

Kyowa Kirin Pharmaceutical Development, Inc.  
Protocol KRN23-CL301

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Table 2.1.3.64.1  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	RGI-C Scores at Week 40		
	Global Score		
	n	10	12
	Mean	1.83	0.75
	SD, SE	0.503, 0.159	0.622, 0.179
	Median	2.00	1.00
	Q1, Q3	1.67, 2.33	0.50, 1.00
	Min, Max	1.0, 2.3	-0.7, 1.7
	GEE <sup>1</sup>		
	LS Mean (SE)	1.81 (0.159)	0.77 (0.190)
	95% C.I.	1.49, 2.12	0.40, 1.15
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.03	
	95% C.I. of difference	0.51, 1.55	
	P-value	0.0001	
	HedgesG (95% CI)	1.739 (0.755, 2.723)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-rgic\_GEE\_64.sas

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Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	RGI-C Scores at Week 64		
	Global Score		
	n	10	12
	Mean	1.97	0.83
	SD, SE	0.399, 0.126	0.659, 0.190
	Median	2.00	1.00
	Q1, Q3	2.00, 2.33	0.50, 1.17
	Min, Max	1.0, 2.3	-0.3, 1.7
	GEE <sup>1</sup>		
	LS Mean (SE)	1.94 (0.139)	0.86 (0.171)
	95% C.I.	1.67, 2.21	0.52, 1.19
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.08	
	95% C.I. of difference	0.63, 1.53	
	P-value	<.0001	
	HedgesG (95% CI)	1.865 (0.861, 2.869)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.1.3.64.1  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
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Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	RGI-C Scores at Week 40		
	Global Score		
	n	19	20
	Mean	1.96	0.82
	SD, SE	0.399, 0.092	0.768, 0.172
	Median	2.00	0.83
	Q1, Q3	2.00, 2.33	0.33, 1.50
	Min, Max	1.0, 2.3	-0.3, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.96 (0.088)	0.82 (0.165)
	95% C.I.	1.79, 2.13	0.50, 1.14
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.14	
	95% C.I. of difference	0.77, 1.51	
	P-value	<.0001	
	HedgesG (95% CI)	1.776 (1.035, 2.517)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	RGI-C Scores at Week 64		
	Global Score		
	n	19	20
	Mean	2.11	1.17
	SD, SE	0.401, 0.092	0.806, 0.180
	Median	2.00	1.17
	Q1, Q3	2.00, 2.33	0.33, 2.00
	Min, Max	1.0, 2.7	-0.3, 2.3
	GEE <sup>1</sup>		
	LS Mean (SE)	2.10 (0.092)	1.17 (0.180)
	95% C.I.	1.92, 2.28	0.82, 1.52
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.93	
	95% C.I. of difference	0.53, 1.33	
	P-value	<.0001	
	HedgesG (95% CI)	1.396 (0.696, 2.096)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.1.3.64.4  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	RGI-C Scores at Week 40		
	Global Score		
	n	14	12
	Mean	1.86	0.67
	SD, SE	0.502, 0.134	0.853, 0.246
	Median	2.00	0.67
	Q1, Q3	1.67, 2.33	0.00, 1.33
	Min, Max	1.0, 2.3	-0.7, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.85 (0.126)	0.67 (0.229)
	95% C.I.	1.61, 2.10	0.22, 1.12
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.18	
	95% C.I. of difference	0.66, 1.69	
	P-value	<.0001	
	HedgesG (95% CI)	1.616 (0.729, 2.504)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-rgic\_GEE\_64.sas

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Table 2.1.3.64.4  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	RGI-C Scores at Week 64		
	Global Score		
	n	14	12
	Mean	2.05	1.14
	SD, SE	0.257, 0.069	0.948, 0.274
	Median	2.00	1.33
	Q1, Q3	2.00, 2.33	0.33, 2.00
	Min, Max	1.3, 2.3	-0.3, 2.3
	GEE <sup>1</sup>		
	LS Mean (SE)	2.04 (0.063)	1.14 (0.274)
	95% C.I.	1.92, 2.17	0.61, 1.68
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.90	
	95% C.I. of difference	0.34, 1.46	
	P-value	0.0016	
	HedgesG (95% CI)	1.264 (0.420, 2.108)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.1.3.64.4  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	RGI-C Scores at Week 40		
	Global Score		
	n	15	20
	Mean	1.98	0.87
	SD, SE	0.367, 0.095	0.616, 0.138
	Median	2.00	1.00
	Q1, Q3	1.67, 2.33	0.33, 1.33
	Min, Max	1.0, 2.3	-0.3, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.97 (0.082)	0.87 (0.130)
	95% C.I.	1.81, 2.13	0.62, 1.13
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.10	
	95% C.I. of difference	0.80, 1.40	
	P-value	<.0001	
	HedgesG (95% CI)	2.010 (1.191, 2.828)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.1.3.64.4  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	RGI-C Scores at Week 64		
	Global Score		
	n	15	20
	Mean	2.07	0.98
	SD, SE	0.507, 0.131	0.644, 0.144
	Median	2.33	1.00
	Q1, Q3	2.00, 2.33	0.50, 1.50
	Min, Max	1.0, 2.7	-0.3, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)	2.06 (0.115)	0.99 (0.142)
	95% C.I.	1.83, 2.29	0.71, 1.27
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.07	
	95% C.I. of difference	0.71, 1.43	
	P-value	<.0001	
	HedgesG (95% CI)	1.742 (0.958, 2.526)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.1.3.64.2  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	RGI-C Scores at Week 40		
	Global Score		
	n	13	14
	Mean	1.82	0.81
	SD, SE	0.520, 0.144	0.623, 0.167
	Median	2.00	0.83
	Q1, Q3	1.67, 2.33	0.33, 1.00
	Min, Max	1.0, 2.3	-0.3, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.81 (0.139)	0.82 (0.166)
	95% C.I.	1.54, 2.09	0.49, 1.14
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.00	
	95% C.I. of difference	0.58, 1.42	
	P-value	<.0001	
	HedgesG (95% CI)	1.638 (0.765, 2.510)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.1.3.64.2  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	RGI-C Scores at Week 64		
	Global Score		
	n	13	14
	Mean	1.95	0.83
	SD, SE	0.559, 0.155	0.865, 0.231
	Median	2.00	1.00
	Q1, Q3	1.67, 2.33	0.33, 1.67
	Min, Max	1.0, 2.7	-0.3, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.94 (0.146)	0.84 (0.215)
	95% C.I.	1.66, 2.23	0.42, 1.26
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.10	
	95% C.I. of difference	0.60, 1.61	
	P-value	<.0001	
	HedgesG (95% CI)	1.418 (0.574, 2.262)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-rgic\_GEE\_64.sas

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Table 2.1.3.64.2  
Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	RGI-C Scores at Week 40		
	Global Score		
	n	16	18
	Mean	2.00	0.78
	SD, SE	0.344, 0.086	0.784, 0.185
	Median	2.00	1.00
	Q1, Q3	2.00, 2.33	0.33, 1.33
	Min, Max	1.0, 2.3	-0.7, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)	2.00 (0.083)	0.78 (0.178)
	95% C.I.	1.84, 2.16	0.43, 1.13
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	1.23	
	95% C.I. of difference	0.85, 1.61	
	P-value	<.0001	
	HedgesG (95% CI)	1.873 (1.066, 2.681)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Subgroup Analysis on change in rickets assessed by the RGI-C global score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	RGI-C Scores at Week 64		
	Global Score		
	n	16	18
	Mean	2.15	1.20
	SD, SE	0.171, 0.043	0.648, 0.153
	Median	2.00	1.17
	Q1, Q3	2.00, 2.33	0.67, 1.67
	Min, Max	2.0, 2.3	0.0, 2.3
	GEE <sup>1</sup>		
	LS Mean (SE)	2.15 (0.042)	1.20 (0.146)
	95% C.I.	2.07, 2.23	0.92, 1.49
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.95	
	95% C.I. of difference	0.65, 1.24	
	P-value	<.0001	
	HedgesG (95% CI)	1.834 (1.031, 2.636)	

<sup>1</sup> The generalized estimation equation (GEE) model includes RGI-C as the dependent variable, treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate, with exchangeable covariate structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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**Table 2.3.1.64.1**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity <= 2.5	N <sub>i</sub>	10	12
	Week 40		
	Responder - n(%)	6 (60.0%)	0 (0.0%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	60.0%	
	GLMM <sup>1</sup>		
	Responder - %	60.9%	0.0%
	95% C.I.	0.0%, 100.0%	0.0%, 100.0%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9579	
	RR <sup>2</sup> (95% CI), P-value		
	ARR <sup>3</sup> (95% CI), P-value	1.185E9 (0.000, 835E149), 0.9009	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.600 (0.296, 0.904)	
	P-value	0.0028	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio are from the logistic regression model.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64.sas

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**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity <= 2.5	Week 64		
	Responder - n(%)	8 (80.0%)	0 (0.0%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	80.0%	
	GLMM <sup>1</sup>		
	Responder - %	99.8%	0.0%
	95% C.I.	0.0%, 100.0%	0.0%, 100.0%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9349	
	RR <sup>2</sup> (95% CI), P-value	5.173E9 (0.000, 461E145), 0.8902	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.800 (0.552, 1.000)	
	P-value	0.0001	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio are from the logistic regression model.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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**Table 2.3.1.64.1**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity > 2.5	N <sub>i</sub>	19	20
	Week 40		
	Responder - n(%)	15 (78.9%)	2 (10.0%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	68.9%	
	GLMM <sup>1</sup>		
	Responder - %	79.9%	9.3%
	95% C.I.	53.8%, 93.1%	2.1%, 33.1%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	39.014	
	95% C.I. of odds ratio	5.162, 294.858	
	P-value	0.0008	
	RR <sup>2</sup> (95% CI), P-value	7.895 (2.077, 30.004), <.0001	
	ARR <sup>3</sup> (95% CI), P-value	39.012 (5.536, 274.928), 0.0002	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.689 (0.464, 0.915)	
	P-value	<.0001	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio are from the logistic regression model.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64.sas

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**Table 2.3.1.64.1**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity > 2.5	Week 64		
	Responder - n(%)	17 (89.5%)	6 (30.0%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	59.5%	
	GLMM <sup>1</sup>		
	Responder - %	90.8%	31.7%
	95% C.I.	66.7%, 98.0%	14.2%, 56.5%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	21.327	
	95% C.I. of odds ratio	3.209, 141.721	
	P-value	0.0024	
	RR <sup>2</sup> (95% CI), P-value	2.982 (1.500, 5.928), 0.0002	
	ARR <sup>3</sup> (95% CI), P-value	21.327 (3.426, 132.741), 0.0010	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.595 (0.351, 0.838)	
	P-value	0.0002	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio are from the logistic regression model.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64.sas

Note: This is DRAFT version and may not be fully validated.

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**Table 2.3.1.64.4**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Age**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Age <5 Years	N <sub>i</sub>	14	12
	Week 40		
	Responder - n(%)	10 (71.4%)	1 (8.3%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	63.1%	
	GLMM <sup>1</sup>		
	Responder - %	72.0%	8.0%
	95% C.I.	40.3%, 90.7%	0.8%, 48.3%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	29.447	
	95% C.I. of odds ratio	1.925, 450.359	
	P-value	0.0173	
	RR <sup>2</sup> (95% CI), P-value	8.571 (1.275, 57.626), 0.0017	
	ARR <sup>3</sup> (95% CI), P-value	28.687 (2.603, 316.114), 0.0061	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.631 (0.347, 0.915)	
	P-value	0.0017	

**1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS total**

**score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio and 2-sided p-value are from the GLMM.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64.sas**

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**Table 2.3.1.64.4**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Age**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Age <5 Years	Week 64		
	Responder - n(%)	13 (92.9%)	4 (33.3%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	59.5%	
	GLMM <sup>1</sup>		
	Responder - %	93.0%	32.8%
	95% C.I.	53.7%, 99.3%	10.4%, 67.4%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	27.153	
	95% C.I. of odds ratio	1.591, 463.277	
	P-value	0.0245	
	RR <sup>2</sup> (95% CI), P-value	2.786 (1.235, 6.282), 0.0029	
	ARR <sup>3</sup> (95% CI), P-value	25.839 (2.428, 275.015), 0.0070	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.595 (0.296, 0.894)	
	P-value	0.0029	

**1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS total**

**score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio and 2-sided p-value are from the GLMM.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64.sas**

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**Table 2.3.1.64.4**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Age**

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	N <sub>i</sub>	15	20
	Week 40		
	Responder - n(%)	11 (73.3%)	1 (5.0%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	68.3%	
	GLMM <sup>1</sup>		
	Responder - %	76.9%	2.6%
	95% C.I.	36.7%, 95.0%	0.1%, 38.6%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	126.131	
	95% C.I. of odds ratio	2.895, >999.999	
	P-value	0.0136	
	RR <sup>2</sup> (95% CI), P-value	14.667 (2.119, 101.51), <.0001	
	ARR <sup>3</sup> (95% CI), P-value	65.419 (5.278, 810.840), 0.0011	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.683 (0.440, 0.927)	
	P-value	<.0001	

**1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS total**

**score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio and 2-sided p-value are from the GLMM.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64.sas**

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**Table 2.3.1.64.4**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Age**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Age >= 5 Years	Week 64		
	Responder - n(%)	12 (80.0%)	2 (10.0%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	70.0%	
	GLMM <sup>1</sup>		
	Responder - %	83.7%	5.7%
	95% C.I.	52.9%, 95.9%	0.8%, 31.9%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	84.563	
	95% C.I. of odds ratio	5.239, >999.999	
	P-value	0.0027	
	RR <sup>2</sup> (95% CI), P-value	8.000 (2.097, 30.519), <.0001	
	ARR <sup>3</sup> (95% CI), P-value	71.568 (5.539, 924.762), 0.0011	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.700 (0.459, 0.941)	
	P-value	<.0001	

**1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS total**

**score as a continuous covariate. The estimated responder rate, 95% CI, and odds ratio and 2-sided p-value are from the GLMM.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64.sas**

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**Table 2.3.1.64.2**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Male	N <sub>i</sub>	13	14
	Week 40		
	Responder - n(%)	8 (61.5%)	1 (7.1%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	54.4%	
	GLMM <sup>1</sup>		
	Responder - %	61.1%	6.5%
	95% C.I.	29.2%, 85.7%	0.6%, 46.3%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	22.577	
	95% C.I. of odds ratio	1.307, 389.915	
	P-value	0.0333	
	RR <sup>2</sup> (95% CI), P-value	8.615 (1.242, 59.769), 0.0044	
	ARR <sup>3</sup> (95% CI), P-value	22.107 (2.090, 233.796), 0.0101	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.544 (0.247, 0.841)	
	P-value	0.0044	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, odds ratio and 2-sided p-value are from the GLMM.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64\_modified.sas

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**Table 2.3.1.64.2**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Male	Week 64		
	Responder - n(%)	9 (69.2%)	3 (21.4%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	47.8%	
	GLMM <sup>1</sup>		
	Responder - %	68.9%	20.8%
	95% C.I.	37.0%, 89.3%	5.7%, 53.0%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	8.461	
	95% C.I. of odds ratio	1.173, 61.014	
	P-value	0.0353	
	RR <sup>2</sup> (95% CI), P-value	3.231 (1.112, 9.386), 0.0213	
	ARR <sup>3</sup> (95% CI), P-value	8.364 (1.407, 49.711), 0.0195	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.478 (0.148, 0.808)	
	P-value	0.0213	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, odds ratio and 2-sided p-value are from the GLMM.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64\_modified.sas

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**Table 2.3.1.64.2**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Female	N <sub>i</sub>	16	18
	Week 40		
	Responder - n(%)	13 (81.3%)	1 (5.6%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	75.7%	
	GLMM <sup>1</sup>		
	Responder - %	61.1%	6.5%
	95% C.I.	29.2%, 85.7%	0.6%, 46.3%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	22.577	
	95% C.I. of odds ratio	1.307, 389.915	
	P-value	0.0333	
	RR <sup>2</sup> (95% CI), P-value	14.625 (2.146, 99.680), <.0001	
	ARR <sup>3</sup> (95% CI), P-value	123.534 (6.586, 2316.98), 0.0013	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.757 (0.538, 0.976)	
	P-value	<.0001	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, odds ratio and 2-sided p-value are from the GLMM.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat Program source: t\_rgic\_resp\_LOGICTIC\_64\_modified.sas

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**Table 2.3.1.64.2**  
**RGI-C Responder Analysis on subjects with a mean RGI-C global score = +2.0 by Subgroup**  
**(FAS - Week 64)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Female	Week 64		
	Responder - n(%)	16 (100.0%)	3 (16.7%)
	Difference in responder (KRN23 vs Oral Phosphate/Active Vitamin D) - %	83.3%	
	GLMM <sup>1</sup>		
	Responder - %	68.9%	20.8%
	95% C.I.	37.0%, 89.3%	5.7%, 53.0%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	8.461	
	95% C.I. of odds ratio	1.173, 61.014	
	P-value	0.0353	
	RR <sup>2</sup> (95% CI), P-value	6.000 (2.136, 16.857), <.0001	
	ARR <sup>3</sup> (95% CI), P-value	4574187 (0.000, 107E160), 0.9330	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.833 (0.661, 1.000)	
	P-value	<.0001	

1. A generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction as factors, baseline RSS total score as a continuous covariate. The estimated responder rate, 95% CI, odds ratio and 2-sided p-value are from the GLMM.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 2.4.1.64.1  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	N <sub>1</sub>	10	12
	Week 40		
	n	10	12
	Mean	0.95	2.17
	SD, SE	0.369, 0.117	0.835, 0.241
	Median	1.00	2.00
	Q1, Q3	0.50, 1.00	2.00, 2.50
	Min, Max	0.5, 1.5	0.5, 4.0
	GEE <sup>1</sup>		
	LS Mean (SE)	0.91 (0.126)	2.27 (0.236)
	95% C.I.	0.66, 1.15	1.81, 2.73
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.36	
	95% C.I. of difference	-1.92, -0.80	
	P-value	<.0001	
	HedgesG (95% CI)	-1.674 (-2.648, -0.700)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.4.1.64.1  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity ≤ 2.5	Week 64		
	n	2	2
	Mean	0.75	2.25
	SD, SE	0.354, 0.250	0.354, 0.250
	Median	0.75	2.25
	Q1, Q3	0.50, 1.00	2.00, 2.50
	Min, Max	0.5, 1.0	2.0, 2.5
	GEE <sup>1</sup>		
	LS Mean (SE)	0.41 (0.128)	1.35 (0.300)
	95% C.I.	0.16, 0.66	0.76, 1.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.94	
	95% C.I. of difference	-1.57, -0.30	
	P-value	0.0039	
	HedgesG (95% CI)	-1.714 (-4.006, 0.578)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.  
The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.4.1.64.1  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	N <sub>1</sub>	19	20
	Week 40		
	n	18	20
	Mean	1.22	2.65
	SD, SE	0.844, 0.199	1.204, 0.269
	Median	1.00	2.50
	Q1, Q3	0.50, 1.50	1.75, 3.50
	Min, Max	0.5, 4.0	1.0, 5.5
	GEE <sup>1</sup>		
	LS Mean (SE)	1.26 (0.140)	2.55 (0.200)
	95% C.I.	0.98, 1.53	2.16, 2.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.30	
	95% C.I. of difference	-1.78, -0.81	
	P-value	<.0001	
	HedgesG (95% CI)	-1.296 (-1.997, -0.596)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

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Table 2.4.1.64.1  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Week 64		
	n	2	1
	Mean	0.75	0.50
	SD, SE	0.354, 0.250	-
	Median	0.75	0.50
	Q1, Q3	0.50, 1.00	0.50, 0.50
	Min, Max	0.5, 1.0	0.5, 0.5
	GEE <sup>1</sup>		
	LS Mean (SE)	1.11 (0.126)	1.10 (0.139)
	95% C.I.	0.86, 1.35	0.82, 1.37
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.01	
	95% C.I. of difference	-0.09, 0.11	
	P-value	0.8642	
	HedgesG (95% CI)	-	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.  
The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.4.1.64.4  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	N <sub>1</sub>	14	12
	Week 40		
	n	14	12
	Mean	1.32	2.54
	SD, SE	0.868, 0.232	1.339, 0.387
	Median	1.00	2.25
	Q1, Q3	1.00, 1.50	1.75, 3.25
	Min, Max	0.5, 4.0	1.0, 5.5
	GEE <sup>1</sup>		
	LS Mean (SE)	1.30 (0.135)	2.39 (0.293)
	95% C.I.	1.03, 1.56	1.82, 2.97
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.10	
	95% C.I. of difference	-1.73, -0.46	
	P-value	0.0008	
	HedgesG (95% CI)	-1.023 (-1.843, -0.204)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.4.1.64.4  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Week 64		
	n	4	3
	Mean	0.75	1.67
	SD, SE	0.289, 0.144	1.041, 0.601
	Median	0.75	2.00
	Q1, Q3	0.50, 1.00	0.50, 2.50
	Min, Max	0.5, 1.0	0.5, 2.5
	GEE <sup>1</sup>		
	LS Mean (SE)	0.92 (0.132)	1.56 (0.268)
	95% C.I.	0.66, 1.18	1.03, 2.08
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.64	
	95% C.I. of difference	-1.23, -0.04	
	P-value	0.0356	
	HedgesG (95% CI)	-0.938 (-2.514, 0.637)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.4.1.64.4  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	N <sub>1</sub>	15	20
	Week 40		
	n	14	20
	Mean	0.93	2.43
	SD, SE	0.475, 0.127	0.950, 0.212
	Median	0.75	2.25
	Q1, Q3	0.50, 1.50	2.00, 3.00
	Min, Max	0.5, 1.5	0.5, 4.0
	GEE <sup>1</sup>		
	LS Mean (SE)	0.92 (0.128)	2.43 (0.179)
	95% C.I.	0.67, 1.17	2.08, 2.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.51	
	95% C.I. of difference	-1.94, -1.08	
	P-value	<.0001	
	HedgesG (95% CI)	-1.790 (-2.595, -0.985)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.1.64.4  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Week 64 GEE <sup>1</sup> LS Mean (SE) 95% C.I. Difference (KRN23 – Oral Phosphate/Active Vitamin D) 95% C.I. of difference P-value		

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction as factors, baseline RSS score as a continuous covariate.  
The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.  
Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas  
Note: This is DRAFT version and may not be fully validated.

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Table 2.4.1.64.2  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	N <sub>1</sub>	13	14
	Week 40		
	n	13	14
	Mean	1.35	2.61
	SD, SE	0.944, 0.262	0.789, 0.211
	Median	1.50	2.50
	Q1, Q3	0.50, 1.50	2.00, 3.00
	Min, Max	0.5, 4.0	1.0, 4.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.38 (0.177)	2.69 (0.155)
	95% C.I.	1.03, 1.72	2.38, 2.99
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.31	
	95% C.I. of difference	-1.78, -0.84	
	P-value	<.0001	
	HedgesG (95% CI)	-1.357 (-2.195, -0.520)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.1.64.2  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Week 64		
	n		1
	Mean		2.00
	SD, SE		-
	Median		2.00
	Q1, Q3		2.00, 2.00
	Min, Max		2.0, 2.0
	GEE <sup>1</sup>		
	LS Mean (SE)		
	95% C.I.		
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)		
	95% C.I. of difference		
	P-value		
	HedgesG (95% CI)	-	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.  
The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.4.1.64.2  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	N <sub>1</sub>	16	18
	Week 40		
	n	15	18
	Mean	0.93	2.36
	SD, SE	0.372, 0.096	1.293, 0.305
	Median	1.00	2.00
	Q1, Q3	0.50, 1.00	1.50, 3.00
	Min, Max	0.5, 1.5	0.5, 5.5
	GEE <sup>1</sup>		
	LS Mean (SE)	1.03 (0.146)	2.26 (0.261)
	95% C.I.	0.75, 1.32	1.75, 2.77
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.23	
	95% C.I. of difference	-1.89, -0.57	
	P-value	0.0003	
	HedgesG (95% CI)	-1.365 (-2.125, -0.605)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.4.1.64.2  
Subgroup Analysis on change in RSS total score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Week 64		
	n	4	2
	Mean	0.75	1.50
	SD, SE	0.289, 0.144	1.414, 1.000
	Median	0.75	1.50
	Q1, Q3	0.50, 1.00	0.50, 2.50
	Min, Max	0.5, 1.0	0.5, 2.5
	GEE <sup>1</sup>		
	LS Mean (SE)	0.66 (0.153)	1.26 (0.265)
	95% C.I.	0.36, 0.96	0.74, 1.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.60	
	95% C.I. of difference	-1.11, -0.09	
	P-value	0.0211	
	HedgesG (95% CI)	-0.653 (-2.390, 1.084)	

<sup>1</sup> A GEE model includes treatment, visit, treatment by visit interaction and baseline age stratification factor as factors, baseline RSS score as a continuous covariate.  
The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE.

Data source: ADSL.sas7bdat Program source: t-rss\_GEE\_64.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	N <sub>1</sub>	10	12
	Baseline		
	n	10	12
	Mean	-2.26	-2.18
	SD, SE	0.793, 0.251	0.638, 0.184
	Median	-2.18	-2.25
	Q1, Q3	-2.58, -1.68	-2.71, -1.85
	Min, Max	-3.8, -1.2	-3.1, -0.8

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Week 24		
	Baseline		
	n	9	12
	Mean	-2.25	-2.18
	SD, SE	0.841, 0.280	0.638, 0.184
	Median	-2.06	-2.25
	Q1, Q3	-2.58, -1.68	-2.71, -1.85
	Min, Max	-3.8, -1.2	-3.1, -0.8
	Observed Value		
	n	9	12
	Mean	-2.08	-2.18
	SD, SE	0.918, 0.306	0.470, 0.136
	Median	-1.99	-2.19
	Q1, Q3	-2.49, -1.50	-2.53, -1.84
	Min, Max	-3.8, -0.6	-3.0, -1.4

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Change from Baseline		
	n	9	12
	Mean	0.17	0.00
	SD, SE	0.220, 0.073	0.263, 0.076
	Median	0.09	0.08
	Q1, Q3	0.03, 0.28	-0.01, 0.11
	Min, Max	-0.1, 0.6	-0.8, 0.2
	GEE <sup>1</sup>		
	LS Mean (SE)	0.14 (0.079)	-0.01 (0.069)
	95% CI	-0.02, 0.29	-0.14, 0.13
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.14	
	95% CI of difference	-0.07, 0.35	
	HedgesG (95% CI)	0.599 (-0.284, 1.482)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Week 40		
	Baseline		
	n	10	12
	Mean	-2.26	-2.18
	SD, SE	0.793, 0.251	0.638, 0.184
	Median	-2.18	-2.25
	Q1, Q3	-2.58, -1.68	-2.71, -1.85
	Min, Max	-3.8, -1.2	-3.1, -0.8
	Observed Value		
	n	10	12
	Mean	-2.11	-2.10
	SD, SE	0.867, 0.274	0.573, 0.166
	Median	-2.13	-2.15
	Q1, Q3	-2.54, -1.40	-2.47, -1.80
	Min, Max	-3.7, -0.6	-3.0, -1.1

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Change from Baseline		
	n	10	12
	Mean	0.15	0.09
	SD, SE	0.241, 0.076	0.178, 0.051
	Median	0.09	0.13
	Q1, Q3	0.05, 0.28	-0.01, 0.22
	Min, Max	-0.2, 0.6	-0.3, 0.3
	GEE <sup>1</sup>		
	LS Mean (SE)	0.16 (0.074)	0.08 (0.046)
	95% CI	0.02, 0.31	-0.01, 0.17
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.09	
	95% CI of difference	-0.09, 0.26	
	HedgesG (95% CI)	0.278 (-0.566, 1.121)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Week 64		
	Baseline		
	n	10	12
	Mean	-2.26	-2.18
	SD, SE	0.793, 0.251	0.638, 0.184
	Median	-2.18	-2.25
	Q1, Q3	-2.58, -1.68	-2.71, -1.85
	Min, Max	-3.8, -1.2	-3.1, -0.8
	Observed Value		
	n	10	12
	Mean	-2.08	-2.09
	SD, SE	0.916, 0.290	0.550, 0.159
	Median	-2.22	-2.15
	Q1, Q3	-2.61, -1.52	-2.44, -1.80
	Min, Max	-3.7, -0.4	-3.1, -1.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Change from Baseline		
	n	10	12
	Mean	0.17	0.09
	SD, SE	0.353, 0.112	0.192, 0.055
	Median	0.08	0.12
	Q1, Q3	-0.07, 0.53	-0.03, 0.22
	Min, Max	-0.3, 0.8	-0.3, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.18 (0.108)	0.08 (0.049)
	95% CI	-0.03, 0.40	-0.01, 0.18
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.10	
	95% CI of difference	-0.13, 0.34	
	HedgesG (95% CI)	0.262 (-0.581, 1.105)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	N <sub>1</sub>	19	20
	Baseline		
	n	18	20
	Mean	-2.35	-1.96
	SD, SE	1.351, 0.319	0.986, 0.221
	Median	-2.39	-2.03
	Q1, Q3	-3.12, -1.40	-2.37, -1.42
	Min, Max	-5.0, -0.3	-4.7, -0.1

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	18	19
	Mean	-2.35	-1.82
	SD, SE	1.351, 0.319	0.764, 0.175
	Median	-2.39	-2.03
	Q1, Q3	-3.12, -1.40	-2.27, -1.40
	Min, Max	-5.0, -0.3	-3.2, -0.1
	Observed Value		
	n	19	19
	Mean	-2.20	-1.73
	SD, SE	1.286, 0.295	0.669, 0.154
	Median	-1.84	-1.88
	Q1, Q3	-3.02, -1.12	-2.31, -1.18
	Min, Max	-4.8, -0.5	-2.8, -0.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Change from Baseline		
	n	18	19
	Mean	0.10	0.09
	SD, SE	0.203, 0.048	0.228, 0.052
	Median	0.10	0.09
	Q1, Q3	-0.02, 0.25	-0.06, 0.23
	Min, Max	-0.3, 0.5	-0.3, 0.7
	GEE <sup>1</sup>		
	LS Mean (SE)	0.09 (0.044)	0.10 (0.050)
	95% CI	0.00, 0.18	0.00, 0.20
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.01	
	95% CI of difference	-0.14, 0.12	
	HedgesG (95% CI)	0.062 (-0.583, 0.707)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	18	20
	Mean	-2.35	-1.96
	SD, SE	1.351, 0.319	0.986, 0.221
	Median	-2.39	-2.03
	Q1, Q3	-3.12, -1.40	-2.37, -1.42
	Min, Max	-5.0, -0.3	-4.7, -0.1
	Observed Value		
	n	19	20
	Mean	-2.12	-1.97
	SD, SE	1.396, 0.320	0.990, 0.221
	Median	-1.89	-1.91
	Q1, Q3	-2.96, -0.88	-2.28, -1.51
	Min, Max	-4.9, -0.2	-4.9, -0.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Change from Baseline		
	n	18	20
	Mean	0.16	-0.01
	SD, SE	0.289, 0.068	0.211, 0.047
	Median	0.19	-0.05
	Q1, Q3	0.03, 0.29	-0.15, 0.17
	Min, Max	-0.5, 0.8	-0.4, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.14 (0.068)	0.00 (0.044)
	95% CI	0.01, 0.28	-0.08, 0.09
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.14	
	95% CI of difference	-0.02, 0.30	
	HedgesG (95% CI)	0.646 (-0.008, 1.299)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	18	20
	Mean	-2.35	-1.96
	SD, SE	1.351, 0.319	0.986, 0.221
	Median	-2.39	-2.03
	Q1, Q3	-3.12, -1.40	-2.37, -1.42
	Min, Max	-5.0, -0.3	-4.7, -0.1
	Observed Value		
	n	19	20
	Mean	-2.12	-1.99
	SD, SE	1.225, 0.281	0.971, 0.217
	Median	-1.90	-1.80
	Q1, Q3	-2.83, -1.24	-2.33, -1.55
	Min, Max	-4.5, -0.2	-4.9, -0.3

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.3.2.64.1  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Change from Baseline		
	n	18	20
	Mean	0.17	-0.03
	SD, SE	0.397, 0.093	0.233, 0.052
	Median	0.19	-0.12
	Q1, Q3	-0.05, 0.43	-0.20, 0.12
	Min, Max	-0.7, 0.9	-0.3, 0.5
	GEE <sup>1</sup>		
	LS Mean (SE)	0.16 (0.080)	-0.01 (0.050)
	95% CI	0.00, 0.31	-0.11, 0.08
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.17	
	95% CI of difference	-0.02, 0.35	
	HedgesG (95% CI)	0.587 (-0.063, 1.238)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	N <sub>1</sub>	14	12
	Baseline		
	n	13	12
	Mean	-2.27	-2.27
	SD, SE	1.149, 0.319	1.011, 0.292
	Median	-2.31	-2.18
	Q1, Q3	-2.77, -1.68	-2.71, -1.53
	Min, Max	-4.6, -0.3	-4.7, -0.8

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Week 24		
	Baseline		
	n	12	11
	Mean	-2.27	-2.05
	SD, SE	1.200, 0.346	0.689, 0.208
	Median	-2.30	-2.14
	Q1, Q3	-2.87, -1.44	-2.71, -1.44
	Min, Max	-4.6, -0.3	-3.2, -0.8
	Observed Value		
	n	13	11
	Mean	-2.03	-2.04
	SD, SE	1.162, 0.322	0.463, 0.140
	Median	-1.79	-2.00
	Q1, Q3	-2.60, -1.33	-2.51, -1.71
	Min, Max	-4.5, -0.5	-2.6, -1.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Change from Baseline		
	n	12	11
	Mean	0.17	0.02
	SD, SE	0.257, 0.074	0.374, 0.113
	Median	0.18	0.09
	Q1, Q3	0.01, 0.33	-0.25, 0.22
	Min, Max	-0.3, 0.6	-0.8, 0.7
	GEE <sup>1</sup>		
	LS Mean (SE)	0.14 (0.068)	0.01 (0.116)
	95% CI	0.01, 0.28	-0.22, 0.24
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.13	
	95% CI of difference	-0.12, 0.39	
	HedgesG (95% CI)	0.453 (-0.375, 1.282)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Week 40		
	Baseline		
	n	13	12
	Mean	-2.27	-2.27
	SD, SE	1.149, 0.319	1.011, 0.292
	Median	-2.31	-2.18
	Q1, Q3	-2.77, -1.68	-2.71, -1.53
	Min, Max	-4.6, -0.3	-4.7, -0.8
	Observed Value		
	n	14	12
	Mean	-2.03	-2.35
	SD, SE	1.268, 0.339	0.999, 0.288
	Median	-2.10	-2.08
	Q1, Q3	-2.76, -0.88	-2.54, -1.77
	Min, Max	-4.9, -0.2	-4.9, -1.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Change from Baseline		
	n	13	12
	Mean	0.15	-0.07
	SD, SE	0.367, 0.102	0.221, 0.064
	Median	0.22	-0.12
	Q1, Q3	-0.01, 0.34	-0.23, 0.13
	Min, Max	-0.5, 0.8	-0.4, 0.3
	GEE <sup>1</sup>		
	LS Mean (SE)	0.15 (0.101)	-0.07 (0.060)
	95% CI	-0.05, 0.35	-0.19, 0.04
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.22	
	95% CI of difference	-0.00, 0.45	
	HedgesG (95% CI)	0.689 (-0.119, 1.496)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Week 64		
	Baseline		
	n	13	12
	Mean	-2.27	-2.27
	SD, SE	1.149, 0.319	1.011, 0.292
	Median	-2.31	-2.18
	Q1, Q3	-2.77, -1.68	-2.71, -1.53
	Min, Max	-4.6, -0.3	-4.7, -0.8
	Observed Value		
	n	14	12
	Mean	-2.04	-2.33
	SD, SE	1.085, 0.290	0.997, 0.288
	Median	-2.22	-2.24
	Q1, Q3	-2.61, -1.14	-2.51, -1.67
	Min, Max	-4.2, -0.4	-4.9, -1.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Change from Baseline		
	n	13	12
	Mean	0.15	-0.06
	SD, SE	0.506, 0.140	0.230, 0.067
	Median	0.16	-0.12
	Q1, Q3	-0.20, 0.53	-0.21, 0.07
	Min, Max	-0.7, 0.9	-0.3, 0.5
	GEE <sup>1</sup>		
	LS Mean (SE)	0.15 (0.123)	-0.05 (0.068)
	95% CI	-0.10, 0.39	-0.19, 0.08
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.20	
	95% CI of difference	-0.07, 0.47	
	HedgesG (95% CI)	0.478 (-0.318, 1.274)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	N <sub>1</sub>	15	20
	Baseline		
	n	15	20
	Mean	-2.36	-1.91
	SD, SE	1.221, 0.315	0.764, 0.171
	Median	-2.02	-2.06
	Q1, Q3	-3.20, -1.40	-2.38, -1.40
	Min, Max	-5.0, -0.5	-3.1, -0.1

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Week 24		
	Baseline		
	n	15	20
	Mean	-2.36	-1.91
	SD, SE	1.221, 0.315	0.764, 0.171
	Median	-2.02	-2.06
	Q1, Q3	-3.20, -1.40	-2.38, -1.40
	Min, Max	-5.0, -0.5	-3.1, -0.1
	Observed Value		
	n	15	20
	Mean	-2.27	-1.83
	SD, SE	1.195, 0.308	0.709, 0.159
	Median	-1.99	-1.98
	Q1, Q3	-3.02, -1.50	-2.31, -1.39
	Min, Max	-4.8, -0.5	-3.0, -0.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Change from Baseline		
	n	15	20
	Mean	0.09	0.08
	SD, SE	0.154, 0.040	0.130, 0.029
	Median	0.04	0.08
	Q1, Q3	-0.02, 0.23	-0.02, 0.15
	Min, Max	-0.2, 0.3	-0.1, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.07 (0.037)	0.09 (0.025)
	95% CI	-0.01, 0.14	0.04, 0.14
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.03	
	95% CI of difference	-0.12, 0.06	
	HedgesG (95% CI)	0.046 (-0.624, 0.715)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Week 40		
	Baseline		
	n	15	20
	Mean	-2.36	-1.91
	SD, SE	1.221, 0.315	0.764, 0.171
	Median	-2.02	-2.06
	Q1, Q3	-3.20, -1.40	-2.38, -1.40
	Min, Max	-5.0, -0.5	-3.1, -0.1
	Observed Value		
	n	15	20
	Mean	-2.20	-1.82
	SD, SE	1.216, 0.314	0.701, 0.157
	Median	-1.93	-2.03
	Q1, Q3	-2.96, -1.36	-2.28, -1.28
	Min, Max	-4.7, -0.3	-3.0, -0.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Change from Baseline		
	n	15	20
	Mean	0.16	0.09
	SD, SE	0.153, 0.039	0.168, 0.037
	Median	0.11	0.10
	Q1, Q3	0.05, 0.25	-0.06, 0.23
	Min, Max	-0.1, 0.5	-0.2, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.14 (0.040)	0.10 (0.032)
	95% CI	0.06, 0.22	0.04, 0.16
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.04	
	95% CI of difference	-0.06, 0.14	
	HedgesG (95% CI)	0.429 (-0.248, 1.106)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Week 64		
	Baseline		
	n	15	20
	Mean	-2.36	-1.91
	SD, SE	1.221, 0.315	0.764, 0.171
	Median	-2.02	-2.06
	Q1, Q3	-3.20, -1.40	-2.38, -1.40
	Min, Max	-5.0, -0.5	-3.1, -0.1
	Observed Value		
	n	15	20
	Mean	-2.17	-1.85
	SD, SE	1.169, 0.302	0.675, 0.151
	Median	-1.97	-1.97
	Q1, Q3	-2.71, -1.47	-2.18, -1.39
	Min, Max	-4.5, -0.2	-3.1, -0.3

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.4  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Change from Baseline		
	n	15	20
	Mean	0.19	0.06
	SD, SE	0.226, 0.058	0.212, 0.047
	Median	0.16	0.11
	Q1, Q3	-0.03, 0.42	-0.12, 0.24
	Min, Max	-0.1, 0.5	-0.3, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.17 (0.050)	0.08 (0.041)
	95% CI	0.07, 0.27	0.00, 0.16
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.09	
	95% CI of difference	-0.03, 0.22	
	HedgesG (95% CI)	0.556 (-0.126, 1.238)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	N <sub>1</sub>	13	14
	Baseline		
	n	13	14
	Mean	-2.51	-1.73
	SD, SE	1.278, 0.354	0.868, 0.232
	Median	-2.58	-1.82
	Q1, Q3	-3.44, -1.62	-2.29, -0.91
	Min, Max	-5.0, -0.5	-3.2, -0.1

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Week 24		
	Baseline		
	n	13	14
	Mean	-2.51	-1.73
	SD, SE	1.278, 0.354	0.868, 0.232
	Median	-2.58	-1.82
	Q1, Q3	-3.44, -1.62	-2.29, -0.91
	Min, Max	-5.0, -0.5	-3.2, -0.1
	Observed Value		
	n	13	14
	Mean	-2.41	-1.74
	SD, SE	1.279, 0.355	0.698, 0.187
	Median	-2.49	-1.85
	Q1, Q3	-3.45, -1.77	-2.32, -1.58
	Min, Max	-4.8, -0.5	-2.5, -0.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Change from Baseline		
	n	13	14
	Mean	0.10	-0.01
	SD, SE	0.168, 0.047	0.313, 0.084
	Median	0.09	-0.02
	Q1, Q3	-0.02, 0.25	-0.11, 0.14
	Min, Max	-0.2, 0.3	-0.8, 0.7
	GEE <sup>1</sup>		
	LS Mean (SE)	0.04 (0.059)	0.02 (0.066)
	95% CI	-0.08, 0.16	-0.11, 0.15
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.02	
	95% CI of difference	-0.15, 0.19	
	HedgesG (95% CI)	0.413 (-0.349, 1.176)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Week 40		
	Baseline		
	n	13	14
	Mean	-2.51	-1.73
	SD, SE	1.278, 0.354	0.868, 0.232
	Median	-2.58	-1.82
	Q1, Q3	-3.44, -1.62	-2.29, -0.91
	Min, Max	-5.0, -0.5	-3.2, -0.1
	Observed Value		
	n	13	14
	Mean	-2.36	-1.77
	SD, SE	1.290, 0.358	0.794, 0.212
	Median	-2.50	-1.85
	Q1, Q3	-3.26, -1.51	-2.20, -1.16
	Min, Max	-4.7, -0.3	-3.4, -0.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Change from Baseline		
	n	13	14
	Mean	0.15	-0.04
	SD, SE	0.289, 0.080	0.172, 0.046
	Median	0.12	-0.07
	Q1, Q3	0.05, 0.25	-0.13, 0.13
	Min, Max	-0.5, 0.8	-0.3, 0.3
	GEE <sup>1</sup>		
	LS Mean (SE)	0.09 (0.070)	0.00 (0.035)
	95% CI	-0.04, 0.23	-0.07, 0.07
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.09	
	95% CI of difference	-0.06, 0.25	
	HedgesG (95% CI)	0.745 (-0.036, 1.526)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Week 64		
	Baseline		
	n	13	14
	Mean	-2.51	-1.73
	SD, SE	1.278, 0.354	0.868, 0.232
	Median	-2.58	-1.82
	Q1, Q3	-3.44, -1.62	-2.29, -0.91
	Min, Max	-5.0, -0.5	-3.2, -0.1
	Observed Value		
	n	13	14
	Mean	-2.35	-1.76
	SD, SE	1.272, 0.353	0.735, 0.196
	Median	-2.48	-1.82
	Q1, Q3	-3.46, -1.47	-2.10, -1.15
	Min, Max	-4.5, -0.2	-3.3, -0.3

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Change from Baseline		
	n	13	14
	Mean	0.16	-0.03
	SD, SE	0.374, 0.104	0.217, 0.058
	Median	0.16	-0.06
	Q1, Q3	-0.05, 0.39	-0.20, 0.13
	Min, Max	-0.7, 0.9	-0.3, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.10 (0.082)	0.00 (0.044)
	95% CI	-0.06, 0.26	-0.08, 0.09
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.10	
	95% CI of difference	-0.09, 0.29	
	HedgesG (95% CI)	0.594 (-0.177, 1.366)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	N <sub>1</sub>	16	18
	Baseline		
	n	15	18
	Mean	-2.15	-2.29
	SD, SE	1.078, 0.278	0.808, 0.190
	Median	-2.29	-2.22
	Q1, Q3	-2.98, -1.40	-2.71, -1.74
	Min, Max	-4.6, -0.3	-4.7, -1.4

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Week 24		
	Baseline		
	n	14	17
	Mean	-2.14	-2.15
	SD, SE	1.118, 0.299	0.551, 0.134
	Median	-2.15	-2.22
	Q1, Q3	-2.98, -1.40	-2.54, -1.74
	Min, Max	-4.6, -0.3	-3.1, -1.4
	Observed Value		
	n	15	17
	Mean	-1.95	-2.03
	SD, SE	1.051, 0.271	0.559, 0.136
	Median	-1.79	-2.01
	Q1, Q3	-2.60, -1.33	-2.48, -1.63
	Min, Max	-4.5, -0.5	-3.0, -1.1

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Change from Baseline		
	n	14	17
	Mean	0.15	0.11
	SD, SE	0.241, 0.064	0.149, 0.036
	Median	0.10	0.10
	Q1, Q3	-0.01, 0.33	0.04, 0.22
	Min, Max	-0.3, 0.6	-0.3, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.14 (0.063)	0.10 (0.037)
	95% CI	0.01, 0.26	0.03, 0.17
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.04	
	95% CI of difference	-0.10, 0.17	
	HedgesG (95% CI)	0.160 (-0.549, 0.868)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Week 40		
	Baseline		
	n	15	18
	Mean	-2.15	-2.29
	SD, SE	1.078, 0.278	0.808, 0.190
	Median	-2.29	-2.22
	Q1, Q3	-2.98, -1.40	-2.71, -1.74
	Min, Max	-4.6, -0.3	-4.7, -1.4
	Observed Value		
	n	16	18
	Mean	-1.92	-2.21
	SD, SE	1.169, 0.292	0.861, 0.203
	Median	-1.86	-2.09
	Q1, Q3	-2.62, -1.12	-2.47, -1.81
	Min, Max	-4.9, -0.2	-4.9, -1.1

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Change from Baseline		
	n	15	18
	Mean	0.16	0.07
	SD, SE	0.259, 0.067	0.215, 0.051
	Median	0.16	0.13
	Q1, Q3	0.02, 0.34	-0.05, 0.25
	Min, Max	-0.3, 0.6	-0.4, 0.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.17 (0.067)	0.07 (0.044)
	95% CI	0.04, 0.30	-0.01, 0.16
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.10	
	95% CI of difference	-0.06, 0.25	
	HedgesG (95% CI)	0.342 (-0.348, 1.032)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Week 64		
	Baseline		
	n	15	18
	Mean	-2.15	-2.29
	SD, SE	1.078, 0.278	0.808, 0.190
	Median	-2.29	-2.22
	Q1, Q3	-2.98, -1.40	-2.71, -1.74
	Min, Max	-4.6, -0.3	-4.7, -1.4
	Observed Value		
	n	16	18
	Mean	-1.91	-2.23
	SD, SE	0.958, 0.240	0.860, 0.203
	Median	-1.93	-2.11
	Q1, Q3	-2.51, -1.29	-2.49, -1.61
	Min, Max	-4.2, -0.4	-4.9, -1.2

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.3.2.64.2  
Subgroup Analysis on change in Standing Height/Recumbent Length Z Score from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Change from Baseline		
	n	15	18
	Mean	0.18	0.06
	SD, SE	0.389, 0.100	0.226, 0.053
	Median	0.16	0.10
	Q1, Q3	-0.12, 0.53	-0.18, 0.24
	Min, Max	-0.6, 0.8	-0.3, 0.5
	GEE <sup>1</sup>		
	LS Mean (SE)	0.19 (0.091)	0.06 (0.049)
	95% CI	0.01, 0.37	-0.04, 0.15
	Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.14	
	95% CI of difference	-0.06, 0.33	
	HedgesG (95% CI)	0.376 (-0.316, 1.067)	

The generalized estimation equation (GEE) model includes change from baseline for recumbent length/standing height Z score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, age and baseline recumbent length/standing height Z score as continuous covariates, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-htz\_GEE.sas

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Adhoc Analysis of UX023-CL301

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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs ≤2.5)

RSS Total Score &gt; 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
Baseline		
n	16	17
Mean	60.53	62.99
SD, SE	12.593, 3.148	9.642, 2.338
Median	60.65	61.60
Q1, Q3	52.80, 69.50	56.60, 70.40
Min, Max	27.4, 78.1	46.4, 78.4

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs ≤2.5)

RSS Total Score &gt; 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
Week 24		
Baseline		
n	16	16
Mean	60.53	64.03
SD, SE	12.593, 3.148	8.926, 2.231
Median	60.65	61.70
Q1, Q3	52.80, 69.50	57.80, 72.35
Min, Max	27.4, 78.1	49.8, 78.4
Observed Value		
n	17	17
Mean	62.76	64.78
SD, SE	9.774, 2.371	9.473, 2.298
Median	60.30	63.30
Q1, Q3	55.60, 70.10	57.40, 72.10
Min, Max	48.7, 81.2	50.7, 79.3
Change from Baseline		
n	16	16
Mean	2.92	1.64
SD, SE	5.088, 1.272	1.369, 0.342
Median	1.55	1.55
Q1, Q3	0.85, 2.45	0.85, 1.70
Min, Max	-0.2, 21.3	-0.3, 4.9
GEE <sup>1</sup>		
LS Mean (SE)	1.86 (0.568)	2.45 (0.595)
95% C.I.	0.75, 2.97	1.29, 3.62
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.59	
95% C.I. of difference	-2.29, 1.10	
P Value	0.4923	
HedgesG (95% CI)	0.326 (-0.371, 1.024)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs ≤2.5)

RSS Total Score > 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
Week 40		
Baseline		
n	14	16
Mean	61.41	63.24
SD, SE	13.251, 3.542	9.901, 2.475
Median	64.60	61.70
Q1, Q3	53.20, 69.50	55.45, 72.35
Min, Max	27.4, 78.1	46.4, 78.4
Observed Value		
n	15	19
Mean	64.27	63.05
SD, SE	10.268, 2.651	10.991, 2.521
Median	63.80	63.50
Q1, Q3	53.30, 71.20	52.30, 72.30
Min, Max	49.7, 82.9	47.3, 80.2
Change from Baseline		
n	14	16
Mean	3.74	2.31
SD, SE	5.552, 1.484	1.766, 0.441
Median	2.00	1.90
Q1, Q3	1.70, 3.00	1.55, 2.40
Min, Max	0.1, 22.3	0.3, 7.0
GEE <sup>1</sup>		
LS Mean (SE)	2.39 (0.568)	3.19 (0.629)
95% C.I.	1.28, 3.51	1.95, 4.42
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.79	
95% C.I. of difference	-2.52, 0.93	
P Value	0.3665	
HedgesG (95% CI)	0.336 (-0.386, 1.058)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs ≤2.5)

RSS Total Score &gt; 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
Week 64		
Baseline		
n	16	17
Mean	60.53	62.99
SD, SE	12.593, 3.148	9.642, 2.338
Median	60.65	61.60
Q1, Q3	52.80, 69.50	56.60, 70.40
Min, Max	27.4, 78.1	46.4, 78.4
Observed Value		
n	18	20
Mean	64.28	64.32
SD, SE	10.157, 2.394	10.533, 2.355
Median	61.70	64.65
Q1, Q3	55.40, 73.30	54.55, 72.85
Min, Max	51.6, 84.4	48.6, 80.5
Change from Baseline		
n	16	17
Mean	5.23	3.60
SD, SE	5.293, 1.323	1.661, 0.403
Median	3.70	3.30
Q1, Q3	2.90, 5.35	2.60, 4.50
Min, Max	2.2, 24.2	1.4, 7.2
GEE <sup>1</sup>		
LS Mean (SE)	4.17 (0.625)	4.43 (0.631)
95% C.I.	2.94, 5.39	3.20, 5.67
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.26	
95% C.I. of difference	-2.08, 1.55	
P Value	0.7752	
HedgesG (95% CI)	0.399 (-0.291, 1.088)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs ≤2.5)

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
Baseline		
n	10	12
Mean	57.41	62.91
SD, SE	5.246, 1.659	7.297, 2.107
Median	57.10	64.20
Q1, Q3	51.60, 61.30	56.10, 67.10
Min, Max	51.3, 67.0	53.1, 76.3

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs ≤2.5)

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
Week 24		
Baseline		
n	9	12
Mean	58.09	62.91
SD, SE	5.077, 1.692	7.297, 2.107
Median	57.90	64.20
Q1, Q3	55.80, 61.30	56.10, 67.10
Min, Max	51.5, 67.0	53.1, 76.3
Observed Value		
n	9	12
Mean	59.47	64.23
SD, SE	5.392, 1.797	7.377, 2.129
Median	58.80	64.55
Q1, Q3	56.10, 62.60	58.00, 68.55
Min, Max	52.2, 67.9	53.6, 79.5
Change from Baseline		
n	9	12
Mean	1.38	1.32
SD, SE	2.237, 0.746	1.060, 0.306
Median	0.90	1.50
Q1, Q3	0.20, 1.40	0.50, 2.00
Min, Max	-0.2, 7.1	-0.4, 3.2
GEE <sup>1</sup>		
LS Mean (SE)	1.24 (0.536)	1.30 (0.333)
95% C.I.	0.19, 2.30	0.65, 1.96
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.06	
95% C.I. of difference	-1.25, 1.13	
P Value	0.9225	
HedgesG (95% CI)	0.029 (-0.835, 0.893)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas



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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs ≤2.5)

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
Week 40		
Baseline		
n	10	12
Mean	57.41	62.91
SD, SE	5.246, 1.659	7.297, 2.107
Median	57.10	64.20
Q1, Q3	51.60, 61.30	56.10, 67.10
Min, Max	51.3, 67.0	53.1, 76.3
Observed Value		
n	10	12
Mean	59.68	65.71
SD, SE	6.178, 1.954	7.607, 2.196
Median	59.20	66.10
Q1, Q3	53.60, 65.10	58.65, 70.10
Min, Max	52.0, 69.0	55.0, 81.1
Change from Baseline		
n	10	12
Mean	2.27	2.80
SD, SE	2.257, 0.714	1.409, 0.407
Median	2.05	2.65
Q1, Q3	0.70, 2.30	1.70, 3.80
Min, Max	0.5, 8.3	0.7, 5.1
GEE <sup>1</sup>		
LS Mean (SE)	2.31 (0.562)	2.78 (0.409)
95% C.I.	1.20, 3.41	1.98, 3.58
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.47	
95% C.I. of difference	-1.79, 0.85	
P Value	0.4832	
HedgesG (95% CI)	-0.264 (-1.107, 0.579)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.1  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Disease Severity (RSS Total Score >2.5 vs <=2.5)

RSS Total Score &lt;= 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
Week 64		
Baseline		
n	10	12
Mean	57.41	62.91
SD, SE	5.246, 1.659	7.297, 2.107
Median	57.10	64.20
Q1, Q3	51.60, 61.30	56.10, 67.10
Min, Max	51.3, 67.0	53.1, 76.3
Observed Value		
n	10	12
Mean	62.27	66.83
SD, SE	8.135, 2.573	7.834, 2.261
Median	60.45	67.25
Q1, Q3	55.80, 67.20	60.25, 70.90
Min, Max	52.8, 78.8	56.2, 84.2
Change from Baseline		
n	10	12
Mean	4.86	3.92
SD, SE	5.030, 1.590	1.796, 0.519
Median	3.05	3.90
Q1, Q3	2.00, 4.50	2.95, 4.85
Min, Max	0.8, 17.5	1.4, 7.9
GEE <sup>1</sup>		
LS Mean (SE)	4.90 (1.528)	3.90 (0.470)
95% C.I.	1.90, 7.89	2.97, 4.82
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	1.00	
95% C.I. of difference	-2.17, 4.18	
P Value	0.5368	
HedgesG (95% CI)	0.239 (-0.604, 1.081)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
Baseline		
n	11	9
Mean	50.86	53.37
SD, SE	8.144, 2.456	3.333, 1.111
Median	52.20	54.30
Q1, Q3	51.30, 54.40	53.10, 56.10
Min, Max	27.4, 58.6	46.4, 56.6

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
Week 24		
Baseline		
n	10	8
Mean	50.82	54.24
SD, SE	8.583, 2.714	2.213, 0.782
Median	52.30	54.40
Q1, Q3	51.50, 54.40	53.25, 56.10
Min, Max	27.4, 58.6	49.8, 56.6
Observed Value		
n	11	9
Mean	54.02	54.81
SD, SE	3.046, 0.918	2.762, 0.921
Median	52.90	54.00
Q1, Q3	52.20, 56.10	53.60, 57.40
Min, Max	48.7, 58.8	50.7, 58.6
Change from Baseline		
n	10	8
Mean	3.42	1.09
SD, SE	6.522, 2.062	0.868, 0.307
Median	1.35	1.05
Q1, Q3	0.20, 2.40	0.55, 1.65
Min, Max	-0.2, 21.3	-0.3, 2.5
GEE <sup>1</sup>		
LS Mean (SE)	2.27 (0.643)	2.04 (0.795)
95% C.I.	1.01, 3.53	0.49, 3.60
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.23	
95% C.I. of difference	-1.87, 2.33	
P Value	0.8300	
HedgesG (95% CI)	0.425 (-0.515, 1.365)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
Week 40		
Baseline		
n	10	9
Mean	50.71	53.37
SD, SE	8.568, 2.709	3.333, 1.111
Median	51.90	54.30
Q1, Q3	51.30, 54.40	53.10, 56.10
Min, Max	27.4, 58.6	46.4, 56.6
Observed Value		
n	11	12
Mean	54.36	53.98
SD, SE	3.422, 1.032	4.018, 1.160
Median	53.30	54.40
Q1, Q3	52.00, 57.20	51.00, 57.80
Min, Max	49.7, 61.1	47.3, 59.4
Change from Baseline		
n	10	9
Mean	3.90	2.02
SD, SE	6.677, 2.111	0.950, 0.317
Median	1.90	1.90
Q1, Q3	0.50, 2.80	1.70, 2.50
Min, Max	0.1, 22.3	0.4, 3.4
GEE <sup>1</sup>		
LS Mean (SE)	2.79 (0.735)	2.95 (0.796)
95% C.I.	1.35, 4.23	1.39, 4.51
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.16	
95% C.I. of difference	-2.37, 2.06	
P Value	0.8884	
HedgesG (95% CI)	0.346 (-0.561, 1.253)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
Week 64		
Baseline		
n	11	9
Mean	50.86	53.37
SD, SE	8.144, 2.456	3.333, 1.111
Median	52.20	54.30
Q1, Q3	51.30, 54.40	53.10, 56.10
Min, Max	27.4, 58.6	46.4, 56.6
Observed Value		
n	13	12
Mean	55.84	55.29
SD, SE	3.280, 0.910	3.977, 1.148
Median	55.40	55.50
Q1, Q3	52.80, 57.10	52.90, 58.50
Min, Max	51.6, 63.1	48.6, 61.3
Change from Baseline		
n	11	9
Mean	5.58	3.20
SD, SE	6.486, 1.956	1.231, 0.410
Median	3.90	3.10
Q1, Q3	2.20, 6.00	2.60, 4.10
Min, Max	0.8, 24.2	1.4, 5.2
GEE <sup>1</sup>		
LS Mean (SE)	4.75 (0.732)	4.13 (0.846)
95% C.I.	3.31, 6.18	2.47, 5.79
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.62	
95% C.I. of difference	-1.68, 2.92	
P Value	0.5968	
HedgesG (95% CI)	0.441 (-0.450, 1.333)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Baseline		
n	15	20
Mean	65.53	67.27
SD, SE	6.850, 1.769	6.426, 1.437
Median	67.00	65.30
Q1, Q3	59.30, 69.50	61.70, 73.25
Min, Max	55.8, 78.1	59.0, 78.4

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Week 24		
Baseline		
n	15	20
Mean	65.53	67.27
SD, SE	6.850, 1.769	6.426, 1.437
Median	67.00	65.30
Q1, Q3	59.30, 69.50	61.70, 73.25
Min, Max	55.8, 78.1	59.0, 78.4
Observed Value		
n	15	20
Mean	67.20	68.94
SD, SE	6.706, 1.731	6.226, 1.392
Median	67.90	66.85
Q1, Q3	62.40, 71.40	63.75, 74.00
Min, Max	57.3, 81.2	61.4, 79.5
Change from Baseline		
n	15	20
Mean	1.67	1.67
SD, SE	1.710, 0.441	1.336, 0.299
Median	1.10	1.60
Q1, Q3	0.70, 2.00	0.90, 2.00
Min, Max	-0.2, 7.1	-0.4, 4.9
GEE <sup>1</sup>		
LS Mean (SE)	1.51 (0.414)	1.84 (0.317)
95% C.I.	0.70, 2.32	1.22, 2.46
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.33	
95% C.I. of difference	-1.32, 0.65	
P Value	0.5073	
HedgesG (95% CI)	-0.002 (-0.672, 0.667)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas



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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Week 40		
Baseline		
n	14	19
Mean	66.20	67.71
SD, SE	6.585, 1.760	6.292, 1.443
Median	67.10	65.60
Q1, Q3	61.30, 69.50	61.80, 74.30
Min, Max	55.8, 78.1	59.6, 78.4
Observed Value		
n	14	19
Mean	68.77	70.46
SD, SE	6.504, 1.738	6.187, 1.419
Median	69.35	69.30
Q1, Q3	63.80, 71.20	65.10, 76.60
Min, Max	57.3, 82.9	60.7, 81.1
Change from Baseline		
n	14	19
Mean	2.57	2.75
SD, SE	1.913, 0.511	1.823, 0.418
Median	2.10	2.10
Q1, Q3	1.80, 2.50	1.70, 4.20
Min, Max	0.6, 8.3	0.3, 7.0
GEE <sup>1</sup>		
LS Mean (SE)	2.39 (0.446)	2.95 (0.405)
95% C.I.	1.52, 3.27	2.16, 3.74
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.56	
95% C.I. of difference	-1.72, 0.60	
P Value	0.3474	
HedgesG (95% CI)	-0.092 (-0.783, 0.599)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

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Table 1.9.1.8.2.2  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Age (< 5 years vs. ≥ 5 years)

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Week 64		
Baseline		
n	15	20
Mean	65.53	67.27
SD, SE	6.850, 1.769	6.426, 1.437
Median	67.00	65.30
Q1, Q3	59.30, 69.50	61.70, 73.25
Min, Max	55.8, 78.1	59.0, 78.4
Observed Value		
n	15	20
Mean	70.26	71.24
SD, SE	7.549, 1.949	6.276, 1.403
Median	70.60	69.40
Q1, Q3	64.70, 75.00	66.05, 76.00
Min, Max	57.8, 84.4	63.4, 84.2
Change from Baseline		
n	15	20
Mean	4.73	3.97
SD, SE	3.994, 1.031	1.843, 0.412
Median	3.40	3.90
Q1, Q3	2.70, 4.70	2.70, 4.60
Min, Max	2.0, 17.5	1.4, 7.9
GEE <sup>1</sup>		
LS Mean (SE)	4.57 (1.065)	4.14 (0.421)
95% C.I.	2.48, 6.66	3.32, 4.97
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.43	
95% C.I. of difference	-1.77, 2.62	
P Value	0.7036	
HedgesG (95% CI)	0.243 (-0.429, 0.915)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
Baseline		
n	13	12
Mean	60.48	67.03
SD, SE	12.938, 3.588	9.286, 2.681
Median	62.00	67.70
Q1, Q3	55.80, 69.40	58.10, 75.40
Min, Max	27.4, 78.1	54.5, 78.4

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
Week 24		
Baseline		
n	13	12
Mean	60.48	67.03
SD, SE	12.938, 3.588	9.286, 2.681
Median	62.00	67.70
Q1, Q3	55.80, 69.40	58.10, 75.40
Min, Max	27.4, 78.1	54.5, 78.4
Observed Value		
n	13	13
Mean	63.49	67.32
SD, SE	9.640, 2.674	10.133, 2.810
Median	63.00	67.00
Q1, Q3	57.30, 70.10	58.60, 76.20
Min, Max	48.7, 81.2	50.7, 79.5
Change from Baseline		
n	13	12
Mean	3.02	1.68
SD, SE	5.541, 1.537	0.737, 0.213
Median	1.50	1.70
Q1, Q3	1.00, 2.00	1.25, 2.00
Min, Max	0.6, 21.3	0.5, 3.2
GEE <sup>1</sup>		
LS Mean (SE)	1.02 (0.710)	3.29 (0.502)
95% C.I.	-0.37, 2.41	2.30, 4.27
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-2.27	
95% C.I. of difference	-4.18, -0.36	
P Value	0.0199	
HedgesG (95% CI)	0.306 (-0.483, 1.095)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
Week 40		
Baseline		
n	12	12
Mean	60.83	67.03
SD, SE	13.447, 3.882	9.286, 2.681
Median	64.50	67.70
Q1, Q3	53.70, 69.45	58.10, 75.40
Min, Max	27.4, 78.1	54.5, 78.4
Observed Value		
n	12	14
Mean	64.56	66.49
SD, SE	10.166, 2.935	11.297, 3.019
Median	66.40	64.95
Q1, Q3	54.80, 70.65	57.90, 76.80
Min, Max	49.7, 82.9	47.3, 81.1
Change from Baseline		
n	12	12
Mean	3.73	2.32
SD, SE	5.955, 1.719	1.206, 0.348
Median	1.90	2.10
Q1, Q3	1.60, 2.75	1.55, 3.25
Min, Max	0.5, 22.3	0.3, 4.8
GEE <sup>1</sup>		
LS Mean (SE)	1.60 (0.715)	3.93 (0.618)
95% C.I.	0.20, 3.00	2.72, 5.14
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-2.33	
95% C.I. of difference	-4.35, -0.31	
P Value	0.0240	
HedgesG (95% CI)	0.301 (-0.503, 1.106)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
Week 64		
Baseline		
n	13	12
Mean	60.48	67.03
SD, SE	12.938, 3.588	9.286, 2.681
Median	62.00	67.70
Q1, Q3	55.80, 69.40	58.10, 75.40
Min, Max	27.4, 78.1	54.5, 78.4
Observed Value		
n	13	14
Mean	65.72	67.96
SD, SE	9.678, 2.684	11.382, 3.042
Median	64.70	66.70
Q1, Q3	57.80, 73.30	58.60, 79.00
Min, Max	51.6, 84.4	48.6, 84.2
Change from Baseline		
n	13	12
Mean	5.25	3.82
SD, SE	5.850, 1.622	1.713, 0.495
Median	3.40	3.90
Q1, Q3	2.70, 4.70	2.50, 4.40
Min, Max	2.0, 24.2	1.6, 7.9
GEE <sup>1</sup>		
LS Mean (SE)	3.25 (0.854)	5.43 (0.682)
95% C.I.	1.57, 4.92	4.09, 6.77
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-2.18	
95% C.I. of difference	-4.44, 0.07	
P Value	0.0580	
HedgesG (95% CI)	0.300 (-0.489, 1.089)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
Baseline		
n	13	17
Mean	58.18	60.08
SD, SE	7.319, 2.030	7.007, 1.700
Median	56.30	61.60
Q1, Q3	52.40, 61.30	54.30, 64.40
Min, Max	51.3, 74.9	46.4, 72.2

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
Week 24		
Baseline		
n	12	16
Mean	58.75	60.94
SD, SE	7.333, 2.117	6.254, 1.564
Median	57.10	61.70
Q1, Q3	52.80, 62.05	55.20, 65.00
Min, Max	51.5, 74.9	49.8, 72.2
Observed Value		
n	13	16
Mean	59.75	62.31
SD, SE	7.183, 1.992	6.450, 1.612
Median	58.00	63.75
Q1, Q3	55.60, 62.60	55.70, 66.30
Min, Max	51.8, 75.6	51.4, 71.8
Change from Baseline		
n	12	16
Mean	1.67	1.37
SD, SE	2.381, 0.687	1.516, 0.379
Median	0.90	1.05
Q1, Q3	0.00, 1.90	0.50, 1.65
Min, Max	-0.2, 7.1	-0.4, 4.9
GEE <sup>1</sup>		
LS Mean (SE)	1.47 (0.553)	1.37 (0.340)
95% C.I.	0.38, 2.55	0.70, 2.04
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	0.10	
95% C.I. of difference	-1.16, 1.35	
P Value	0.8805	
HedgesG (95% CI)	0.144 (-0.605, 0.894)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas



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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
Week 40		
Baseline		
n	12	16
Mean	58.66	60.15
SD, SE	7.426, 2.144	7.231, 1.808
Median	57.10	61.70
Q1, Q3	52.70, 62.05	53.85, 65.00
Min, Max	51.3, 74.9	46.4, 72.2
Observed Value		
n	13	17
Mean	60.47	62.10
SD, SE	7.662, 2.125	8.124, 1.970
Median	58.00	64.10
Q1, Q3	53.60, 65.10	55.00, 68.40
Min, Max	51.9, 76.7	48.3, 73.7
Change from Baseline		
n	12	16
Mean	2.53	2.66
SD, SE	2.341, 0.676	1.889, 0.472
Median	2.20	1.90
Q1, Q3	0.90, 2.65	1.70, 3.35
Min, Max	0.1, 8.3	0.4, 7.0
GEE <sup>1</sup>		
LS Mean (SE)	2.39 (0.546)	2.70 (0.427)
95% C.I.	1.32, 3.46	1.87, 3.54
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	-0.32	
95% C.I. of difference	-1.68, 1.04	
P Value	0.6463	
HedgesG (95% CI)	-0.061 (-0.810, 0.687)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

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Table 1.9.1.8.2.3  
Summary of Change from Baseline in Sitting Height  
Full Analysis Set  
by Sex (female vs. male)

Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
Week 64		
Baseline		
n	13	17
Mean	58.18	60.08
SD, SE	7.319, 2.030	7.007, 1.700
Median	56.30	61.60
Q1, Q3	52.40, 61.30	54.30, 64.40
Min, Max	51.3, 74.9	46.4, 72.2
Observed Value		
n	15	18
Mean	61.69	63.16
SD, SE	9.017, 2.328	7.530, 1.775
Median	58.30	65.35
Q1, Q3	55.30, 67.20	56.20, 68.70
Min, Max	52.5, 78.8	49.0, 73.7
Change from Baseline		
n	13	17
Mean	4.93	3.66
SD, SE	4.448, 1.234	1.730, 0.420
Median	3.60	3.10
Q1, Q3	2.80, 4.50	2.60, 4.50
Min, Max	0.8, 17.5	1.4, 7.2
GEE <sup>1</sup>		
LS Mean (SE)	4.88 (1.143)	3.67 (0.404)
95% C.I.	2.64, 7.12	2.88, 4.47
Difference (KRN23 - Oral Phosphate/Active Vitamin D)	1.21	
95% C.I. of difference	-1.15, 3.56	
P Value	0.3156	
HedgesG (95% CI)	0.373 (-0.355, 1.101)	

<sup>1</sup> GEE model has baseline and age as covariates and treatment, visit, RSS Total Scale, and treatment\*visit as factors.

Data Source: ADSL, ADSITHT. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-siht-subg.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	N <sub>1</sub>	5	8
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 24		
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0
	Observed Value		
	n	5	8
	Mean	360.20	440.88
	SD, SE	35.780, 16.001	127.149, 44.954
	Median	345.00	415.50
	Q1, Q3	340.00, 396.00	359.00, 495.50
	Min, Max	320.0, 400.0	286.0, 701.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-13.60	-13.13
	SD, SE	47.019, 21.028	68.876, 24.351
	Median	-20.00	-13.00
	Q1, Q3	-28.00, -6.00	-66.00, 41.00
	Min, Max	-72.0, 58.0	-118.0, 89.0
	GEE <sup>1</sup>		
	LS Mean (SE)	-16.88 (16.449)	-11.08 (21.059)
	95% C.I.	-49.12, 15.36	-52.35, 30.20
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-5.80	
	95% C.I. of difference	-51.23, 39.63	
	P-value	0.8024	
	HedgesG (95% CI)	-0.007 (-1.124, 1.111)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 40		
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0
	Observed Value		
	n	5	8
	Mean	431.20	443.50
	SD, SE	77.606, 34.706	98.858, 34.951
	Median	410.00	439.50
	Q1, Q3	390.00, 485.00	360.50, 518.00
	Min, Max	338.0, 533.0	321.0, 591.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	57.40	-10.50
	SD, SE	70.436, 31.500	57.383, 20.288
	Median	61.00	-24.50
	Q1, Q3	8.00, 103.00	-54.50, 27.50
	Min, Max	-30.0, 145.0	-77.0, 96.0
	GEE <sup>1</sup>		
	LS Mean (SE)	54.12 (26.962)	-8.45 (19.200)
	95% C.I.	1.28, 106.97	-46.08, 29.18
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	62.58	
	95% C.I. of difference	-2.65, 127.80	
	P-value	0.0600	
	HedgesG (95% CI)	0.930 (-0.243, 2.104)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 64		
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0
	Observed Value		
	n	5	8
	Mean	427.00	464.88
	SD, SE	72.080, 32.235	112.011, 39.602
	Median	395.00	446.00
	Q1, Q3	384.00, 455.00	372.00, 549.50
	Min, Max	361.0, 540.0	341.0, 643.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	53.20	10.88
	SD, SE	65.762, 29.410	41.212, 14.571
	Median	68.00	17.50
	Q1, Q3	16.00, 108.00	-23.50, 41.50
	Min, Max	-41.0, 115.0	-52.0, 68.0
	GEE <sup>1</sup>		
	LS Mean (SE)	49.92 (25.258)	12.92 (15.199)
	95% C.I.	0.42, 99.43	-16.87, 42.71
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	37.00	
	95% C.I. of difference	-21.74, 95.74	
	P-value	0.2170	
	HedgesG (95% CI)	0.703 (-0.447, 1.853)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	n	10	12
	Mean	362.00	448.17
	SD, SE	139.681, 44.171	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	335.00, 410.00	375.50, 520.00
	Min, Max	54.0, 624.0	267.0, 720.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	10	12
	Mean	362.00	448.17
	SD, SE	139.681, 44.171	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	335.00, 410.00	375.50, 520.00
	Min, Max	54.0, 624.0	267.0, 720.0
	Observed Value		
	n	10	12
	Mean	432.70	475.25
	SD, SE	88.409, 27.958	216.747, 62.569
	Median	417.50	446.00
	Q1, Q3	353.00, 475.00	396.00, 523.00
	Min, Max	335.0, 633.0	104.0, 1046.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	70.70	27.08
	SD, SE	89.017, 28.150	130.878, 37.781
	Median	62.50	21.00
	Q1, Q3	5.00, 100.00	-10.00, 74.50
	Min, Max	-9.0, 292.0	-256.0, 326.0
	GEE <sup>1</sup>		
	LS Mean (SE)	56.94 (15.968)	38.55 (40.093)
	95% C.I.	25.64, 88.23	-40.03, 117.13
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	18.38	
	95% C.I. of difference	-60.30, 97.06	
	P-value	0.6470	
	HedgesG (95% CI)	0.351 (-0.495, 1.197)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	10	12
	Mean	362.00	448.17
	SD, SE	139.681, 44.171	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	335.00, 410.00	375.50, 520.00
	Min, Max	54.0, 624.0	267.0, 720.0
	Observed Value		
	n	10	12
	Mean	436.50	466.67
	SD, SE	84.293, 26.656	96.557, 27.874
	Median	405.00	480.00
	Q1, Q3	380.00, 475.00	402.00, 522.00
	Min, Max	370.0, 647.0	310.0, 637.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	74.50	18.50
	SD, SE	109.869, 34.744	56.287, 16.249
	Median	45.00	9.50
	Q1, Q3	16.00, 95.00	-18.00, 59.00
	Min, Max	-22.0, 368.0	-83.0, 115.0
	GEE <sup>1</sup>		
	LS Mean (SE)	60.74 (20.321)	29.97 (15.760)
	95% C.I.	20.91, 100.57	-0.92, 60.86
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	30.77	
	95% C.I. of difference	-18.14, 79.68	
	P-value	0.2176	
	HedgesG (95% CI)	0.606 (-0.252, 1.465)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	10	12
	Mean	362.00	448.17
	SD, SE	139.681, 44.171	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	335.00, 410.00	375.50, 520.00
	Min, Max	54.0, 624.0	267.0, 720.0
	Observed Value		
	n	10	12
	Mean	482.20	492.25
	SD, SE	83.777, 26.493	117.332, 33.871
	Median	464.00	465.00
	Q1, Q3	445.00, 528.00	408.00, 563.50
	Min, Max	365.0, 673.0	318.0, 732.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	120.20	44.08
	SD, SE	71.706, 22.675	98.809, 28.524
	Median	108.00	21.00
	Q1, Q3	98.00, 120.00	-26.00, 119.50
	Min, Max	49.0, 311.0	-127.0, 195.0
	GEE <sup>1</sup>		
	LS Mean (SE)	106.44 (9.559)	55.55 (25.464)
	95% C.I.	87.70, 125.17	5.64, 105.46
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	50.88	
	95% C.I. of difference	-2.28, 104.05	
	P-value	0.0607	
	HedgesG (95% CI)	0.797 (-0.075, 1.668)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	n	10	9
	Mean	359.40	452.33
	SD, SE	142.244, 44.982	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	305.00, 410.00	375.00, 540.00
	Min, Max	54.0, 624.0	267.0, 720.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Baseline		
	n	10	9
	Mean	359.40	452.33
	SD, SE	142.244, 44.982	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	305.00, 410.00	375.00, 540.00
	Min, Max	54.0, 624.0	267.0, 720.0
	Observed Value		
	n	10	9
	Mean	419.30	497.78
	SD, SE	92.454, 29.237	227.362, 75.787
	Median	400.50	420.00
	Q1, Q3	346.00, 475.00	358.00, 546.00
	Min, Max	335.0, 633.0	286.0, 1046.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	59.90	45.44
	SD, SE	91.906, 29.063	113.006, 37.669
	Median	27.00	17.00
	Q1, Q3	0.00, 100.00	-17.00, 53.00
	Min, Max	-9.0, 292.0	-64.0, 326.0
	GEE <sup>1</sup>		
	LS Mean (SE)	25.07 (14.553)	52.41 (39.506)
	95% C.I.	-3.45, 53.60	-25.02, 129.84
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-27.34	
	95% C.I. of difference	-104.9, 50.18	
	P-value	0.4894	
	HedgesG (95% CI)	0.128 (-0.774, 1.029)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Baseline		
	n	10	9
	Mean	359.40	452.33
	SD, SE	142.244, 44.982	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	305.00, 410.00	375.00, 540.00
	Min, Max	54.0, 624.0	267.0, 720.0
	Observed Value		
	n	10	9
	Mean	431.00	468.56
	SD, SE	82.889, 26.212	110.066, 36.689
	Median	400.00	500.00
	Q1, Q3	385.00, 440.00	374.00, 536.00
	Min, Max	370.0, 647.0	310.0, 637.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	71.60	16.22
	SD, SE	111.530, 35.269	61.822, 20.607
	Median	36.50	1.00
	Q1, Q3	10.00, 95.00	-20.00, 43.00
	Min, Max	-22.0, 368.0	-83.0, 115.0
	GEE <sup>1</sup>		
	LS Mean (SE)	36.77 (18.039)	23.19 (20.515)
	95% C.I.	1.42, 72.13	-17.02, 63.40
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	13.58	
	95% C.I. of difference	-38.94, 66.11	
	P-value	0.6122	
	HedgesG (95% CI)	0.546 (-0.371, 1.464)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Baseline		
	n	10	9
	Mean	359.40	452.33
	SD, SE	142.244, 44.982	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	305.00, 410.00	375.00, 540.00
	Min, Max	54.0, 624.0	267.0, 720.0
	Observed Value		
	n	10	9
	Mean	463.80	479.33
	SD, SE	95.206, 30.107	119.144, 39.715
	Median	445.00	430.00
	Q1, Q3	395.00, 528.00	413.00, 547.00
	Min, Max	361.0, 673.0	356.0, 732.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	104.40	27.00
	SD, SE	87.991, 27.825	105.641, 35.214
	Median	107.00	2.00
	Q1, Q3	60.00, 113.00	-19.00, 68.00
	Min, Max	-41.0, 311.0	-127.0, 195.0
	GEE <sup>1</sup>		
	LS Mean (SE)	69.57 (14.531)	33.96 (23.541)
	95% C.I.	41.09, 98.05	-12.18, 80.10
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	35.61	
	95% C.I. of difference	-21.20, 92.41	
	P-value	0.2192	
	HedgesG (95% CI)	0.723 (-0.206, 1.653)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0
	Observed Value		
	n	5	11
	Mean	387.00	431.82
	SD, SE	56.080, 25.080	141.607, 42.696
	Median	400.00	442.00
	Q1, Q3	340.00, 420.00	384.00, 498.00
	Min, Max	320.0, 455.0	104.0, 701.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	8.00	-17.18
	SD, SE	68.644, 30.699	103.831, 31.306
	Median	-20.00	0.00
	Q1, Q3	-28.00, 80.00	-68.00, 76.00
	Min, Max	-72.0, 80.0	-256.0, 95.0
	GEE <sup>1</sup>		
	LS Mean (SE)	21.55 (22.596)	-23.34 (31.254)
	95% C.I.	-22.74, 65.84	-84.60, 37.91
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	44.89	
	95% C.I. of difference	-35.86, 125.65	
	P-value	0.2759	
	HedgesG (95% CI)	0.234 (-0.826, 1.294)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0
	Observed Value		
	n	5	11
	Mean	442.20	448.27
	SD, SE	80.434, 35.971	86.366, 26.040
	Median	475.00	460.00
	Q1, Q3	380.00, 485.00	384.00, 520.00
	Min, Max	338.0, 533.0	321.0, 591.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	63.20	-0.73
	SD, SE	65.717, 29.389	54.718, 16.498
	Median	61.00	-16.00
	Q1, Q3	40.00, 100.00	-48.00, 31.00
	Min, Max	-30.0, 145.0	-77.0, 95.0
	GEE <sup>1</sup>		
	LS Mean (SE)	76.75 (24.504)	-6.89 (14.319)
	95% C.I.	28.73, 124.78	-34.95, 21.18
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	83.64	
	95% C.I. of difference	28.54, 138.74	
	P-value	0.0029	
	HedgesG (95% CI)	0.974 (-0.136, 2.083)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0
	Observed Value		
	n	5	11
	Mean	463.80	482.91
	SD, SE	55.966, 25.029	113.680, 34.276
	Median	460.00	480.00
	Q1, Q3	455.00, 480.00	390.00, 606.00
	Min, Max	384.0, 540.0	318.0, 643.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.1.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	84.80	33.91
	SD, SE	43.517, 19.461	59.212, 17.853
	Median	105.00	30.00
	Q1, Q3	68.00, 115.00	-28.00, 95.00
	Min, Max	16.0, 120.0	-48.0, 138.0
	GEE <sup>1</sup>		
	LS Mean (SE)	98.35 (13.162)	27.75 (15.073)
	95% C.I.	72.56, 124.15	-1.79, 57.29
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	70.60	
	95% C.I. of difference	32.58, 108.63	
	P-value	0.0003	
	HedgesG (95% CI)	0.816 (-0.279, 1.910)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	N <sub>1</sub>	5	8
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 24		
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0
	Observed Value		
	n	5	8
	Mean	360.20	440.88
	SD, SE	35.780, 16.001	127.149, 44.954
	Median	345.00	415.50
	Q1, Q3	340.00, 396.00	359.00, 495.50
	Min, Max	320.0, 400.0	286.0, 701.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

Note: This is DRAFT version and may not be fully validated.



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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	-13.60	-13.13
	SD, SE	47.019, 21.028	68.876, 24.351
	Median	-20.00	-13.00
	Q1, Q3	-28.00, -6.00	-66.00, 41.00
	Min, Max	-72.0, 58.0	-118.0, 89.0
	GEE <sup>1</sup>		
	LS Mean (SE)	-16.88 (16.449)	-11.08 (21.059)
	95% C.I.	-49.12, 15.36	-52.35, 30.20
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-5.80	
	95% C.I. of difference	-51.23, 39.63	
	P-value	0.8024	
	HedgesG (95% CI)	-0.007 (-1.124, 1.111)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 40		
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0
	Observed Value		
	n	5	8
	Mean	431.20	443.50
	SD, SE	77.606, 34.706	98.858, 34.951
	Median	410.00	439.50
	Q1, Q3	390.00, 485.00	360.50, 518.00
	Min, Max	338.0, 533.0	321.0, 591.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	57.40	-10.50
	SD, SE	70.436, 31.500	57.383, 20.288
	Median	61.00	-24.50
	Q1, Q3	8.00, 103.00	-54.50, 27.50
	Min, Max	-30.0, 145.0	-77.0, 96.0
	GEE <sup>1</sup>		
	LS Mean (SE)	54.12 (26.962)	-8.45 (19.200)
	95% C.I.	1.28, 106.97	-46.08, 29.18
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	62.58	
	95% C.I. of difference	-2.65, 127.80	
	P-value	0.0600	
	HedgesG (95% CI)	0.930 (-0.243, 2.104)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 64		
	Baseline		
	n	5	8
	Mean	373.80	454.00
	SD, SE	69.190, 30.943	92.387, 32.664
	Median	368.00	451.50
	Q1, Q3	340.00, 402.00	372.00, 511.50
	Min, Max	287.0, 472.0	350.0, 612.0
	Observed Value		
	n	5	8
	Mean	427.00	464.88
	SD, SE	72.080, 32.235	112.011, 39.602
	Median	395.00	446.00
	Q1, Q3	384.00, 455.00	372.00, 549.50
	Min, Max	361.0, 540.0	341.0, 643.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	53.20	10.88
	SD, SE	65.762, 29.410	41.212, 14.571
	Median	68.00	17.50
	Q1, Q3	16.00, 108.00	-23.50, 41.50
	Min, Max	-41.0, 115.0	-52.0, 68.0
	GEE <sup>1</sup>		
	LS Mean (SE)	49.92 (25.258)	12.92 (15.199)
	95% C.I.	0.42, 99.43	-16.87, 42.71
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	37.00	
	95% C.I. of difference	-21.74, 95.74	
	P-value	0.2170	
	HedgesG (95% CI)	0.703 (-0.447, 1.853)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	8	12
	Baseline		
	n	8	12
	Mean	392.00	448.17
	SD, SE	99.217, 35.078	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	337.50, 397.50	375.50, 520.00
	Min, Max	305.0, 624.0	267.0, 720.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	8	12
	Mean	392.00	448.17
	SD, SE	99.217, 35.078	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	337.50, 397.50	375.50, 520.00
	Min, Max	305.0, 624.0	267.0, 720.0
	Observed Value		
	n	8	12
	Mean	438.25	475.25
	SD, SE	93.192, 32.948	216.747, 62.569
	Median	417.50	446.00
	Q1, Q3	379.00, 472.50	396.00, 523.00
	Min, Max	335.0, 633.0	104.0, 1046.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	8	12
	Mean	46.25	27.08
	SD, SE	49.135, 17.372	130.878, 37.781
	Median	44.50	21.00
	Q1, Q3	2.50, 90.00	-10.00, 74.50
	Min, Max	-9.0, 105.0	-256.0, 326.0
	GEE <sup>1</sup>		
	LS Mean (SE)	43.85 (15.948)	28.68 (36.877)
	95% C.I.	12.59, 75.11	-43.59, 100.96
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	15.16	
	95% C.I. of difference	-62.33, 92.65	
	P-value	0.7013	
	HedgesG (95% CI)	0.163 (-0.733, 1.059)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	8	12
	Mean	392.00	448.17
	SD, SE	99.217, 35.078	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	337.50, 397.50	375.50, 520.00
	Min, Max	305.0, 624.0	267.0, 720.0
	Observed Value		
	n	8	12
	Mean	437.88	466.67
	SD, SE	95.402, 33.730	96.557, 27.874
	Median	386.50	480.00
	Q1, Q3	379.00, 477.50	402.00, 522.00
	Min, Max	370.0, 647.0	310.0, 637.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	8	12
	Mean	45.88	18.50
	SD, SE	41.028, 14.505	56.287, 16.249
	Median	45.00	9.50
	Q1, Q3	19.50, 80.00	-18.00, 59.00
	Min, Max	-22.0, 100.0	-83.0, 115.0
	GEE <sup>1</sup>		
	LS Mean (SE)	43.47 (13.668)	20.10 (16.115)
	95% C.I.	16.68, 70.26	-11.48, 51.69
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	23.37	
	95% C.I. of difference	-22.20, 68.94	
	P-value	0.3148	
	HedgesG (95% CI)	0.489 (-0.419, 1.396)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	8	12
	Mean	392.00	448.17
	SD, SE	99.217, 35.078	118.826, 34.302
	Median	368.50	426.50
	Q1, Q3	337.50, 397.50	375.50, 520.00
	Min, Max	305.0, 624.0	267.0, 720.0
	Observed Value		
	n	8	12
	Mean	491.13	492.25
	SD, SE	81.676, 28.877	117.332, 33.871
	Median	464.00	465.00
	Q1, Q3	445.00, 510.00	408.00, 563.50
	Min, Max	418.0, 673.0	318.0, 732.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	8	12
	Mean	99.13	44.08
	SD, SE	28.847, 10.199	98.809, 28.524
	Median	108.00	21.00
	Q1, Q3	82.50, 116.50	-26.00, 119.50
	Min, Max	49.0, 130.0	-127.0, 195.0
	GEE <sup>1</sup>		
	LS Mean (SE)	96.72 (9.334)	45.68 (27.041)
	95% C.I.	78.43, 115.02	-7.31, 98.68
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	51.04	
	95% C.I. of difference	-7.28, 109.36	
	P-value	0.0863	
	HedgesG (95% CI)	0.631 (-0.285, 1.546)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	8	9
	Baseline		
	n	8	9
	Mean	388.75	452.33
	SD, SE	104.851, 37.070	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	320.00, 406.00	375.00, 540.00
	Min, Max	287.0, 624.0	267.0, 720.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Baseline		
	n	8	9
	Mean	388.75	452.33
	SD, SE	104.851, 37.070	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	320.00, 406.00	375.00, 540.00
	Min, Max	287.0, 624.0	267.0, 720.0
	Observed Value		
	n	8	9
	Mean	421.50	497.78
	SD, SE	98.862, 34.953	227.362, 75.787
	Median	400.50	420.00
	Q1, Q3	349.00, 452.50	358.00, 546.00
	Min, Max	335.0, 633.0	286.0, 1046.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	8	9
	Mean	32.75	45.44
	SD, SE	47.856, 16.920	113.006, 37.669
	Median	7.00	17.00
	Q1, Q3	-3.00, 79.00	-17.00, 53.00
	Min, Max	-9.0, 105.0	-64.0, 326.0
	GEE <sup>1</sup>		
	LS Mean (SE)	18.36 (16.052)	43.30 (35.553)
	95% C.I.	-13.11, 49.82	-26.39, 112.98
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-24.94	
	95% C.I. of difference	-94.49, 44.61	
	P-value	0.4821	
	HedgesG (95% CI)	-0.128 (-1.081, 0.826)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Baseline		
	n	8	9
	Mean	388.75	452.33
	SD, SE	104.851, 37.070	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	320.00, 406.00	375.00, 540.00
	Min, Max	287.0, 624.0	267.0, 720.0
	Observed Value		
	n	8	9
	Mean	431.00	468.56
	SD, SE	93.865, 33.186	110.066, 36.689
	Median	389.00	500.00
	Q1, Q3	381.50, 445.00	374.00, 536.00
	Min, Max	370.0, 647.0	310.0, 637.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	8	9
	Mean	42.25	16.22
	SD, SE	43.771, 15.475	61.822, 20.607
	Median	36.50	1.00
	Q1, Q3	12.00, 80.00	-20.00, 43.00
	Min, Max	-22.0, 103.0	-83.0, 115.0
	GEE <sup>1</sup>		
	LS Mean (SE)	27.86 (17.067)	14.07 (19.612)
	95% C.I.	-5.59, 61.31	-24.36, 52.51
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	13.78	
	95% C.I. of difference	-38.42, 65.99	
	P-value	0.6049	
	HedgesG (95% CI)	0.429 (-0.535, 1.392)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Baseline		
	n	8	9
	Mean	388.75	452.33
	SD, SE	104.851, 37.070	136.166, 45.389
	Median	373.50	428.00
	Q1, Q3	320.00, 406.00	375.00, 540.00
	Min, Max	287.0, 624.0	267.0, 720.0
	Observed Value		
	n	8	9
	Mean	468.13	479.33
	SD, SE	98.231, 34.730	119.144, 39.715
	Median	445.00	430.00
	Q1, Q3	406.50, 504.00	413.00, 547.00
	Min, Max	361.0, 673.0	356.0, 732.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	8	9
	Mean	79.38	27.00
	SD, SE	55.995, 19.797	105.641, 35.214
	Median	107.00	2.00
	Q1, Q3	54.50, 111.50	-19.00, 68.00
	Min, Max	-41.0, 130.0	-127.0, 195.0
	GEE <sup>1</sup>		
	LS Mean (SE)	64.98 (18.569)	24.85 (27.905)
	95% C.I.	28.59, 101.38	-29.84, 79.54
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	40.13	
	95% C.I. of difference	-29.73, 109.99	
	P-value	0.2602	
	HedgesG (95% CI)	0.542 (-0.427, 1.512)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0
	Observed Value		
	n	5	11
	Mean	387.00	431.82
	SD, SE	56.080, 25.080	141.607, 42.696
	Median	400.00	442.00
	Q1, Q3	340.00, 420.00	384.00, 498.00
	Min, Max	320.0, 455.0	104.0, 701.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	8.00	-17.18
	SD, SE	68.644, 30.699	103.831, 31.306
	Median	-20.00	0.00
	Q1, Q3	-28.00, 80.00	-68.00, 76.00
	Min, Max	-72.0, 80.0	-256.0, 95.0
	GEE <sup>1</sup>		
	LS Mean (SE)	21.55 (22.596)	-23.34 (31.254)
	95% C.I.	-22.74, 65.84	-84.60, 37.91
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	44.89	
	95% C.I. of difference	-35.86, 125.65	
	P-value	0.2759	
	HedgesG (95% CI)	0.234 (-0.826, 1.294)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0
	Observed Value		
	n	5	11
	Mean	442.20	448.27
	SD, SE	80.434, 35.971	86.366, 26.040
	Median	475.00	460.00
	Q1, Q3	380.00, 485.00	384.00, 520.00
	Min, Max	338.0, 533.0	321.0, 591.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	63.20	-0.73
	SD, SE	65.717, 29.389	54.718, 16.498
	Median	61.00	-16.00
	Q1, Q3	40.00, 100.00	-48.00, 31.00
	Min, Max	-30.0, 145.0	-77.0, 95.0
	GEE <sup>1</sup>		
	LS Mean (SE)	76.75 (24.504)	-6.89 (14.319)
	95% C.I.	28.73, 124.78	-34.95, 21.18
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	83.64	
	95% C.I. of difference	28.54, 138.74	
	P-value	0.0029	
	HedgesG (95% CI)	0.974 (-0.136, 2.083)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Baseline		
	n	5	11
	Mean	379.00	449.00
	SD, SE	54.378, 24.319	81.757, 24.651
	Median	368.00	436.00
	Q1, Q3	340.00, 375.00	369.00, 500.00
	Min, Max	340.0, 472.0	360.0, 612.0
	Observed Value		
	n	5	11
	Mean	463.80	482.91
	SD, SE	55.966, 25.029	113.680, 34.276
	Median	460.00	480.00
	Q1, Q3	455.00, 480.00	390.00, 606.00
	Min, Max	384.0, 540.0	318.0, 643.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.3.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) total distance from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	84.80	33.91
	SD, SE	43.517, 19.461	59.212, 17.853
	Median	105.00	30.00
	Q1, Q3	68.00, 115.00	-28.00, 95.00
	Min, Max	16.0, 120.0	-48.0, 138.0
	GEE <sup>1</sup>		
	LS Mean (SE)	98.35 (13.162)	27.75 (15.073)
	95% C.I.	72.56, 124.15	-1.79, 57.29
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	70.60	
	95% C.I. of difference	32.58, 108.63	
	P-value	0.0003	
	HedgesG (95% CI)	0.816 (-0.279, 1.910)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	N <sub>1</sub>	5	8
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 24		
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3
	Observed Value		
	n	5	8
	Mean	63.28	73.13
	SD, SE	5.251, 2.348	19.748, 6.982
	Median	61.83	68.31
	Q1, Q3	59.37, 65.37	58.28, 81.77
	Min, Max	58.5, 71.4	54.2, 114.1

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-3.82	-3.72
	SD, SE	8.892, 3.977	11.557, 4.086
	Median	-5.36	-3.06
	Q1, Q3	-6.51, -1.72	-13.32, 5.56
	Min, Max	-15.0, 9.5	-20.9, 12.8
	GEE <sup>1</sup>		
	LS Mean (SE)	-4.14 (3.269)	-3.53 (3.610)
	95% C.I.	-10.55, 2.27	-10.60, 3.55
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.61	
	95% C.I. of difference	-9.44, 8.22	
	P-value	0.8921	
	HedgesG (95% CI)	-0.008 (-1.126, 1.109)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 40		
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3
	Observed Value		
	n	5	8
	Mean	74.99	73.03
	SD, SE	15.088, 6.748	15.831, 5.597
	Median	72.64	74.66
	Q1, Q3	63.57, 87.01	58.82, 85.00
	Min, Max	58.1, 93.6	52.1, 95.2

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	7.88	-3.82
	SD, SE	12.440, 5.563	9.470, 3.348
	Median	7.21	-5.69
	Q1, Q3	0.02, 16.76	-11.39, 2.22
	Min, Max	-7.7, 23.2	-14.7, 13.8
	GEE <sup>1</sup>		
	LS Mean (SE)	7.57 (4.774)	-3.62 (3.141)
	95% C.I.	-1.79, 16.93	-9.78, 2.53
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	11.19	
	95% C.I. of difference	0.09, 22.29	
	P-value	0.0481	
	HedgesG (95% CI)	0.940 (-0.234, 2.115)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 64		
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3
	Observed Value		
	n	5	8
	Mean	72.90	75.37
	SD, SE	14.294, 6.393	17.586, 6.218
	Median	71.75	76.50
	Q1, Q3	64.78, 79.79	60.42, 86.98
	Min, Max	55.4, 92.8	52.9, 102.2

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	5.80	-1.48
	SD, SE	10.576, 4.730	6.545, 2.314
	Median	6.42	-0.18
	Q1, Q3	-1.09, 15.87	-6.27, 2.77
	Min, Max	-8.2, 16.0	-12.2, 7.7
	GEE <sup>1</sup>		
	LS Mean (SE)	5.48 (3.991)	-1.29 (2.371)
	95% C.I.	-2.34, 13.31	-5.93, 3.36
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	6.77	
	95% C.I. of difference	-2.28, 15.82	
	P-value	0.1427	
	HedgesG (95% CI)	0.755 (-0.399, 1.910)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	n	10	12
	Mean	59.64	75.76
	SD, SE	21.475, 6.791	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	51.53, 68.14	66.10, 87.16
	Min, Max	9.5, 92.3	51.1, 107.7

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	10	12
	Mean	59.64	75.76
	SD, SE	21.475, 6.791	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	51.53, 68.14	66.10, 87.16
	Min, Max	9.5, 92.3	51.1, 107.7
	Observed Value		
	n	10	12
	Mean	70.18	78.14
	SD, SE	10.528, 3.329	31.229, 9.015
	Median	65.09	81.09
	Q1, Q3	63.27, 76.22	61.96, 87.82
	Min, Max	59.3, 92.3	19.6, 155.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	10.54	2.38
	SD, SE	15.536, 4.913	22.081, 6.374
	Median	8.99	1.96
	Q1, Q3	-0.00, 15.28	-3.08, 11.97
	Min, Max	-3.3, 49.8	-50.5, 47.3
	GEE <sup>1</sup>		
	LS Mean (SE)	6.89 (2.210)	5.41 (6.665)
	95% C.I.	2.56, 11.22	-7.65, 18.48
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.48	
	95% C.I. of difference	-11.43, 14.39	
	P-value	0.8223	
	HedgesG (95% CI)	0.386 (-0.461, 1.233)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	10	12
	Mean	59.64	75.76
	SD, SE	21.475, 6.791	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	51.53, 68.14	66.10, 87.16
	Min, Max	9.5, 92.3	51.1, 107.7
	Observed Value		
	n	10	12
	Mean	70.28	76.78
	SD, SE	10.583, 3.347	13.512, 3.901
	Median	70.67	78.61
	Q1, Q3	60.12, 74.12	64.33, 90.19
	Min, Max	57.1, 93.6	56.8, 94.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	10.63	1.02
	SD, SE	18.973, 6.000	9.067, 2.617
	Median	6.01	-0.55
	Q1, Q3	0.15, 13.25	-4.54, 8.03
	Min, Max	-4.8, 61.7	-13.9, 16.7
	GEE <sup>1</sup>		
	LS Mean (SE)	6.99 (2.820)	4.05 (2.703)
	95% C.I.	1.46, 12.51	-1.24, 9.35
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	2.93	
	95% C.I. of difference	-4.39, 10.26	
	P-value	0.4323	
	HedgesG (95% CI)	0.613 (-0.246, 1.471)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	10	12
	Mean	59.64	75.76
	SD, SE	21.475, 6.791	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	51.53, 68.14	66.10, 87.16
	Min, Max	9.5, 92.3	51.1, 107.7
	Observed Value		
	n	10	12
	Mean	76.70	79.98
	SD, SE	11.374, 3.597	18.014, 5.200
	Median	76.32	80.57
	Q1, Q3	68.04, 82.91	63.07, 91.04
	Min, Max	60.3, 96.4	55.3, 111.7

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	17.05	4.22
	SD, SE	12.663, 4.004	16.006, 4.621
	Median	15.13	-0.11
	Q1, Q3	12.67, 17.32	-6.50, 15.20
	Min, Max	4.2, 50.9	-22.3, 29.2
	GEE <sup>1</sup>		
	LS Mean (SE)	13.41 (1.541)	7.25 (4.266)
	95% C.I.	10.39, 16.43	-1.11, 15.61
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	6.15	
	95% C.I. of difference	-2.87, 15.18	
	P-value	0.1814	
	HedgesG (95% CI)	0.807 (-0.066, 1.679)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	n	10	9
	Mean	60.52	73.46
	SD, SE	21.359, 6.754	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	55.88, 68.14	61.69, 85.59
	Min, Max	9.5, 92.3	51.1, 107.7

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Baseline		
	n	10	9
	Mean	60.52	73.46
	SD, SE	21.359, 6.754	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	55.88, 68.14	61.69, 85.59
	Min, Max	9.5, 92.3	51.1, 107.7
	Observed Value		
	n	10	9
	Mean	69.49	79.26
	SD, SE	10.736, 3.395	31.486, 10.495
	Median	65.09	66.32
	Q1, Q3	62.03, 76.22	60.42, 85.39
	Min, Max	59.3, 92.3	54.2, 155.0

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	8.96	5.79
	SD, SE	15.972, 5.051	17.251, 5.750
	Median	3.19	1.52
	Q1, Q3	-1.67, 15.28	-3.18, 7.58
	Min, Max	-3.3, 49.8	-14.1, 47.3
	GEE <sup>1</sup>		
	LS Mean (SE)	3.33 (2.363)	7.47 (6.248)
	95% C.I.	-1.30, 7.96	-4.78, 19.71
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-4.14	
	95% C.I. of difference	-16.68, 8.40	
	P-value	0.5176	
	HedgesG (95% CI)	0.173 (-0.730, 1.075)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Baseline		
	n	10	9
	Mean	60.52	73.46
	SD, SE	21.359, 6.754	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	55.88, 68.14	61.69, 85.59
	Min, Max	9.5, 92.3	51.1, 107.7
	Observed Value		
	n	10	9
	Mean	70.85	74.65
	SD, SE	9.841, 3.112	14.994, 4.998
	Median	70.67	78.35
	Q1, Q3	63.57, 74.12	62.78, 87.07
	Min, Max	59.0, 93.6	52.1, 93.8

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	10.32	1.19
	SD, SE	19.292, 6.101	9.628, 3.209
	Median	3.89	-1.15
	Q1, Q3	0.02, 13.25	-5.00, 5.69
	Min, Max	-4.8, 61.7	-13.9, 16.7
	GEE <sup>1</sup>		
	LS Mean (SE)	4.69 (3.019)	2.86 (3.496)
	95% C.I.	-1.23, 10.61	-3.99, 9.71
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.83	
	95% C.I. of difference	-6.48, 10.14	
	P-value	0.6666	
	HedgesG (95% CI)	0.532 (-0.384, 1.448)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Baseline		
	n	10	9
	Mean	60.52	73.46
	SD, SE	21.359, 6.754	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	55.88, 68.14	61.69, 85.59
	Min, Max	9.5, 92.3	51.1, 107.7
	Observed Value		
	n	10	9
	Mean	75.18	75.56
	SD, SE	13.114, 4.147	16.711, 5.570
	Median	75.48	76.45
	Q1, Q3	65.75, 82.91	63.26, 83.15
	Min, Max	55.4, 96.4	52.9, 107.1

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	14.66	2.10
	SD, SE	14.965, 4.732	17.202, 5.734
	Median	15.13	-1.04
	Q1, Q3	7.16, 15.90	-5.58, 7.71
	Min, Max	-8.2, 50.9	-22.3, 29.2
	GEE <sup>1</sup>		
	LS Mean (SE)	9.02 (2.656)	3.77 (3.963)
	95% C.I.	3.82, 14.23	-4.00, 11.54
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	5.25	
	95% C.I. of difference	-4.33, 14.83	
	P-value	0.2827	
	HedgesG (95% CI)	0.707 (-0.221, 1.635)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3
	Observed Value		
	n	5	11
	Mean	64.67	73.58
	SD, SE	6.159, 2.754	23.427, 7.063
	Median	63.27	79.68
	Q1, Q3	59.37, 70.87	61.92, 83.46
	Min, Max	58.5, 71.4	19.6, 114.1

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-0.68	-4.86
	SD, SE	11.942, 5.341	18.800, 5.668
	Median	-5.36	-2.66
	Q1, Q3	-6.51, 11.74	-12.55, 11.77
	Min, Max	-15.0, 11.8	-50.5, 15.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.05 (4.316)	-5.64 (5.597)
	95% C.I.	-7.41, 9.51	-16.61, 5.33
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	6.69	
	95% C.I. of difference	-7.69, 21.07	
	P-value	0.3621	
	HedgesG (95% CI)	0.216 (-0.844, 1.276)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3
	Observed Value		
	n	5	11
	Mean	73.85	75.79
	SD, SE	16.516, 7.386	14.230, 4.290
	Median	73.42	78.88
	Q1, Q3	58.13, 87.01	63.16, 93.31
	Min, Max	57.1, 93.6	54.5, 95.2

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	8.50	-2.64
	SD, SE	11.437, 5.115	9.110, 2.747
	Median	7.21	-4.08
	Q1, Q3	5.56, 14.32	-10.38, 2.96
	Min, Max	-7.7, 23.2	-14.7, 13.6
	GEE <sup>1</sup>		
	LS Mean (SE)	10.23 (4.378)	-3.43 (2.385)
	95% C.I.	1.65, 18.81	-8.10, 1.25
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	13.65	
	95% C.I. of difference	3.73, 23.58	
	P-value	0.0070	
	HedgesG (95% CI)	1.003 (-0.110, 2.115)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3
	Observed Value		
	n	5	11
	Mean	75.93	80.24
	SD, SE	10.954, 4.899	18.692, 5.636
	Median	73.44	77.13
	Q1, Q3	68.85, 79.79	62.54, 96.82
	Min, Max	64.8, 92.8	55.3, 111.7

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.2.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	10.59	1.81
	SD, SE	7.780, 3.479	9.519, 2.870
	Median	14.34	0.90
	Q1, Q3	6.42, 15.95	-7.43, 12.32
	Min, Max	-1.1, 17.3	-12.9, 17.9
	GEE <sup>1</sup>		
	LS Mean (SE)	12.31 (2.633)	1.02 (2.536)
	95% C.I.	7.15, 17.47	-3.95, 5.99
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	11.29	
	95% C.I. of difference	3.96, 18.61	
	P-value	0.0025	
	HedgesG (95% CI)	0.858 (-0.240, 1.956)	

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-6minwalk\_GEE.sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	N <sub>1</sub>	5	8
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 24		
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3
	Observed Value		
	n	5	8
	Mean	63.28	73.13
	SD, SE	5.251, 2.348	19.748, 6.982
	Median	61.83	68.31
	Q1, Q3	59.37, 65.37	58.28, 81.77
	Min, Max	58.5, 71.4	54.2, 114.1

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	-3.82	-3.72
	SD, SE	8.892, 3.977	11.557, 4.086
	Median	-5.36	-3.06
	Q1, Q3	-6.51, -1.72	-13.32, 5.56
	Min, Max	-15.0, 9.5	-20.9, 12.8
	GEE <sup>1</sup>		
	LS Mean (SE)	-4.14 (3.269)	-3.53 (3.610)
	95% C.I.	-10.55, 2.27	-10.60, 3.55
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.61	
	95% C.I. of difference	-9.44, 8.22	
	P-value	0.8921	
	HedgesG (95% CI)	-0.008 (-1.126, 1.109)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 40		
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3
	Observed Value		
	n	5	8
	Mean	74.99	73.03
	SD, SE	15.088, 6.748	15.831, 5.597
	Median	72.64	74.66
	Q1, Q3	63.57, 87.01	58.82, 85.00
	Min, Max	58.1, 93.6	52.1, 95.2

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	7.88	-3.82
	SD, SE	12.440, 5.563	9.470, 3.348
	Median	7.21	-5.69
	Q1, Q3	0.02, 16.76	-11.39, 2.22
	Min, Max	-7.7, 23.2	-14.7, 13.8
	GEE <sup>1</sup>		
	LS Mean (SE)	7.57 (4.774)	-3.62 (3.141)
	95% C.I.	-1.79, 16.93	-9.78, 2.53
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	11.19	
	95% C.I. of difference	0.09, 22.29	
	P-value	0.0481	
	HedgesG (95% CI)	0.940 (-0.234, 2.115)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 64		
	Baseline		
	n	5	8
	Mean	67.11	76.85
	SD, SE	11.428, 5.111	14.287, 5.051
	Median	63.84	76.22
	Q1, Q3	63.56, 65.88	66.80, 85.05
	Min, Max	55.9, 86.4	57.3, 101.3
	Observed Value		
	n	5	8
	Mean	72.90	75.37
	SD, SE	14.294, 6.393	17.586, 6.218
	Median	71.75	76.50
	Q1, Q3	64.78, 79.79	60.42, 86.98
	Min, Max	55.4, 92.8	52.9, 102.2

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	5.80	-1.48
	SD, SE	10.576, 4.730	6.545, 2.314
	Median	6.42	-0.18
	Q1, Q3	-1.09, 15.87	-6.27, 2.77
	Min, Max	-8.2, 16.0	-12.2, 7.7
	GEE <sup>1</sup>		
	LS Mean (SE)	5.48 (3.991)	-1.29 (2.371)
	95% C.I.	-2.34, 13.31	-5.93, 3.36
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	6.77	
	95% C.I. of difference	-2.28, 15.82	
	P-value	0.1427	
	HedgesG (95% CI)	0.755 (-0.399, 1.910)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	8	12
	Baseline		
	n	8	12
	Mean	63.80	75.76
	SD, SE	13.129, 4.642	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	55.31, 66.53	66.10, 87.16
	Min, Max	49.8, 92.3	51.1, 107.7

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	8	12
	Mean	63.80	75.76
	SD, SE	13.129, 4.642	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	55.31, 66.53	66.10, 87.16
	Min, Max	49.8, 92.3	51.1, 107.7
	Observed Value		
	n	8	12
	Mean	69.96	78.14
	SD, SE	10.133, 3.583	31.229, 9.015
	Median	65.09	81.09
	Q1, Q3	64.05, 73.54	61.96, 87.82
	Min, Max	62.0, 92.3	19.6, 155.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	8	12
	Mean	6.16	2.38
	SD, SE	8.065, 2.851	22.081, 6.374
	Median	5.94	1.96
	Q1, Q3	-0.84, 13.52	-3.08, 11.97
	Min, Max	-3.3, 15.4	-50.5, 47.3
	GEE <sup>1</sup>		
	LS Mean (SE)	5.21 (2.533)	3.01 (6.210)
	95% C.I.	0.24, 10.17	-9.16, 15.18
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	2.20	
	95% C.I. of difference	-10.72, 15.12	
	P-value	0.7388	
	HedgesG (95% CI)	0.191 (-0.705, 1.088)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	8	12
	Mean	63.80	75.76
	SD, SE	13.129, 4.642	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	55.31, 66.53	66.10, 87.16
	Min, Max	49.8, 92.3	51.1, 107.7
	Observed Value		
	n	8	12
	Mean	69.47	76.78
	SD, SE	11.781, 4.165	13.512, 3.901
	Median	69.23	78.61
	Q1, Q3	59.55, 73.77	64.33, 90.19
	Min, Max	57.1, 93.6	56.8, 94.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	8	12
	Mean	5.68	1.02
	SD, SE	6.588, 2.329	9.067, 2.617
	Median	6.01	-0.55
	Q1, Q3	0.74, 11.19	-4.54, 8.03
	Min, Max	-4.8, 14.3	-13.9, 16.7
	GEE <sup>1</sup>		
	LS Mean (SE)	4.72 (2.223)	1.65 (2.696)
	95% C.I.	0.37, 9.08	-3.63, 6.94
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	3.07	
	95% C.I. of difference	-4.80, 10.94	
	P-value	0.4440	
	HedgesG (95% CI)	0.517 (-0.392, 1.426)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	8	12
	Mean	63.80	75.76
	SD, SE	13.129, 4.642	15.807, 4.563
	Median	62.29	70.05
	Q1, Q3	55.31, 66.53	66.10, 87.16
	Min, Max	49.8, 92.3	51.1, 107.7
	Observed Value		
	n	8	12
	Mean	77.17	79.98
	SD, SE	10.257, 3.626	18.014, 5.200
	Median	76.32	80.57
	Q1, Q3	68.45, 82.81	63.07, 91.04
	Min, Max	65.7, 96.4	55.3, 111.7

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.11.4.64.1  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Rickets severity

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	8	12
	Mean	13.37	4.22
	SD, SE	4.960, 1.753	16.006, 4.621
	Median	15.13	-0.11
	Q1, Q3	10.75, 16.61	-6.50, 15.20
	Min, Max	4.2, 17.8	-22.3, 29.2
	GEE <sup>1</sup>		
	LS Mean (SE)	12.42 (1.696)	4.85 (4.477)
	95% C.I.	9.09, 15.74	-3.92, 13.62
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	7.57	
	95% C.I. of difference	-2.55, 17.69	
	P-value	0.1428	
	HedgesG (95% CI)	0.646 (-0.271, 1.562)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	8	9
	Baseline		
	n	8	9
	Mean	64.90	73.46
	SD, SE	12.461, 4.406	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	58.38, 66.53	61.69, 85.59
	Min, Max	49.8, 92.3	51.1, 107.7

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Baseline		
	n	8	9
	Mean	64.90	73.46
	SD, SE	12.461, 4.406	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	58.38, 66.53	61.69, 85.59
	Min, Max	49.8, 92.3	51.1, 107.7
	Observed Value		
	n	8	9
	Mean	69.09	79.26
	SD, SE	10.381, 3.670	31.486, 10.495
	Median	65.09	66.32
	Q1, Q3	63.44, 70.79	60.42, 85.39
	Min, Max	61.8, 92.3	54.2, 155.0

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	8	9
	Mean	4.19	5.79
	SD, SE	7.883, 2.787	17.251, 5.750
	Median	0.07	1.52
	Q1, Q3	-1.69, 12.38	-3.18, 7.58
	Min, Max	-3.3, 15.4	-14.1, 47.3
	GEE <sup>1</sup>		
	LS Mean (SE)	1.94 (2.680)	5.61 (5.453)
	95% C.I.	-3.32, 7.19	-5.08, 16.30
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-3.67	
	95% C.I. of difference	-14.59, 7.24	
	P-value	0.5095	
	HedgesG (95% CI)	-0.104 (-1.057, 0.849)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Baseline		
	n	8	9
	Mean	64.90	73.46
	SD, SE	12.461, 4.406	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	58.38, 66.53	61.69, 85.59
	Min, Max	49.8, 92.3	51.1, 107.7
	Observed Value		
	n	8	9
	Mean	70.19	74.65
	SD, SE	10.977, 3.881	14.994, 4.998
	Median	69.23	78.35
	Q1, Q3	61.85, 73.38	62.78, 87.07
	Min, Max	59.0, 93.6	52.1, 93.8

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	8	9
	Mean	5.29	1.19
	SD, SE	7.395, 2.614	9.628, 3.209
	Median	3.89	-1.15
	Q1, Q3	0.09, 11.19	-5.00, 5.69
	Min, Max	-4.8, 16.8	-13.9, 16.7
	GEE <sup>1</sup>		
	LS Mean (SE)	3.03 (2.991)	1.00 (3.146)
	95% C.I.	-2.83, 8.89	-5.16, 7.17
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	2.03	
	95% C.I. of difference	-6.49, 10.55	
	P-value	0.6412	
	HedgesG (95% CI)	0.422 (-0.541, 1.385)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Baseline		
	n	8	9
	Mean	64.90	73.46
	SD, SE	12.461, 4.406	17.942, 5.981
	Median	63.63	68.74
	Q1, Q3	58.38, 66.53	61.69, 85.59
	Min, Max	49.8, 92.3	51.1, 107.7
	Observed Value		
	n	8	9
	Mean	75.27	75.56
	SD, SE	12.696, 4.489	16.711, 5.570
	Median	75.48	76.45
	Q1, Q3	66.89, 82.81	63.26, 83.15
	Min, Max	55.4, 96.4	52.9, 107.1

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	8	9
	Mean	10.38	2.10
	SD, SE	8.896, 3.145	17.202, 5.734
	Median	15.13	-1.04
	Q1, Q3	5.67, 15.89	-5.58, 7.71
	Min, Max	-8.2, 17.8	-22.3, 29.2
	GEE <sup>1</sup>		
	LS Mean (SE)	8.12 (3.133)	1.91 (4.570)
	95% C.I.	1.98, 14.26	-7.04, 10.87
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	6.21	
	95% C.I. of difference	-5.34, 17.76	
	P-value	0.2923	
	HedgesG (95% CI)	0.529 (-0.440, 1.498)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3
	Observed Value		
	n	5	11
	Mean	64.67	73.58
	SD, SE	6.159, 2.754	23.427, 7.063
	Median	63.27	79.68
	Q1, Q3	59.37, 70.87	61.92, 83.46
	Min, Max	58.5, 71.4	19.6, 114.1

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-0.68	-4.86
	SD, SE	11.942, 5.341	18.800, 5.668
	Median	-5.36	-2.66
	Q1, Q3	-6.51, 11.74	-12.55, 11.77
	Min, Max	-15.0, 11.8	-50.5, 15.0
	GEE <sup>1</sup>		
	LS Mean (SE)	1.05 (4.316)	-5.64 (5.597)
	95% C.I.	-7.41, 9.51	-16.61, 5.33
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	6.69	
	95% C.I. of difference	-7.69, 21.07	
	P-value	0.3621	
	HedgesG (95% CI)	0.216 (-0.844, 1.276)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3
	Observed Value		
	n	5	11
	Mean	73.85	75.79
	SD, SE	16.516, 7.386	14.230, 4.290
	Median	73.42	78.88
	Q1, Q3	58.13, 87.01	63.16, 93.31
	Min, Max	57.1, 93.6	54.5, 95.2

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	8.50	-2.64
	SD, SE	11.437, 5.115	9.110, 2.747
	Median	7.21	-4.08
	Q1, Q3	5.56, 14.32	-10.38, 2.96
	Min, Max	-7.7, 23.2	-14.7, 13.6
	GEE <sup>1</sup>		
	LS Mean (SE)	10.23 (4.378)	-3.43 (2.385)
	95% C.I.	1.65, 18.81	-8.10, 1.25
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	13.65	
	95% C.I. of difference	3.73, 23.58	
	P-value	0.0070	
	HedgesG (95% CI)	1.003 (-0.110, 2.115)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Baseline		
	n	5	11
	Mean	65.35	78.44
	SD, SE	12.991, 5.810	12.186, 3.674
	Median	63.84	76.14
	Q1, Q3	59.10, 65.88	68.49, 92.28
	Min, Max	51.5, 86.4	64.9, 101.3
	Observed Value		
	n	5	11
	Mean	75.93	80.24
	SD, SE	10.954, 4.899	18.692, 5.636
	Median	73.44	77.13
	Q1, Q3	68.85, 79.79	62.54, 96.82
	Min, Max	64.8, 92.8	55.3, 111.7

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: .sas

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Table 2.11.4.64.2  
Subgroup Analysis on Change in the Six Minute Walk Test (6MWT) percent of predicted normal from Baseline (Subjects Completed 6MWT)  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Gender

Subgroup	Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	10.59	1.81
	SD, SE	7.780, 3.479	9.519, 2.870
	Median	14.34	0.90
	Q1, Q3	6.42, 15.95	-7.43, 12.32
	Min, Max	-1.1, 17.3	-12.9, 17.9
	GEE <sup>1</sup>		
	LS Mean (SE)	12.31 (2.633)	1.02 (2.536)
	95% C.I.	7.15, 17.47	-3.95, 5.99
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	11.29	
	95% C.I. of difference	3.96, 18.61	
	P-value	0.0025	
	HedgesG (95% CI)	0.858 (-0.240, 1.956)	

Note: Subjects 103-118 and 106-055, who did not complete the 6MWT are excluded from this analysis.

The generalized estimation equation (GEE) model includes change from baseline for 6MWT as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.4.2.40.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	N <sub>i</sub>	19	20
	Baseline		
	n	19	20
	Mean	2.40	2.29
	SD, SE	0.229, 0.052	0.295, 0.066
	Median	2.40	2.30
	Q1, Q3	2.20, 2.60	2.10, 2.50
	Min, Max	2.0, 2.8	1.8, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat    Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32 and 40)		
	Observed Value		
	n	19	20
	Mean	3.30	2.57
	SD, SE	0.375, 0.086	0.248, 0.055
	Median	3.31	2.54
	Q1, Q3	3.06, 3.51	2.39, 2.75
	Min, Max	2.5, 4.1	2.2, 3.0
	Change from Baseline		
	n	19	20
	Mean	0.90	0.27
	SD, SE	0.326, 0.075	0.281, 0.063
	Median	0.84	0.23
	Q1, Q3	0.71, 1.07	0.12, 0.47
	Min, Max	0.5, 1.7	-0.3, 0.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	ANCOVA <sup>1</sup>		
	LS Mean (SE)	0.92 (0.066)	0.25 (0.064)
	95% C.I.	0.78, 1.05	0.12, 0.38
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.67	
	95% C.I. of difference	0.48, 0.86	
	P-value	<.0001	
	HedgesG (95% CI)	1.968 ( 1.203, 2.733)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	N <sub>i</sub>	10	12
	Baseline		
	n	10	12
	Mean	2.46	2.32
	SD, SE	0.280, 0.088	0.190, 0.055
	Median	2.45	2.35
	Q1, Q3	2.30, 2.70	2.20, 2.40
	Min, Max	2.0, 2.9	2.0, 2.7

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat    Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32 and 40)		
	Observed Value		
	n	10	12
	Mean	3.52	2.52
	SD, SE	0.344, 0.109	0.361, 0.104
	Median	3.68	2.54
	Q1, Q3	3.24, 3.81	2.20, 2.69
	Min, Max	2.9, 3.9	1.9, 3.2
	Change from Baseline		
	n	10	12
	Mean	1.06	0.21
	SD, SE	0.407, 0.129	0.374, 0.108
	Median	1.06	0.16
	Q1, Q3	0.77, 1.20	-0.14, 0.45
	Min, Max	0.5, 1.9	-0.2, 1.0

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	ANCOVA <sup>1</sup>		
	LS Mean (SE)	1.12 (0.117)	0.18 (0.109)
	95% C.I.	0.88, 1.37	-0.05, 0.40
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.95	
	95% C.I. of difference	0.61, 1.29	
	P-value	<.0001	
	HedgesG (95% CI)	2.015 ( 0.986, 3.044)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat    Program source: t-serum-phos-mean\_ANCOVA\_40.sas



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Table 2.4.2.64.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	N <sub>1</sub>	10	12
	Baseline		
	n	10	12
	Mean	2.46	2.32
	SD, SE	0.280, 0.088	0.190, 0.055
	Median	2.45	2.35
	Q1, Q3	2.30, 2.70	2.20, 2.40
	Min, Max	2.0, 2.9	2.0, 2.7

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.2.64.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32, 40, 52 and 64 )		
	Observed Value		
	n	10	12
	Mean	3.50	2.53
	SD, SE	0.338, 0.107	0.348, 0.101
	Median	3.66	2.59
	Q1, Q3	3.21, 3.72	2.24, 2.68
	Min, Max	2.9, 3.9	1.9, 3.1
	Change from Baseline		
	n	10	12
	Mean	1.04	0.22
	SD, SE	0.395, 0.125	0.364, 0.105
	Median	1.02	0.14
	Q1, Q3	0.76, 1.17	-0.12, 0.51
	Min, Max	0.5, 1.9	-0.2, 0.9

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	ANCOVA <sup>1</sup>		
	LS Mean (SE)	1.10 (0.113)	0.19 (0.105)
	95% C.I.	0.86, 1.34	-0.03, 0.41
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.91	
	95% C.I. of difference	0.58, 1.24	
	P-value	<.0001	
	HedgesG (95% CI)	1.992 ( 0.967, 3.017)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	N <sub>1</sub>	19	20
	Baseline		
	n	19	20
	Mean	2.40	2.29
	SD, SE	0.229, 0.052	0.295, 0.066
	Median	2.40	2.30
	Q1, Q3	2.20, 2.60	2.10, 2.50
	Min, Max	2.0, 2.8	1.8, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32, 40, 52 and 64 )		
	Observed Value		
	n	19	20
	Mean	3.29	2.58
	SD, SE	0.365, 0.084	0.275, 0.061
	Median	3.32	2.51
	Q1, Q3	3.04, 3.43	2.37, 2.76
	Min, Max	2.5, 4.2	2.2, 3.2
	Change from Baseline		
	n	19	20
	Mean	0.89	0.28
	SD, SE	0.326, 0.075	0.292, 0.065
	Median	0.82	0.22
	Q1, Q3	0.70, 1.03	0.15, 0.47
	Min, Max	0.5, 1.8	-0.3, 0.9

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.1  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	ANCOVA <sup>1</sup>		
	LS Mean (SE)	0.90 (0.068)	0.25 (0.066)
	95% C.I.	0.77, 1.04	0.12, 0.39
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.65	
	95% C.I. of difference	0.46, 0.84	
	P-value	<.0001	
	HedgesG (95% CI)	1.867 ( 1.115, 2.619)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.40.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	N <sub>1</sub>	14	12
	Baseline		
	n	14	12
	Mean	2.54	2.39
	SD, SE	0.224, 0.060	0.219, 0.063
	Median	2.55	2.30
	Q1, Q3	2.40, 2.70	2.20, 2.50
	Min, Max	2.0, 2.9	2.2, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32 and 40)		
	Observed Value		
	n	14	12
	Mean	3.39	2.65
	SD, SE	0.368, 0.098	0.302, 0.087
	Median	3.33	2.63
	Q1, Q3	3.29, 3.69	2.40, 2.89
	Min, Max	2.5, 3.8	2.2, 3.2
	Change from Baseline		
	n	14	12
	Mean	0.85	0.25
	SD, SE	0.203, 0.054	0.283, 0.082
	Median	0.82	0.19
	Q1, Q3	0.73, 0.99	0.06, 0.40
	Min, Max	0.5, 1.2	-0.0, 1.0

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	ANCOVA <sup>1</sup>		
	LS Mean (SE)	0.87 (0.065)	0.29 (0.071)
	95% C.I.	0.74, 1.01	0.15, 0.44
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.58	
	95% C.I. of difference	0.38, 0.78	
	P-value	<.0001	
	HedgesG (95% CI)	2.280 ( 1.291, 3.269)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	N <sub>1</sub>	15	20
	Baseline		
	n	15	20
	Mean	2.31	2.25
	SD, SE	0.217, 0.056	0.269, 0.060
	Median	2.40	2.30
	Q1, Q3	2.10, 2.50	2.05, 2.40
	Min, Max	2.0, 2.6	1.8, 2.7

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32 and 40)		
	Observed Value		
	n	15	20
	Mean	3.37	2.50
	SD, SE	0.392, 0.101	0.276, 0.062
	Median	3.31	2.51
	Q1, Q3	3.06, 3.56	2.27, 2.65
	Min, Max	2.7, 4.1	1.9, 3.1
	Change from Baseline		
	n	15	20
	Mean	1.06	0.25
	SD, SE	0.441, 0.114	0.340, 0.076
	Median	1.07	0.24
	Q1, Q3	0.64, 1.41	-0.05, 0.48
	Min, Max	0.5, 1.9	-0.3, 0.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	ANCOVA <sup>1</sup>		
	LS Mean (SE)	1.09 (0.090)	0.22 (0.077)
	95% C.I.	0.90, 1.27	0.07, 0.38
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.86	
	95% C.I. of difference	0.63, 1.10	
	P-value	<.0001	
	HedgesG (95% CI)	1.992 ( 1.176, 2.808)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.64.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	N <sub>1</sub>	14	12
	Baseline		
	n	14	12
	Mean	2.54	2.39
	SD, SE	0.224, 0.060	0.219, 0.063
	Median	2.55	2.30
	Q1, Q3	2.40, 2.70	2.20, 2.50
	Min, Max	2.0, 2.9	2.2, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32, 40, 52 and 64 )		
	Observed Value		
	n	14	12
	Mean	3.37	2.66
	SD, SE	0.354, 0.095	0.319, 0.092
	Median	3.34	2.66
	Q1, Q3	3.24, 3.67	2.42, 2.89
	Min, Max	2.5, 3.8	2.2, 3.2
	Change from Baseline		
	n	14	12
	Mean	0.83	0.27
	SD, SE	0.188, 0.050	0.297, 0.086
	Median	0.80	0.19
	Q1, Q3	0.74, 0.97	0.05, 0.43
	Min, Max	0.5, 1.2	-0.1, 0.9

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	ANCOVA <sup>1</sup>		
	LS Mean (SE)	0.86 (0.066)	0.31 (0.072)
	95% C.I.	0.72, 0.99	0.16, 0.46
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.55	
	95% C.I. of difference	0.35, 0.75	
	P-value	<.0001	
	HedgesG (95% CI)	2.152 ( 1.184, 3.120)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	N <sub>1</sub>	15	20
	Baseline		
	n	15	20
	Mean	2.31	2.25
	SD, SE	0.217, 0.056	0.269, 0.060
	Median	2.40	2.30
	Q1, Q3	2.10, 2.50	2.05, 2.40
	Min, Max	2.0, 2.6	1.8, 2.7

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

Note: This is DRAFT version and may not be fully validated.



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Table 2.4.2.64.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32, 40, 52 and 64 )		
	Observed Value		
	n	15	20
	Mean	3.35	2.50
	SD, SE	0.387, 0.100	0.279, 0.062
	Median	3.30	2.50
	Q1, Q3	3.04, 3.53	2.29, 2.68
	Min, Max	2.7, 4.2	1.9, 3.0
	Change from Baseline		
	n	15	20
	Mean	1.04	0.25
	SD, SE	0.440, 0.114	0.335, 0.075
	Median	1.03	0.23
	Q1, Q3	0.64, 1.32	-0.06, 0.49
	Min, Max	0.5, 1.9	-0.3, 0.9

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.2.64.4  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	ANCOVA <sup>1</sup>		
	LS Mean (SE)	1.07 (0.090)	0.23 (0.076)
	95% C.I.	0.88, 1.25	0.07, 0.38
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.84	
	95% C.I. of difference	0.60, 1.07	
	P-value	<.0001	
	HedgesG (95% CI)	1.945 ( 1.135, 2.755)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.40.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	N <sub>1</sub>	13	14
	Baseline		
	n	13	14
	Mean	2.40	2.22
	SD, SE	0.252, 0.070	0.286, 0.076
	Median	2.40	2.25
	Q1, Q3	2.20, 2.60	2.00, 2.40
	Min, Max	2.0, 2.9	1.8, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.2.40.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32 and 40)		
	Observed Value		
	n	13	14
	Mean	3.21	2.50
	SD, SE	0.439, 0.122	0.295, 0.079
	Median	3.17	2.43
	Q1, Q3	3.00, 3.51	2.26, 2.73
	Min, Max	2.5, 4.1	2.2, 3.2
	Change from Baseline		
	n	13	14
	Mean	0.81	0.28
	SD, SE	0.348, 0.096	0.350, 0.094
	Median	0.71	0.26
	Q1, Q3	0.56, 0.91	-0.01, 0.50
	Min, Max	0.5, 1.7	-0.2, 1.0

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	ANCOVA <sup>1</sup>		
	LS Mean (SE)	0.79 (0.123)	0.23 (0.098)
	95% C.I.	0.53, 1.04	0.03, 0.43
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.56	
	95% C.I. of difference	0.25, 0.87	
	P-value	0.0012	
	HedgesG (95% CI)	1.415 ( 0.571, 2.259)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	N <sub>1</sub>	16	18
	Baseline		
	n	16	18
	Mean	2.44	2.37
	SD, SE	0.245, 0.061	0.220, 0.052
	Median	2.50	2.40
	Q1, Q3	2.30, 2.60	2.20, 2.50
	Min, Max	2.0, 2.8	2.0, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.2.40.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32 and 40)		
	Observed Value		
	n	16	18
	Mean	3.52	2.59
	SD, SE	0.247, 0.062	0.289, 0.068
	Median	3.45	2.57
	Q1, Q3	3.31, 3.76	2.40, 2.74
	Min, Max	3.2, 3.9	1.9, 3.1
	Change from Baseline		
	n	16	18
	Mean	1.08	0.23
	SD, SE	0.326, 0.082	0.293, 0.069
	Median	1.01	0.21
	Q1, Q3	0.82, 1.18	0.10, 0.34
	Min, Max	0.7, 1.9	-0.3, 0.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.40.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	ANCOVA <sup>1</sup>		
	LS Mean (SE)	1.12 (0.070)	0.21 (0.066)
	95% C.I.	0.98, 1.26	0.07, 0.34
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.91	
	95% C.I. of difference	0.71, 1.11	
	P-value	<.0001	
	HedgesG (95% CI)	2.609 ( 1.694, 3.525)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_40.sas

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Table 2.4.2.64.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	N <sub>1</sub>	13	14
	Baseline		
	n	13	14
	Mean	2.40	2.22
	SD, SE	0.252, 0.070	0.286, 0.076
	Median	2.40	2.25
	Q1, Q3	2.20, 2.60	2.00, 2.40
	Min, Max	2.0, 2.9	1.8, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32, 40, 52 and 64 )		
	Observed Value		
	n	13	14
	Mean	3.20	2.50
	SD, SE	0.434, 0.120	0.283, 0.076
	Median	3.13	2.41
	Q1, Q3	3.00, 3.42	2.26, 2.72
	Min, Max	2.5, 4.2	2.2, 3.1
	Change from Baseline		
	n	13	14
	Mean	0.80	0.27
	SD, SE	0.350, 0.097	0.331, 0.088
	Median	0.70	0.24
	Q1, Q3	0.60, 0.84	-0.04, 0.47
	Min, Max	0.5, 1.8	-0.2, 0.9

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	ANCOVA <sup>1</sup>		
	LS Mean (SE)	0.79 (0.119)	0.23 (0.096)
	95% C.I.	0.54, 1.03	0.03, 0.42
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.56	
	95% C.I. of difference	0.26, 0.86	
	P-value	0.0010	
	HedgesG (95% CI)	1.446 ( 0.598, 2.294)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	N <sub>1</sub>	16	18
	Baseline		
	n	16	18
	Mean	2.44	2.37
	SD, SE	0.245, 0.061	0.220, 0.052
	Median	2.50	2.40
	Q1, Q3	2.30, 2.60	2.20, 2.50
	Min, Max	2.0, 2.8	2.0, 2.8

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	Mean Post-baseline (Week 1, 4, 8, 16, 24, 32, 40, 52 and 64 )		
	Observed Value		
	n	16	18
	Mean	3.49	2.61
	SD, SE	0.242, 0.061	0.311, 0.073
	Median	3.40	2.59
	Q1, Q3	3.28, 3.69	2.44, 2.79
	Min, Max	3.2, 3.9	1.9, 3.2
	Change from Baseline		
	n	16	18
	Mean	1.05	0.24
	SD, SE	0.322, 0.080	0.314, 0.074
	Median	0.98	0.19
	Q1, Q3	0.80, 1.15	0.06, 0.40
	Min, Max	0.7, 1.9	-0.3, 0.9

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.2.64.2  
Subgroup Analysis on Change in serum phosphorus [mg/dL] to mean postbaseline values from Baseline  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	ANCOVA <sup>1</sup>		
	LS Mean (SE)	1.09 (0.073)	0.23 (0.069)
	95% C.I.	0.94, 1.24	0.08, 0.37
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	0.86	
	95% C.I. of difference	0.65, 1.07	
	P-value	<.0001	
	HedgesG (95% CI)	2.402 ( 1.519, 3.284)	

The ANCOVA model includes change in serum phosphorus from baseline to mean post-baseline as the dependent variable, treatment group, baseline age and baseline RSS stratification as factors, baseline phosphorous measure as a covariate. The LS Mean, SE, 95% CI and 2-sided p-value are from the ANCOVA model.

Data source: ADSL.sas7bdat Program source: t-serum-phos-mean\_ANCOVA\_64.sas

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Table 2.4.4.40.1  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	N <sub>1</sub>	10	12
	n	10	12
	Mean	77.14	7.14
	SD, SE	29.508, 9.331	14.286, 4.124
	Median	92.86	0.00
	Q1, Q3	57.14, 100.00	0.00, 7.14
	Min, Max	14.3, 100.0	0.0, 42.9
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	73.76 (6.746)	9.96 (6.129)
	95% C.I.	59.64, 87.88	-2.87, 22.79
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	63.79	
	95% C.I. of difference	44.23, 83.36	
	P-value	<.0001	
	HedgesG (95% CI)	2.860 ( 1.669, 4.051)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit, age as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.40.1  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 40)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	N <sub>1</sub>	19	20
	n	19	20
	Mean	64.66	5.57
	SD, SE	34.460, 7.906	11.257, 2.517
	Median	71.43	0.00
	Q1, Q3	28.57, 100.00	0.00, 7.14
	Min, Max	0.0, 100.0	0.0, 40.0
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	64.57 (5.813)	5.66 (5.665)
	95% C.I.	52.78, 76.36	-5.83, 17.15
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	58.90	
	95% C.I. of difference	42.44, 75.37	
	P-value	<.0001	
	HedgesG (95% CI)	2.224 ( 1.425, 3.022)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit, age as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.



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Table 2.4.4.64.1  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity <= 2.5	N <sub>1</sub>	10	12
	n	10	12
	Mean	77.78	6.48
	SD, SE	30.542, 9.658	13.779, 3.978
	Median	94.44	0.00
	Q1, Q3	66.67, 100.00	0.00, 5.56
	Min, Max	11.1, 100.0	0.0, 44.4
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	73.89 (6.656)	9.72 (6.047)
	95% C.I.	59.96, 87.82	-2.93, 22.38
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	64.16	
	95% C.I. of difference	44.86, 83.46	
	P-value	<.0001	
	HedgesG (95% CI)	2.856 ( 1.666, 4.047)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit, age as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.64.1  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Rickets severity > 2.5	N <sub>1</sub>	19	20
	n	19	20
	Mean	62.57	6.59
	SD, SE	32.963, 7.562	13.452, 3.008
	Median	66.67	0.00
	Q1, Q3	33.33, 88.89	0.00, 5.56
	Min, Max	0.0, 100.0	0.0, 42.9
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	62.48 (5.709)	6.68 (5.564)
	95% C.I.	50.90, 74.05	-4.61, 17.96
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	55.80	
	95% C.I. of difference	39.63, 71.97	
	P-value	<.0001	
	HedgesG (95% CI)	2.143 ( 1.355, 2.930)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit, age as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.40.4  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	N <sub>1</sub>	14	12
	n	14	12
	Mean	71.43	7.14
	SD, SE	31.697, 8.471	14.286, 4.124
	Median	85.71	0.00
	Q1, Q3	57.14, 100.00	0.00, 7.14
	Min, Max	0.0, 100.0	0.0, 42.9
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	73.92 (6.824)	10.04 (7.396)
	95% C.I.	59.77, 88.07	-5.29, 25.38
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	63.88	
	95% C.I. of difference	43.59, 84.17	
	P-value	<.0001	
	HedgesG (95% CI)	2.368 ( 1.364, 3.373)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.40.4  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 40)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	N <sub>1</sub>	15	20
	n	15	20
	Mean	66.67	5.57
	SD, SE	34.854, 8.999	11.257, 2.517
	Median	71.43	0.00
	Q1, Q3	28.57, 100.00	0.00, 7.14
	Min, Max	14.3, 100.0	0.0, 40.0
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	66.58 (6.589)	5.65 (5.640)
	95% C.I.	53.14, 80.02	-5.85, 17.16
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	60.93	
	95% C.I. of difference	43.54, 78.31	
	P-value	<.0001	
	HedgesG (95% CI)	2.390 ( 1.517, 3.263)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.64.4  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age <5 Years	N <sub>1</sub>	14	12
	n	14	12
	Mean	69.84	9.26
	SD, SE	30.948, 8.271	16.973, 4.900
	Median	72.22	0.00
	Q1, Q3	66.67, 88.89	0.00, 16.67
	Min, Max	0.0, 100.0	0.0, 44.4
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	72.79 (6.759)	12.67 (7.327)
	95% C.I.	58.77, 86.81	-2.52, 27.87
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	60.12	
	95% C.I. of difference	40.02, 80.21	
	P-value	<.0001	
	HedgesG (95% CI)	2.209 ( 1.232, 3.187)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.64.4  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 64)  
Subgroup: Age

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Age >= 5 Years	N <sub>1</sub>	15	20
	n	15	20
	Mean	65.93	4.92
	SD, SE	34.749, 8.972	10.801, 2.415
	Median	77.78	0.00
	Q1, Q3	33.33, 100.00	0.00, 5.56
	Min, Max	11.1, 100.0	0.0, 42.9
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	65.69 (6.536)	4.92 (5.595)
	95% C.I.	52.36, 79.02	-6.49, 16.33
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	60.78	
	95% C.I. of difference	43.54, 78.02	
	P-value	<.0001	
	HedgesG (95% CI)	2.404 ( 1.530, 3.279)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

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Table 2.4.4.40.2  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	N <sub>1</sub>	13	14
	n	13	14
	Mean	51.65	4.08
	SD, SE	39.356, 10.916	11.792, 3.151
	Median	57.14	0.00
	Q1, Q3	14.29, 100.00	0.00, 0.00
	Min, Max	0.0, 100.0	0.0, 42.9
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	53.70 (8.792)	5.37 (8.038)
	95% C.I.	35.51, 71.89	-11.26, 21.99
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	48.34	
	95% C.I. of difference	24.77, 71.90	
	P-value	0.0003	
	HedgesG (95% CI)	1.554 ( 0.693, 2.415)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification, age as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.40.2  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 40)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	N <sub>1</sub>	16	18
	n	16	18
	Mean	83.04	7.78
	SD, SE	17.472, 4.368	12.733, 3.001
	Median	85.71	0.00
	Q1, Q3	64.29, 100.00	0.00, 14.29
	Min, Max	57.1, 100.0	0.0, 40.0
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	83.54 (3.906)	7.32 (3.740)
	95% C.I.	75.56, 91.52	-0.32, 14.96
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	76.22	
	95% C.I. of difference	65.13, 87.31	
	P-value	<.0001	
	HedgesG (95% CI)	4.708 ( 3.402, 6.015)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification, age as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.



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Table 2.4.4.64.2  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Male	N <sub>1</sub>	13	14
	n	13	14
	Mean	51.28	3.97
	SD, SE	38.899, 10.789	12.020, 3.213
	Median	44.44	0.00
	Q1, Q3	11.11, 88.89	0.00, 0.00
	Min, Max	0.0, 100.0	0.0, 44.4
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	53.80 (8.683)	5.49 (7.938)
	95% C.I.	35.84, 71.76	-10.93, 21.91
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	48.31	
	95% C.I. of difference	25.03, 71.58	
	P-value	0.0003	
	HedgesG (95% CI)	1.559 ( 0.698, 2.421)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification, age as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.4.4.64.2  
Subgroup Analysis on Percentage of time in normal range (3.2 – 6.1 mg/dL) of serum phosphorus  
(FAS - Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=29)	Oral Phosphate/Active Vitamin D (N=32)
Sex = Female	N <sub>1</sub>	16	18
	n	16	18
	Mean	81.25	8.55
	SD, SE	18.016, 4.504	14.313, 3.374
	Median	88.89	0.00
	Q1, Q3	66.67, 100.00	0.00, 11.11
	Min, Max	44.4, 100.0	0.0, 42.9
	ANCOVA <sup>1</sup>		
	LS Mean (SE)	81.55 (4.206)	8.29 (4.027)
	95% C.I.	72.96, 90.14	0.06, 16.51
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	73.27	
	95% C.I. of difference	61.33, 85.21	
	P-value	<.0001	
	HedgesG (95% CI)	4.262 ( 3.046, 5.479)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit baseline RSS stratification, age as factors, baseline domain score as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-lb-serum-phos-nr\_ANCOVA.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	N <sub>1</sub>	5	8
	Baseline		
	Pain Interference		
	n	5	8
	Mean	60.7	49.6
	SD / SE	13.78, 6.16	13.48, 4.77
	Median	58.4	46.8
	Q1, Q3	52.4, 74.6	38.3, 58.1
	Min, Max	43, 75	37, 74

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 24		
	Pain Interference		
	Baseline		
	n	5	8
	Mean	60.7	49.6
	SD / SE	13.78, 6.16	13.48, 4.77
	Median	58.4	46.8
	Q1, Q3	52.4, 74.6	38.3, 58.1
	Min, Max	43, 75	37, 74
	Observed Value		
	n	5	8
	Mean	51.1	48.8
	SD / SE	12.31, 5.50	7.80, 2.76
	Median	54.2	50.4
	Q1, Q3	39.9, 59.8	40.7, 54.1
	Min, Max	37, 65	40, 61

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-9.6	-0.8
	SD / SE	7.83, 3.50	7.76, 2.74
	Median	-9.7	0.0
	Q1, Q3	-14.8, -6.6	-5.3, 2.6
	Min, Max	-19, 2	-13, 12
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.42 (1.101)	0.52 (0.641)
	95% C.I.	-2.58, 1.74	-0.74, 1.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.94	
	95% C.I. of difference	-3.46, 1.58	
	P Value	0.4646	
	HedgesG (95% CI)	-0.963 (-2.140, 0.214)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 40		
	Pain Interference		
	Baseline		
	n	5	8
	Mean	60.7	49.6
	SD / SE	13.78, 6.16	13.48, 4.77
	Median	58.4	46.8
	Q1, Q3	52.4, 74.6	38.3, 58.1
	Min, Max	43, 75	37, 74
	Observed Value		
	n	5	8
	Mean	55.1	47.8
	SD / SE	10.26, 4.59	9.52, 3.36
	Median	52.4	45.8
	Q1, Q3	49.9, 59.8	39.9, 57.5
	Min, Max	43, 70	37, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-5.5	-1.9
	SD / SE	6.27, 2.80	12.42, 4.39
	Median	-4.4	0.0
	Q1, Q3	-8.5, 0.0	-12.2, 2.0
	Min, Max	-15, 0	-17, 22
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.00 (0.918)	-0.19 (0.904)
	95% C.I.	-3.80, -0.20	-1.96, 1.58
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.81	
	95% C.I. of difference	-4.36, 0.75	
	P Value	0.1652	
	HedgesG (95% CI)	-0.296 (-1.419, 0.827)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 64		
	Pain Interference		
	Baseline		
	n	5	8
	Mean	60.7	49.6
	SD / SE	13.78, 6.16	13.48, 4.77
	Median	58.4	46.8
	Q1, Q3	52.4, 74.6	38.3, 58.1
	Min, Max	43, 75	37, 74
	Observed Value		
	n	5	8
	Mean	50.7	48.5
	SD / SE	11.15, 4.99	8.49, 3.00
	Median	50.7	51.2
	Q1, Q3	39.9, 57.2	39.9, 55.2
	Min, Max	40, 66	37, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-10.0	-1.1
	SD / SE	10.41, 4.66	9.41, 3.33
	Median	-12.5	0.0
	Q1, Q3	-17.4, -9.0	-2.6, 1.7
	Min, Max	-19, 7	-21, 14
	GEE <sup>1</sup>		
	LS Mean (SE)	-1.25 (0.994)	-0.77 (0.756)
	95% C.I.	-3.20, 0.70	-2.26, 0.71
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.48	
	95% C.I. of difference	-2.95, 2.00	
	P Value	0.7051	
	HedgesG (95% CI)	-0.779 (-1.936, 0.378)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	Pain Interference		
	n	10	12
	Mean	49.3	50.0
	SD / SE	7.39, 2.34	11.62, 3.36
	Median	48.4	48.1
	Q1, Q3	47.1, 55.6	39.9, 60.7
	Min, Max	37, 61	37, 68

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Pain Interference		
	Baseline		
	n	10	12
	Mean	49.3	50.0
	SD / SE	7.39, 2.34	11.62, 3.36
	Median	48.4	48.1
	Q1, Q3	47.1, 55.6	39.9, 60.7
	Min, Max	37, 61	37, 68
	Observed Value		
	n	10	12
	Mean	50.1	53.2
	SD / SE	7.95, 2.51	12.09, 3.49
	Median	51.9	55.0
	Q1, Q3	46.5, 56.4	40.7, 64.2
	Min, Max	37, 59	37, 68

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	0.8	3.1
	SD / SE	8.31, 2.63	5.86, 1.69
	Median	2.1	2.4
	Q1, Q3	-6.0, 4.5	0.0, 7.9
	Min, Max	-12, 17	-7, 12
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.42 (1.101)	0.52 (0.641)
	95% C.I.	-2.58, 1.74	-0.74, 1.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.94	
	95% C.I. of difference	-3.46, 1.58	
	P Value	0.4646	
	HedgesG (95% CI)	-0.303 (-1.147, 0.541)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Pain Interference		
	Baseline		
	n	10	12
	Mean	49.3	50.0
	SD / SE	7.39, 2.34	11.62, 3.36
	Median	48.4	48.1
	Q1, Q3	47.1, 55.6	39.9, 60.7
	Min, Max	37, 61	37, 68
	Observed Value		
	n	10	12
	Mean	43.9	52.1
	SD / SE	7.54, 2.38	9.51, 2.75
	Median	39.9	55.2
	Q1, Q3	36.8, 52.1	44.2, 59.8
	Min, Max	37, 55	37, 63

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	-5.5	2.1
	SD / SE	7.49, 2.37	5.88, 1.70
	Median	-7.5	0.9
	Q1, Q3	-11.6, -1.3	-0.5, 7.4
	Min, Max	-13, 12	-8, 12
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.00 (0.918)	-0.19 (0.904)
	95% C.I.	-3.80, -0.20	-1.96, 1.58
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.81	
	95% C.I. of difference	-4.36, 0.75	
	P Value	0.1652	
	HedgesG (95% CI)	-1.041 (-1.935, -0.148)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Pain Interference		
	Baseline		
	n	10	12
	Mean	49.3	50.0
	SD / SE	7.39, 2.34	11.62, 3.36
	Median	48.4	48.1
	Q1, Q3	47.1, 55.6	39.9, 60.7
	Min, Max	37, 61	37, 68
	Observed Value		
	n	10	12
	Mean	48.6	50.0
	SD / SE	6.67, 2.11	10.48, 3.03
	Median	50.2	51.6
	Q1, Q3	48.6, 52.4	38.3, 58.5
	Min, Max	37, 56	37, 64

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.1  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	-0.7	-0.1
	SD / SE	8.74, 2.76	5.58, 1.61
	Median	0.1	0.0
	Q1, Q3	-5.2, 2.4	-2.8, 4.9
	Min, Max	-16, 16	-11, 7
	GEE <sup>1</sup>		
	LS Mean (SE)	-1.25 (0.994)	-0.77 (0.756)
	95% C.I.	-3.20, 0.70	-2.26, 0.71
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.48	
	95% C.I. of difference	-2.95, 2.00	
	P Value	0.7051	
	HedgesG (95% CI)	-0.085 (-0.924, 0.755)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	Pain Interference		
	n	10	9
	Mean	50.2	45.8
	SD / SE	10.60, 3.35	10.82, 3.61
	Median	48.0	41.4
	Q1, Q3	43.4, 55.6	36.8, 51.1
	Min, Max	37, 75	37, 68

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Pain Interference		
	Baseline		
	n	10	9
	Mean	50.2	45.8
	SD / SE	10.60, 3.35	10.82, 3.61
	Median	48.0	41.4
	Q1, Q3	43.4, 55.6	36.8, 51.1
	Min, Max	37, 75	37, 68
	Observed Value		
	n	10	9
	Mean	51.0	48.5
	SD / SE	8.52, 2.70	10.90, 3.63
	Median	53.2	49.1
	Q1, Q3	46.5, 58.2	39.9, 56.3
	Min, Max	37, 60	37, 68

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	0.8	2.8
	SD / SE	8.52, 2.69	5.25, 1.75
	Median	2.1	0.0
	Q1, Q3	-6.0, 4.5	0.0, 7.0
	Min, Max	-15, 17	-4, 12
	GEE <sup>1</sup>		
	LS Mean (SE)	1.66 (0.030)	-9.16 (0.070)
	95% C.I.	1.60, 1.72	-9.30, -9.02
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	10.82	
	95% C.I. of difference	10.74, 10.90	
	P Value	<.0001	
	HedgesG (95% CI)	-0.249 (-1.153, 0.655)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Pain Interference		
	Baseline		
	n	10	9
	Mean	50.2	45.8
	SD / SE	10.60, 3.35	10.82, 3.61
	Median	48.0	41.4
	Q1, Q3	43.4, 55.6	36.8, 51.1
	Min, Max	37, 75	37, 68
	Observed Value		
	n	10	9
	Mean	45.0	48.1
	SD / SE	7.99, 2.53	9.98, 3.33
	Median	41.7	48.4
	Q1, Q3	39.9, 52.1	39.9, 58.9
	Min, Max	37, 60	37, 60

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	-5.2	2.3
	SD / SE	8.04, 2.54	10.83, 3.61
	Median	-7.5	0.0
	Q1, Q3	-11.6, 0.0	0.0, 7.8
	Min, Max	-15, 12	-16, 22
	GEE <sup>1</sup>		
	LS Mean (SE)	-11.54 (0.030)	-3.00 (0.033)
	95% C.I.	-11.60, -11.48	-3.07, -2.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-8.53	
	95% C.I. of difference	-8.54, -8.53	
	P Value	<.0001	
	HedgesG (95% CI)	-0.718 (-1.647, 0.211)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Pain Interference		
	Baseline		
	n	10	9
	Mean	50.2	45.8
	SD / SE	10.60, 3.35	10.82, 3.61
	Median	48.0	41.4
	Q1, Q3	43.4, 55.6	36.8, 51.1
	Min, Max	37, 75	37, 68
	Observed Value		
	n	10	9
	Mean	49.4	46.0
	SD / SE	7.20, 2.28	8.53, 2.84
	Median	50.6	48.4
	Q1, Q3	48.6, 54.7	36.8, 52.1
	Min, Max	37, 57	37, 58

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	-0.8	0.3
	SD / SE	10.15, 3.21	7.42, 2.47
	Median	0.1	0.0
	Q1, Q3	-5.2, 5.3	-3.7, 4.3
	Min, Max	-17, 16	-11, 14
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.76 (0.038)	-1.47 (0.033)
	95% C.I.	-2.83, -2.69	-1.53, -1.41
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.29	
	95% C.I. of difference	-1.30, -1.28	
	P Value	<.0001	
	HedgesG (95% CI)	-0.104 (-1.006, 0.797)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	Pain Interference		
	n	5	11
	Mean	59.0	53.2
	SD / SE	10.07, 4.50	12.44, 3.75
	Median	58.4	54.7
	Q1, Q3	52.4, 61.4	39.9, 63.5
	Min, Max	48, 75	37, 74

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Pain Interference		
	Baseline		
	n	5	11
	Mean	59.0	53.2
	SD / SE	10.07, 4.50	12.44, 3.75
	Median	58.4	54.7
	Q1, Q3	52.4, 61.4	39.9, 63.5
	Min, Max	48, 75	37, 74
	Observed Value		
	n	5	11
	Mean	49.5	53.8
	SD / SE	11.37, 5.08	10.18, 3.07
	Median	51.6	52.1
	Q1, Q3	39.9, 54.2	41.4, 63.4
	Min, Max	37, 65	40, 68

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-9.6	0.6
	SD / SE	7.30, 3.27	7.93, 2.39
	Median	-9.8	0.0
	Q1, Q3	-11.6, -9.7	-7.2, 5.5
	Min, Max	-19, 2	-13, 12
	GEE <sup>1</sup>		
	LS Mean (SE)	5.57 (0.000)	-3.76 (0.000)
	95% C.I.	5.57, 5.57	-3.76, -3.76
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	9.33	
	95% C.I. of difference	9.33, 9.33	
	P Value		
	HedgesG (95% CI)	-1.155 (-2.285, -0.025)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Pain Interference		
	Baseline		
	n	5	11
	Mean	59.0	53.2
	SD / SE	10.07, 4.50	12.44, 3.75
	Median	58.4	54.7
	Q1, Q3	52.4, 61.4	39.9, 63.5
	Min, Max	48, 75	37, 74
	Observed Value		
	n	5	11
	Mean	52.9	52.2
	SD / SE	11.97, 5.35	9.16, 2.76
	Median	52.4	57.0
	Q1, Q3	49.9, 55.2	39.9, 59.8
	Min, Max	37, 70	37, 63

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-6.1	-1.0
	SD / SE	4.36, 1.95	7.37, 2.22
	Median	-6.2	0.0
	Q1, Q3	-8.5, -4.4	-5.3, 2.3
	Min, Max	-12, 0	-17, 12
	GEE <sup>1</sup>		
	LS Mean (SE)	-9.13 (0.000)	-1.31 (0.000)
	95% C.I.	-9.13, -9.13	-1.31, -1.31
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-7.82	
	95% C.I. of difference	-7.82, -7.82	
	P Value		
	HedgesG (95% CI)	-0.682 (-1.766, 0.401)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Pain Interference		
	Baseline		
	n	5	11
	Mean	59.0	53.2
	SD / SE	10.07, 4.50	12.44, 3.75
	Median	58.4	54.7
	Q1, Q3	52.4, 61.4	39.9, 63.5
	Min, Max	48, 75	37, 74
	Observed Value		
	n	5	11
	Mean	49.1	52.1
	SD / SE	10.54, 4.71	9.78, 2.95
	Median	49.5	54.7
	Q1, Q3	39.9, 50.7	39.9, 59.0
	Min, Max	40, 66	37, 64

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.1.64.2  
Subgroup Analysis on Change in PROMIS Pain Interference from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-9.9	-1.1
	SD / SE	7.13, 3.19	7.20, 2.17
	Median	-10.7	0.0
	Q1, Q3	-12.5, -9.0	-1.5, 3.3
	Min, Max	-19, 1	-21, 7
	GEE <sup>1</sup>		
	LS Mean (SE)	0.87 (0.000)	0.94 (0.000)
	95% C.I.	0.87, 0.87	0.94, 0.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.07	
	95% C.I. of difference	-0.07, -0.07	
	P Value		
	HedgesG (95% CI)	-1.088 (-2.210, 0.035)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	N <sub>1</sub>	5	8
	Baseline		
	Physical Function Mobility		
	n	5	8
	Mean	42.3	47.4
	SD / SE	10.52, 4.71	7.33, 2.59
	Median	41.0	47.6
	Q1, Q3	34.0, 44.2	42.7, 52.6
	Min, Max	33, 59	36, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 24		
	Physical Function Mobility		
	Baseline		
	n	5	8
	Mean	42.3	47.4
	SD / SE	10.52, 4.71	7.33, 2.59
	Median	41.0	47.6
	Q1, Q3	34.0, 44.2	42.7, 52.6
	Min, Max	33, 59	36, 57
	Observed Value		
	n	5	8
	Mean	45.5	48.3
	SD / SE	8.42, 3.76	7.23, 2.55
	Median	43.2	48.3
	Q1, Q3	40.6, 50.7	40.9, 55.1
	Min, Max	36, 57	40, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	3.3	0.8
	SD / SE	7.94, 3.55	4.11, 1.45
	Median	2.2	0.7
	Q1, Q3	2.0, 7.6	-0.6, 4.5
	Min, Max	-8, 13	-7, 5
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.42 (1.101)	0.52 (0.641)
	95% C.I.	-2.58, 1.74	-0.74, 1.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.94	
	95% C.I. of difference	-3.46, 1.58	
	P Value	0.4646	
	HedgesG (95% CI)	0.358 (-0.768, 1.484)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 40		
	Physical Function Mobility		
	Baseline		
	n	5	8
	Mean	42.3	47.4
	SD / SE	10.52, 4.71	7.33, 2.59
	Median	41.0	47.6
	Q1, Q3	34.0, 44.2	42.7, 52.6
	Min, Max	33, 59	36, 57
	Observed Value		
	n	5	8
	Mean	47.2	46.3
	SD / SE	10.74, 4.80	6.74, 2.38
	Median	43.5	46.0
	Q1, Q3	42.6, 57.2	40.1, 51.2
	Min, Max	34, 59	39, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	4.9	-1.1
	SD / SE	6.03, 2.70	4.75, 1.68
	Median	2.5	0.1
	Q1, Q3	0.0, 9.6	-4.4, 1.8
	Min, Max	-0, 13	-9, 5
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.00 (0.918)	-0.19 (0.904)
	95% C.I.	-3.80, -0.20	-1.96, 1.58
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.81	
	95% C.I. of difference	-4.36, 0.75	
	P Value	0.1652	
	HedgesG (95% CI)	0.990 (-0.190, 2.171)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 64		
	Physical Function Mobility		
	Baseline		
	n	5	8
	Mean	42.3	47.4
	SD / SE	10.52, 4.71	7.33, 2.59
	Median	41.0	47.6
	Q1, Q3	34.0, 44.2	42.7, 52.6
	Min, Max	33, 59	36, 57
	Observed Value		
	n	5	8
	Mean	47.5	46.9
	SD / SE	11.57, 5.17	7.47, 2.64
	Median	48.0	44.4
	Q1, Q3	42.6, 57.2	41.1, 54.4
	Min, Max	31, 59	38, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	5.3	-0.5
	SD / SE	6.76, 3.02	5.01, 1.77
	Median	7.0	0.0
	Q1, Q3	0.0, 9.6	-3.3, 2.3
	Min, Max	-3, 13	-9, 7
	GEE <sup>1</sup>		
	LS Mean (SE)	-1.25 (0.994)	-0.77 (0.756)
	95% C.I.	-3.20, 0.70	-2.26, 0.71
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.48	
	95% C.I. of difference	-2.95, 2.00	
	P Value	0.7051	
	HedgesG (95% CI)	0.865 (-0.301, 2.031)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	Physical Function Mobility		
	n	10	12
	Mean	46.6	44.2
	SD / SE	8.44, 2.67	11.37, 3.28
	Median	43.8	44.9
	Q1, Q3	38.9, 57.2	34.2, 54.4
	Min, Max	38, 59	27, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Physical Function Mobility		
	Baseline		
	n	10	12
	Mean	46.6	44.2
	SD / SE	8.44, 2.67	11.37, 3.28
	Median	43.8	44.9
	Q1, Q3	38.9, 57.2	34.2, 54.4
	Min, Max	38, 59	27, 59
	Observed Value		
	n	10	12
	Mean	48.2	45.0
	SD / SE	8.37, 2.65	11.15, 3.22
	Median	46.8	43.1
	Q1, Q3	41.8, 57.2	33.9, 58.2
	Min, Max	37, 59	32, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	1.6	0.9
	SD / SE	7.05, 2.23	3.45, 1.00
	Median	0.4	0.0
	Q1, Q3	-0.4, 9.1	-0.7, 2.8
	Min, Max	-12, 10	-4, 8
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.42 (1.101)	0.52 (0.641)
	95% C.I.	-2.58, 1.74	-0.74, 1.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.94	
	95% C.I. of difference	-3.46, 1.58	
	P Value	0.4646	
	HedgesG (95% CI)	0.123 (-0.717, 0.963)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Physical Function Mobility		
	Baseline		
	n	10	12
	Mean	46.6	44.2
	SD / SE	8.44, 2.67	11.37, 3.28
	Median	43.8	44.9
	Q1, Q3	38.9, 57.2	34.2, 54.4
	Min, Max	38, 59	27, 59
	Observed Value		
	n	10	12
	Mean	48.2	45.0
	SD / SE	7.48, 2.37	11.54, 3.33
	Median	45.3	40.7
	Q1, Q3	43.6, 57.2	35.6, 58.2
	Min, Max	40, 59	30, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	1.6	0.8
	SD / SE	5.59, 1.77	4.39, 1.27
	Median	2.0	0.1
	Q1, Q3	0.0, 3.5	-0.5, 3.9
	Min, Max	-12, 10	-7, 8
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.00 (0.918)	-0.19 (0.904)
	95% C.I.	-3.80, -0.20	-1.96, 1.58
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.81	
	95% C.I. of difference	-4.36, 0.75	
	P Value	0.1652	
	HedgesG (95% CI)	0.153 (-0.687, 0.994)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Physical Function Mobility		
	Baseline		
	n	10	12
	Mean	46.6	44.2
	SD / SE	8.44, 2.67	11.37, 3.28
	Median	43.8	44.9
	Q1, Q3	38.9, 57.2	34.2, 54.4
	Min, Max	38, 59	27, 59
	Observed Value		
	n	10	12
	Mean	48.2	45.9
	SD / SE	8.55, 2.71	11.15, 3.22
	Median	46.6	44.8
	Q1, Q3	41.8, 59.1	35.7, 58.2
	Min, Max	36, 59	32, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.1  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	1.6	1.8
	SD / SE	7.07, 2.24	3.92, 1.13
	Median	1.9	1.8
	Q1, Q3	0.0, 5.2	-0.4, 4.8
	Min, Max	-15, 10	-5, 8
	GEE <sup>1</sup>		
	LS Mean (SE)	-1.25 (0.994)	-0.77 (0.756)
	95% C.I.	-3.20, 0.70	-2.26, 0.71
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.48	
	95% C.I. of difference	-2.95, 2.00	
	P Value	0.7051	
	HedgesG (95% CI)	-0.037 (-0.876, 0.802)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	Physical Function Mobility		
	n	10	9
	Mean	47.1	50.7
	SD / SE	10.34, 3.27	9.00, 3.00
	Median	45.3	48.4
	Q1, Q3	37.9, 57.2	48.0, 59.1
	Min, Max	33, 59	32, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Physical Function Mobility		
	Baseline		
	n	10	9
	Mean	47.1	50.7
	SD / SE	10.34, 3.27	9.00, 3.00
	Median	45.3	48.4
	Q1, Q3	37.9, 57.2	48.0, 59.1
	Min, Max	33, 59	32, 59
	Observed Value		
	n	10	9
	Mean	48.2	50.2
	SD / SE	8.04, 2.54	9.48, 3.16
	Median	46.8	50.7
	Q1, Q3	41.8, 57.2	45.2, 59.1
	Min, Max	37, 59	33, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	1.1	-0.6
	SD / SE	7.12, 2.25	3.31, 1.10
	Median	0.4	0.0
	Q1, Q3	-0.4, 7.6	0.0, 0.0
	Min, Max	-12, 10	-7, 5
	GEE <sup>1</sup>		
	LS Mean (SE)	1.66 (0.030)	-9.16 (0.070)
	95% C.I.	1.60, 1.72	-9.30, -9.02
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	10.82	
	95% C.I. of difference	10.74, 10.90	
	P Value	<.0001	
	HedgesG (95% CI)	0.266 (-0.638, 1.171)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Physical Function Mobility		
	Baseline		
	n	10	9
	Mean	47.1	50.7
	SD / SE	10.34, 3.27	9.00, 3.00
	Median	45.3	48.4
	Q1, Q3	37.9, 57.2	48.0, 59.1
	Min, Max	33, 59	32, 59
	Observed Value		
	n	10	9
	Mean	49.1	49.5
	SD / SE	8.40, 2.66	9.19, 3.06
	Median	45.3	49.3
	Q1, Q3	42.6, 59.1	44.0, 59.1
	Min, Max	40, 59	33, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

Note: This is DRAFT version and may not be fully validated.



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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	2.0	-1.3
	SD / SE	6.16, 1.95	4.31, 1.44
	Median	1.8	0.0
	Q1, Q3	0.0, 6.1	-1.7, 0.8
	Min, Max	-12, 10	-9, 5
	GEE <sup>1</sup>		
	LS Mean (SE)	-11.54 (0.030)	-3.00 (0.033)
	95% C.I.	-11.60, -11.48	-3.07, -2.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-8.53	
	95% C.I. of difference	-8.54, -8.53	
	P Value	<.0001	
	HedgesG (95% CI)	0.556 (-0.361, 1.474)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Physical Function Mobility		
	Baseline		
	n	10	9
	Mean	47.1	50.7
	SD / SE	10.34, 3.27	9.00, 3.00
	Median	45.3	48.4
	Q1, Q3	37.9, 57.2	48.0, 59.1
	Min, Max	33, 59	32, 59
	Observed Value		
	n	10	9
	Mean	48.9	50.7
	SD / SE	9.38, 2.97	8.58, 2.86
	Median	46.6	53.3
	Q1, Q3	41.8, 59.1	44.2, 59.1
	Min, Max	36, 59	37, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	1.8	0.0
	SD / SE	7.48, 2.36	3.71, 1.24
	Median	1.4	0.0
	Q1, Q3	0.0, 9.0	0.0, 0.0
	Min, Max	-15, 10	-7, 5
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.76 (0.038)	-1.47 (0.033)
	95% C.I.	-2.83, -2.69	-1.53, -1.41
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.29	
	95% C.I. of difference	-1.30, -1.28	
	P Value	<.0001	
	HedgesG (95% CI)	0.269 (-0.635, 1.174)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	Physical Function Mobility		
	n	5	11
	Mean	41.3	41.1
	SD / SE	4.33, 1.94	8.63, 2.60
	Median	43.0	39.7
	Q1, Q3	41.0, 44.2	34.7, 48.0
	Min, Max	34, 45	27, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Physical Function Mobility		
	Baseline		
	n	5	11
	Mean	41.3	41.1
	SD / SE	4.33, 1.94	8.63, 2.60
	Median	43.0	39.7
	Q1, Q3	41.0, 44.2	34.7, 48.0
	Min, Max	34, 45	27, 57
	Observed Value		
	n	5	11
	Mean	45.6	43.2
	SD / SE	9.15, 4.09	9.07, 2.73
	Median	43.2	41.0
	Q1, Q3	38.7, 53.0	34.1, 53.0
	Min, Max	36, 57	32, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	4.3	2.0
	SD / SE	7.41, 3.32	3.58, 1.08
	Median	2.2	1.4
	Q1, Q3	2.0, 10.0	-0.7, 5.1
	Min, Max	-6, 13	-4, 8
	GEE <sup>1</sup>		
	LS Mean (SE)	5.57 (0.000)	-3.76 (0.000)
	95% C.I.	5.57, 5.57	-3.76, -3.76
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	9.33	
	95% C.I. of difference	9.33, 9.33	
	P Value		
	HedgesG (95% CI)	0.396 (-0.670, 1.462)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Physical Function Mobility		
	Baseline		
	n	5	11
	Mean	41.3	41.1
	SD / SE	4.33, 1.94	8.63, 2.60
	Median	43.0	39.7
	Q1, Q3	41.0, 44.2	34.7, 48.0
	Min, Max	34, 45	27, 57
	Observed Value		
	n	5	11
	Mean	45.5	42.2
	SD / SE	8.50, 3.80	9.25, 2.79
	Median	45.0	40.0
	Q1, Q3	43.5, 48.0	36.2, 53.0
	Min, Max	34, 57	30, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	4.1	1.1
	SD / SE	5.17, 2.31	4.61, 1.39
	Median	2.5	0.3
	Q1, Q3	2.0, 3.5	-1.1, 5.0
	Min, Max	-0, 13	-7, 8
	GEE <sup>1</sup>		
	LS Mean (SE)	-9.13 (0.000)	-1.31 (0.000)
	95% C.I.	-9.13, -9.13	-1.31, -1.31
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-7.82	
	95% C.I. of difference	-7.82, -7.82	
	P Value		
	HedgesG (95% CI)	0.563 (-0.512, 1.638)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Physical Function Mobility		
	Baseline		
	n	5	11
	Mean	41.3	41.1
	SD / SE	4.33, 1.94	8.63, 2.60
	Median	43.0	39.7
	Q1, Q3	41.0, 44.2	34.7, 48.0
	Min, Max	34, 45	27, 57
	Observed Value		
	n	5	11
	Mean	46.1	42.7
	SD / SE	9.72, 4.35	9.24, 2.78
	Median	48.0	40.7
	Q1, Q3	45.0, 49.7	34.0, 51.5
	Min, Max	31, 57	32, 57

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.7.2.64.2  
Subgroup Analysis on Change in PROMIS Physical Function Mobility from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	4.8	1.6
	SD / SE	6.04, 2.70	4.98, 1.50
	Median	5.2	3.5
	Q1, Q3	2.0, 7.0	-0.7, 4.7
	Min, Max	-3, 13	-9, 8
	GEE <sup>1</sup>		
	LS Mean (SE)	0.87 (0.000)	0.94 (0.000)
	95% C.I.	0.87, 0.87	0.94, 0.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.07	
	95% C.I. of difference	-0.07, -0.07	
	P Value		
	HedgesG (95% CI)	0.536 (-0.537, 1.610)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	N <sub>1</sub>	5	8
	Baseline		
	Fatigue		
	n	5	8
	Mean	53.6	42.6
	SD / SE	13.08, 5.85	10.24, 3.62
	Median	49.8	40.5
	Q1, Q3	46.8, 66.0	35.2, 46.3
	Min, Max	38, 68	32, 64

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 24		
	Fatigue		
	Baseline		
	n	5	8
	Mean	53.6	42.6
	SD / SE	13.08, 5.85	10.24, 3.62
	Median	49.8	40.5
	Q1, Q3	46.8, 66.0	35.2, 46.3
	Min, Max	38, 68	32, 64
	Observed Value		
	n	5	8
	Mean	49.1	39.7
	SD / SE	12.29, 5.50	5.33, 1.88
	Median	45.3	39.8
	Q1, Q3	41.8, 58.1	35.2, 43.4
	Min, Max	35, 65	32, 48

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-4.5	-2.9
	SD / SE	5.96, 2.67	5.53, 1.96
	Median	-4.5	-1.0
	Q1, Q3	-7.9, -2.8	-2.9, 0.0
	Min, Max	-12, 4	-16, 1
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.42 (1.101)	0.52 (0.641)
	95% C.I.	-2.58, 1.74	-0.74, 1.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.94	
	95% C.I. of difference	-3.46, 1.58	
	P Value	0.4646	
	HedgesG (95% CI)	-0.240 (-1.362, 0.881)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 40		
	Fatigue		
	Baseline		
	n	5	8
	Mean	53.6	42.6
	SD / SE	13.08, 5.85	10.24, 3.62
	Median	49.8	40.5
	Q1, Q3	46.8, 66.0	35.2, 46.3
	Min, Max	38, 68	32, 64
	Observed Value		
	n	5	8
	Mean	49.1	41.2
	SD / SE	14.33, 6.41	10.12, 3.58
	Median	45.8	36.0
	Q1, Q3	36.5, 61.3	35.2, 48.1
	Min, Max	35, 67	32, 59

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-4.5	-1.4
	SD / SE	4.26, 1.90	12.26, 4.34
	Median	-4.0	0.0
	Q1, Q3	-4.7, -1.4	-3.3, 4.5
	Min, Max	-12, -1	-28, 14
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.00 (0.918)	-0.19 (0.904)
	95% C.I.	-3.80, -0.20	-1.96, 1.58
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.81	
	95% C.I. of difference	-4.36, 0.75	
	P Value	0.1652	
	HedgesG (95% CI)	-0.268 (-1.390, 0.854)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 64		
	Fatigue		
	Baseline		
	n	5	8
	Mean	53.6	42.6
	SD / SE	13.08, 5.85	10.24, 3.62
	Median	49.8	40.5
	Q1, Q3	46.8, 66.0	35.2, 46.3
	Min, Max	38, 68	32, 64
	Observed Value		
	n	5	8
	Mean	47.4	41.6
	SD / SE	14.32, 6.40	6.79, 2.40
	Median	41.8	43.1
	Q1, Q3	35.2, 58.3	35.2, 45.7
	Min, Max	35, 67	32, 52

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-6.2	-1.0
	SD / SE	7.67, 3.43	8.18, 2.89
	Median	-7.7	0.3
	Q1, Q3	-11.6, -1.4	0.0, 3.3
	Min, Max	-15, 4	-21, 5
	GEE <sup>1</sup>		
	LS Mean (SE)	-1.25 (0.994)	-0.77 (0.756)
	95% C.I.	-3.20, 0.70	-2.26, 0.71
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.48	
	95% C.I. of difference	-2.95, 2.00	
	P Value	0.7051	
	HedgesG (95% CI)	-0.555 (-1.693, 0.583)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	Fatigue		
	n	10	12
	Mean	46.3	50.0
	SD / SE	6.89, 2.18	15.28, 4.41
	Median	48.9	44.8
	Q1, Q3	39.7, 51.7	36.0, 64.9
	Min, Max	35, 54	32, 73

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Fatigue		
	Baseline		
	n	10	12
	Mean	46.3	50.0
	SD / SE	6.89, 2.18	15.28, 4.41
	Median	48.9	44.8
	Q1, Q3	39.7, 51.7	36.0, 64.9
	Min, Max	35, 54	32, 73
	Observed Value		
	n	10	12
	Mean	46.1	51.5
	SD / SE	8.45, 2.67	11.38, 3.29
	Median	46.5	50.0
	Q1, Q3	39.7, 51.8	45.3, 63.9
	Min, Max	32, 59	32, 66

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	-0.2	1.6
	SD / SE	7.25, 2.29	8.35, 2.41
	Median	0.2	2.7
	Q1, Q3	-0.6, 4.9	-4.6, 7.7
	Min, Max	-13, 9	-15, 15
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.42 (1.101)	0.52 (0.641)
	95% C.I.	-2.58, 1.74	-0.74, 1.78
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.94	
	95% C.I. of difference	-3.46, 1.58	
	P Value	0.4646	
	HedgesG (95% CI)	-0.200 (-1.042, 0.641)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Fatigue		
	Baseline		
	n	10	12
	Mean	46.3	50.0
	SD / SE	6.89, 2.18	15.28, 4.41
	Median	48.9	44.8
	Q1, Q3	39.7, 51.7	36.0, 64.9
	Min, Max	35, 54	32, 73
	Observed Value		
	n	10	12
	Mean	42.5	50.1
	SD / SE	7.96, 2.52	9.95, 2.87
	Median	44.3	47.4
	Q1, Q3	35.2, 49.5	43.7, 60.6
	Min, Max	32, 53	32, 64

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	-3.9	0.1
	SD / SE	6.63, 2.10	8.52, 2.46
	Median	-3.1	0.7
	Q1, Q3	-9.8, 0.0	-7.7, 8.4
	Min, Max	-13, 8	-14, 12
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.00 (0.918)	-0.19 (0.904)
	95% C.I.	-3.80, -0.20	-1.96, 1.58
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.81	
	95% C.I. of difference	-4.36, 0.75	
	P Value	0.1652	
	HedgesG (95% CI)	-0.476 (-1.327, 0.375)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Fatigue		
	Baseline		
	n	10	12
	Mean	46.3	50.0
	SD / SE	6.89, 2.18	15.28, 4.41
	Median	48.9	44.8
	Q1, Q3	39.7, 51.7	36.0, 64.9
	Min, Max	35, 54	32, 73
	Observed Value		
	n	10	12
	Mean	44.1	47.2
	SD / SE	9.08, 2.87	13.13, 3.79
	Median	44.5	43.2
	Q1, Q3	35.2, 50.9	34.6, 62.1
	Min, Max	32, 59	32, 65

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.1  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	-2.3	-2.8
	SD / SE	9.66, 3.05	8.76, 2.53
	Median	-0.2	-1.9
	Q1, Q3	-13.0, 7.0	-7.9, 2.9
	Min, Max	-16, 11	-22, 9
	GEE <sup>1</sup>		
	LS Mean (SE)	-1.25 (0.994)	-0.77 (0.756)
	95% C.I.	-3.20, 0.70	-2.26, 0.71
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.48	
	95% C.I. of difference	-2.95, 2.00	
	P Value	0.7051	
	HedgesG (95% CI)	0.051 (-0.789, 0.890)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	Fatigue		
	n	10	9
	Mean	47.5	42.2
	SD / SE	9.44, 2.98	12.38, 4.13
	Median	48.9	39.0
	Q1, Q3	37.5, 51.7	35.2, 43.7
	Min, Max	35, 66	32, 73

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Fatigue		
	Baseline		
	n	10	9
	Mean	47.5	42.2
	SD / SE	9.44, 2.98	12.38, 4.13
	Median	48.9	39.0
	Q1, Q3	37.5, 51.7	35.2, 43.7
	Min, Max	35, 66	32, 73
	Observed Value		
	n	10	9
	Mean	47.6	44.5
	SD / SE	9.08, 2.87	10.57, 3.52
	Median	48.6	39.9
	Q1, Q3	41.8, 55.5	36.5, 51.8
	Min, Max	32, 59	32, 65

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	0.0	2.2
	SD / SE	6.33, 2.00	6.17, 2.06
	Median	0.2	0.8
	Q1, Q3	-0.6, 4.3	0.0, 4.1
	Min, Max	-13, 9	-7, 15
	GEE <sup>1</sup>		
	LS Mean (SE)	1.66 (0.030)	-9.16 (0.070)
	95% C.I.	1.60, 1.72	-9.30, -9.02
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	10.82	
	95% C.I. of difference	10.74, 10.90	
	P Value	<.0001	
	HedgesG (95% CI)	-0.315 (-1.221, 0.591)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Fatigue		
	Baseline		
	n	10	9
	Mean	47.5	42.2
	SD / SE	9.44, 2.98	12.38, 4.13
	Median	48.9	39.0
	Q1, Q3	37.5, 51.7	35.2, 43.7
	Min, Max	35, 66	32, 73
	Observed Value		
	n	10	9
	Mean	44.3	42.8
	SD / SE	9.45, 2.99	9.05, 3.02
	Median	44.3	41.8
	Q1, Q3	35.2, 50.6	35.2, 47.1
	Min, Max	32, 61	32, 62

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	-3.3	0.6
	SD / SE	6.57, 2.08	6.61, 2.20
	Median	-1.3	0.0
	Q1, Q3	-9.8, 0.0	-1.0, 1.8
	Min, Max	-13, 8	-10, 10
	GEE <sup>1</sup>		
	LS Mean (SE)	-11.54 (0.030)	-3.00 (0.033)
	95% C.I.	-11.60, -11.48	-3.07, -2.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-8.53	
	95% C.I. of difference	-8.54, -8.53	
	P Value	<.0001	
	HedgesG (95% CI)	-0.526 (-1.442, 0.390)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Fatigue		
	Baseline		
	n	10	9
	Mean	47.5	42.2
	SD / SE	9.44, 2.98	12.38, 4.13
	Median	48.9	39.0
	Q1, Q3	37.5, 51.7	35.2, 43.7
	Min, Max	35, 66	32, 73
	Observed Value		
	n	10	9
	Mean	45.4	42.3
	SD / SE	10.07, 3.19	10.68, 3.56
	Median	45.3	42.4
	Q1, Q3	35.2, 53.8	32.4, 45.4
	Min, Max	32, 59	32, 64

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	-2.1	0.1
	SD / SE	9.95, 3.15	5.14, 1.71
	Median	-0.2	0.0
	Q1, Q3	-13.0, 7.0	-0.5, 0.5
	Min, Max	-16, 11	-9, 9
	GEE <sup>1</sup>		
	LS Mean (SE)	-2.76 (0.038)	-1.47 (0.033)
	95% C.I.	-2.83, -2.69	-1.53, -1.41
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-1.29	
	95% C.I. of difference	-1.30, -1.28	
	P Value	<.0001	
	HedgesG (95% CI)	-0.243 (-1.147, 0.661)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	Fatigue		
	n	5	11
	Mean	51.3	50.9
	SD / SE	10.49, 4.69	14.00, 4.22
	Median	49.8	48.3
	Q1, Q3	46.8, 52.0	35.2, 64.3
	Min, Max	40, 68	32, 71

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Fatigue		
	Baseline		
	n	5	11
	Mean	51.3	50.9
	SD / SE	10.49, 4.69	14.00, 4.22
	Median	49.8	48.3
	Q1, Q3	46.8, 52.0	35.2, 64.3
	Min, Max	40, 68	32, 71
	Observed Value		
	n	5	11
	Mean	46.3	48.7
	SD / SE	11.50, 5.14	11.46, 3.45
	Median	45.3	45.4
	Q1, Q3	39.7, 46.2	41.8, 62.4
	Min, Max	35, 65	32, 66

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-4.9	-2.2
	SD / SE	7.65, 3.42	8.20, 2.47
	Median	-4.5	-2.6
	Q1, Q3	-11.6, -2.8	-4.8, 2.1
	Min, Max	-12, 7	-16, 10
	GEE <sup>1</sup>		
	LS Mean (SE)	5.57 (0.000)	-3.76 (0.000)
	95% C.I.	5.57, 5.57	-3.76, -3.76
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	9.33	
	95% C.I. of difference	9.33, 9.33	
	P Value		
	HedgesG (95% CI)	-0.296 (-1.358, 0.766)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Fatigue		
	Baseline		
	n	5	11
	Mean	51.3	50.9
	SD / SE	10.49, 4.69	14.00, 4.22
	Median	49.8	48.3
	Q1, Q3	46.8, 52.0	35.2, 64.3
	Min, Max	40, 68	32, 71
	Observed Value		
	n	5	11
	Mean	45.5	49.6
	SD / SE	13.52, 6.04	11.41, 3.44
	Median	45.8	49.4
	Q1, Q3	35.2, 47.4	36.7, 58.8
	Min, Max	32, 67	32, 64

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-5.8	-1.3
	SD / SE	3.87, 1.73	12.23, 3.69
	Median	-4.6	0.0
	Q1, Q3	-7.3, -4.0	-8.0, 7.3
	Min, Max	-12, -1	-28, 14
	GEE <sup>1</sup>		
	LS Mean (SE)	-9.13 (0.000)	-1.31 (0.000)
	95% C.I.	-9.13, -9.13	-1.31, -1.31
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-7.82	
	95% C.I. of difference	-7.82, -7.82	
	P Value		
	HedgesG (95% CI)	-0.374 (-1.439, 0.691)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Fatigue		
	Baseline		
	n	5	11
	Mean	51.3	50.9
	SD / SE	10.49, 4.69	14.00, 4.22
	Median	49.8	48.3
	Q1, Q3	46.8, 52.0	35.2, 64.3
	Min, Max	40, 68	32, 71
	Observed Value		
	n	5	11
	Mean	44.8	47.1
	SD / SE	13.09, 5.85	11.59, 3.50
	Median	40.4	43.7
	Q1, Q3	35.2, 46.3	36.8, 60.7
	Min, Max	35, 67	32, 65

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.8.1.64.2  
Subgroup Analysis on Change in PROMIS Fatigue from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	-6.5	-3.8
	SD / SE	6.52, 2.92	10.21, 3.08
	Median	-5.7	0.0
	Q1, Q3	-11.6, -1.4	-10.5, 4.0
	Min, Max	-15, 1	-22, 9
	GEE <sup>1</sup>		
	LS Mean (SE)	0.87 (0.000)	0.94 (0.000)
	95% C.I.	0.87, 0.87	0.94, 0.94
	Difference (KRN23 – Oral Phosphate/Active Vitamin D)	-0.07	
	95% C.I. of difference	-0.07, -0.07	
	P Value		
	HedgesG (95% CI)	-0.258 (-1.319, 0.803)	

The generalized estimation equation (GEE) model includes change from baseline for PROMIS domain score as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline domain score as a covariate, with exchangeable covariance structure.

The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-promis\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	N <sub>1</sub>	5	8
	Baseline		
	n	5	8
	Mean	0.8	0.8
	SD, SE	1.79, 0.80	1.04, 0.37
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 4	0, 2

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 24		
	Baseline		
	n	5	8
	Mean	0.8	0.8
	SD, SE	1.79, 0.80	1.04, 0.37
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 4	0, 2
	Observed Value		
	n	5	8
	Mean	1.2	0.0
	SD, SE	2.68, 1.20	0.00, 0.00
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 0.0
	Min, Max	0, 6	0, 0

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	0.4	-0.8
	SD, SE	3.58, 1.60	1.04, 0.37
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	-2.0, 0.0
	Min, Max	-4, 6	-2, 0
	GEE <sup>1</sup>		
	LS Mean (SE)	0.43 (1.097)	-0.77 (0.035)
	95% C.I.	-1.72, 2.58	-0.84, -0.70
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.19	
	95% C.I. of difference	-0.96, 3.35	
	P-value	0.2774	
	HedgesG (95% CI)	0.426 (-0.703, 1.555)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 40		
	Baseline		
	n	5	8
	Mean	0.8	0.8
	SD, SE	1.79, 0.80	1.04, 0.37
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 4	0, 2
	Observed Value		
	n	5	8
	Mean	1.2	0.8
	SD, SE	1.79, 0.80	2.12, 0.75
	Median	0.0	0.0
	Q1, Q3	0.0, 2.0	0.0, 0.0
	Min, Max	0, 4	0, 6

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	0.4	0.0
	SD, SE	2.19, 0.98	1.85, 0.65
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	-1.0, 0.0
	Min, Max	-2, 4	-2, 4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.43 (0.705)	-0.02 (0.688)
	95% C.I.	-0.95, 1.81	-1.37, 1.33
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	0.44	
	95% C.I. of difference	-1.50, 2.39	
	P-value	0.6534	
	HedgesG (95% CI)	0.173 (-0.947, 1.292)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Week 64		
	Baseline		
	n	5	8
	Mean	0.8	0.8
	SD, SE	1.79, 0.80	1.04, 0.37
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 4	0, 2
	Observed Value		
	n	5	8
	Mean	0.4	1.0
	SD, SE	0.89, 0.40	1.51, 0.53
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 2	0, 4

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity $\leq$ 2.5	Change from Baseline		
	n	5	8
	Mean	-0.4	0.3
	SD, SE	2.19, 0.98	1.67, 0.59
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	-1.0, 2.0
	Min, Max	-4, 2	-2, 2
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.37 (0.386)	0.23 (0.497)
	95% C.I.	-1.13, 0.38	-0.74, 1.21
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.61	
	95% C.I. of difference	-1.85, 0.64	
	P-value	0.3394	
	HedgesG (95% CI)	-0.297 (-1.420, 0.827)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	n	10	12
	Mean	0.2	0.7
	SD, SE	0.63, 0.20	1.30, 0.38
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 1.0
	Min, Max	0, 2	0, 4

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	10	12
	Mean	0.2	0.7
	SD, SE	0.63, 0.20	1.30, 0.38
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 1.0
	Min, Max	0, 2	0, 4
	Observed Value		
	n	10	12
	Mean	0.4	0.7
	SD, SE	0.84, 0.27	1.30, 0.38
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 1.0
	Min, Max	0, 2	0, 4

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	0.2	0.0
	SD, SE	1.14, 0.36	1.71, 0.49
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 1.0
	Min, Max	-2, 2	-4, 2
	GEE <sup>1</sup>		
	LS Mean (SE)	0.01 (0.267)	0.19 (0.326)
	95% C.I.	-0.51, 0.53	-0.44, 0.83
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.18	
	95% C.I. of difference	-0.97, 0.60	
	P-value	0.6447	
	HedgesG (95% CI)	0.124 (-0.716, 0.964)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	10	12
	Mean	0.2	0.7
	SD, SE	0.63, 0.20	1.30, 0.38
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 1.0
	Min, Max	0, 2	0, 4
	Observed Value		
	n	10	12
	Mean	0.2	0.5
	SD, SE	0.63, 0.20	1.24, 0.36
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 0.0
	Min, Max	0, 2	0, 4

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	0.0	-0.2
	SD, SE	0.94, 0.30	1.34, 0.39
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 0.0
	Min, Max	-2, 2	-4, 2
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.19 (0.204)	0.03 (0.281)
	95% C.I.	-0.59, 0.21	-0.52, 0.58
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.22	
	95% C.I. of difference	-0.84, 0.40	
	P-value	0.4910	
	HedgesG (95% CI)	0.130 (-0.710, 0.970)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	10	11
	Mean	0.2	0.5
	SD, SE	0.63, 0.20	1.29, 0.39
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 0.0
	Min, Max	0, 2	0, 4
	Observed Value		
	n	10	11
	Mean	0.6	0.2
	SD, SE	0.97, 0.31	0.60, 0.18
	Median	0.0	0.0
	Q1, Q3	0.0, 2.0	0.0, 0.0
	Min, Max	0, 2	0, 2

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.1  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	11
	Mean	0.4	-0.4
	SD, SE	1.26, 0.40	1.21, 0.36
	Median	0.0	0.0
	Q1, Q3	0.0, 2.0	0.0, 0.0
	Min, Max	-2, 2	-4, 0
	GEE <sup>1</sup>		
	LS Mean (SE)	0.21 (0.305)	-0.26 (0.102)
	95% C.I.	-0.39, 0.81	-0.46, -0.06
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	0.47	
	95% C.I. of difference	-0.14, 1.07	
	P-value	0.1310	
	HedgesG (95% CI)	0.565 (-0.308, 1.438)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	n	10	9
	Mean	0.6	0.7
	SD, SE	1.35, 0.43	1.00, 0.33
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 4	0, 2

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Baseline		
	n	10	9
	Mean	0.6	0.7
	SD, SE	1.35, 0.43	1.00, 0.33
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 4	0, 2
	Observed Value		
	n	10	9
	Mean	0.2	0.7
	SD, SE	0.63, 0.20	1.41, 0.47
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 0.0
	Min, Max	0, 2	0, 4

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	-0.4	0.0
	SD, SE	1.58, 0.50	1.41, 0.47
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 0.0
	Min, Max	-4, 2	-2, 2
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.37 (0.318)	0.06 (0.375)
	95% C.I.	-0.99, 0.26	-0.68, 0.79
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.42	
	95% C.I. of difference	-1.49, 0.65	
	P-value	0.4393	
	HedgesG (95% CI)	-0.240 (-1.144, 0.663)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Baseline		
	n	10	9
	Mean	0.6	0.7
	SD, SE	1.35, 0.43	1.00, 0.33
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 4	0, 2
	Observed Value		
	n	10	9
	Mean	0.2	1.3
	SD, SE	0.63, 0.20	2.24, 0.75
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 2	0, 6

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	-0.4	0.7
	SD, SE	0.84, 0.27	1.41, 0.47
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 0.0
	Min, Max	-2, 0	0, 4
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.37 (0.128)	0.72 (0.592)
	95% C.I.	-0.62, -0.11	-0.44, 1.88
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-1.09	
	95% C.I. of difference	-2.21, 0.04	
	P-value	0.0581	
	HedgesG (95% CI)	-0.840 (-1.779, 0.100)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Baseline		
	n	10	8
	Mean	0.6	0.5
	SD, SE	1.35, 0.43	0.93, 0.33
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 1.0
	Min, Max	0, 4	0, 2
	Observed Value		
	n	10	8
	Mean	0.2	1.3
	SD, SE	0.63, 0.20	1.49, 0.53
	Median	0.0	1.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 2	0, 4

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	8
	Mean	-0.4	0.8
	SD, SE	1.58, 0.50	1.04, 0.37
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	-4, 2	0, 2
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.37 (0.318)	0.68 (0.397)
	95% C.I.	-0.99, 0.26	-0.09, 1.46
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-1.05	
	95% C.I. of difference	-1.99, -0.11	
	P-value	0.0284	
	HedgesG (95% CI)	-0.755 (-1.717, 0.207)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	n	5	11
	Mean	0.0	0.7
	SD, SE	0.00, 0.00	1.35, 0.41
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 0	0, 4

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Baseline		
	n	5	11
	Mean	0.0	0.7
	SD, SE	0.00, 0.00	1.35, 0.41
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 0	0, 4
	Observed Value		
	n	5	11
	Mean	1.6	0.2
	SD, SE	2.61, 1.17	0.60, 0.18
	Median	0.0	0.0
	Q1, Q3	0.0, 2.0	0.0, 0.0
	Min, Max	0, 6	0, 2

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	1.6	-0.5
	SD, SE	2.61, 1.17	1.57, 0.47
	Median	0.0	0.0
	Q1, Q3	0.0, 2.0	-2.0, 0.0
	Min, Max	0, 6	-4, 2
	GEE <sup>1</sup>		
	LS Mean (SE)	1.09 (1.017)	-0.32 (0.172)
	95% C.I.	-0.90, 3.09	-0.65, 0.02
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.41	
	95% C.I. of difference	-0.59, 3.41	
	P-value	0.1663	
	HedgesG (95% CI)	0.985 (-0.126, 2.096)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Baseline		
	n	5	11
	Mean	0.0	0.7
	SD, SE	0.00, 0.00	1.35, 0.41
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 0	0, 4
	Observed Value		
	n	5	11
	Mean	1.2	0.0
	SD, SE	1.79, 0.80	0.00, 0.00
	Median	0.0	0.0
	Q1, Q3	0.0, 2.0	0.0, 0.0
	Min, Max	0, 4	0, 0

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	1.2	-0.7
	SD, SE	1.79, 0.80	1.35, 0.41
	Median	0.0	0.0
	Q1, Q3	0.0, 2.0	-2.0, 0.0
	Min, Max	0, 4	-4, 0
	GEE <sup>1</sup>		
	LS Mean (SE)	0.69 (0.691)	-0.50 (0.024)
	95% C.I.	-0.66, 2.05	-0.54, -0.45
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.19	
	95% C.I. of difference	-0.14, 2.52	
	P-value	0.0793	
	HedgesG (95% CI)	1.146 ( 0.017, 2.275)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Baseline		
	n	5	11
	Mean	0.0	0.7
	SD, SE	0.00, 0.00	1.35, 0.41
	Median	0.0	0.0
	Q1, Q3	0.0, 0.0	0.0, 2.0
	Min, Max	0, 0	0, 4
	Observed Value		
	n	5	11
	Mean	1.2	0.0
	SD, SE	1.10, 0.49	0.00, 0.00
	Median	2.0	0.0
	Q1, Q3	0.0, 2.0	0.0, 0.0
	Min, Max	0, 2	0, 0

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.8.2.64.2  
Subgroup Analysis on Change in Faces Pain Scale – Revised (FPS-R) from Baseline  
(FAS - Baseline Age  $\geq$  5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	1.2	-0.7
	SD, SE	1.10, 0.49	1.35, 0.41
	Median	2.0	0.0
	Q1, Q3	0.0, 2.0	-2.0, 0.0
	Min, Max	0, 2	-4, 0
	GEE <sup>1</sup>		
	LS Mean (SE)	0.69 (0.400)	-0.50 (0.024)
	95% C.I.	-0.09, 1.48	-0.54, -0.45
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.19	
	95% C.I. of difference	0.43, 1.95	
	P-value	0.0022	
	HedgesG (95% CI)	1.330 ( 0.177, 2.484)	

The generalized estimation equation (GEE) model includes change from baseline for FPS-R as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline FPS-R as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-fps\_GEE.sas

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	N <sub>1</sub>	5	8
	Baseline		
	n	5	8
	Mean	39.32	44.13
	SD, SE	9.614, 4.299	12.712, 4.494
	Median	39.97	49.83
	Q1, Q3	37.68, 46.53	31.77, 53.81
	Min, Max	24.1, 48.4	25.0, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 24		
	Baseline		
	n	5	8
	Mean	39.32	44.13
	SD, SE	9.614, 4.299	12.712, 4.494
	Median	39.97	49.83
	Q1, Q3	37.68, 46.53	31.77, 53.81
	Min, Max	24.1, 48.4	25.0, 57.2
	Observed Value		
	n	5	8
	Mean	43.81	48.29
	SD, SE	11.241, 5.027	11.743, 4.152
	Median	48.36	55.51
	Q1, Q3	45.85, 49.04	36.20, 57.21
	Min, Max	24.1, 51.8	31.3, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	4.49	4.17
	SD, SE	4.341, 1.941	11.702, 4.137
	Median	5.23	0.79
	Q1, Q3	0.00, 8.17	-0.92, 3.40
	Min, Max	0.0, 9.1	-5.5, 32.2
	GEE <sup>1</sup>		
	LS Mean (SE)	3.17 (2.452)	4.99 (3.626)
	95% C.I.	-1.64, 7.98	-2.11, 12.10
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-1.83	
	95% C.I. of difference	-11.12, 7.47	
	P-value	0.7002	
	HedgesG (95% CI)	0.029 (-1.089, 1.146)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 40		
	Baseline		
	n	5	8
	Mean	39.32	44.13
	SD, SE	9.614, 4.299	12.712, 4.494
	Median	39.97	49.83
	Q1, Q3	37.68, 46.53	31.77, 53.81
	Min, Max	24.1, 48.4	25.0, 57.2
	Observed Value		
	n	5	8
	Mean	41.82	45.77
	SD, SE	13.865, 6.201	8.359, 2.955
	Median	48.36	48.47
	Q1, Q3	37.68, 49.04	39.26, 52.45
	Min, Max	19.5, 54.5	31.3, 54.5

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	2.50	1.64
	SD, SE	5.804, 2.596	14.941, 5.282
	Median	0.00	-1.37
	Q1, Q3	0.00, 7.96	-9.89, 10.34
	Min, Max	-4.5, 9.1	-14.5, 29.5
	GEE <sup>1</sup>		
	LS Mean (SE)	1.18 (3.433)	2.47 (3.828)
	95% C.I.	-5.55, 7.91	-5.03, 9.97
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-1.30	
	95% C.I. of difference	-11.85, 9.26	
	P-value	0.8099	
	HedgesG (95% CI)	0.059 (-1.058, 1.177)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 64		
	Baseline		
	n	5	8
	Mean	39.32	44.13
	SD, SE	9.614, 4.299	12.712, 4.494
	Median	39.97	49.83
	Q1, Q3	37.68, 46.53	31.77, 53.81
	Min, Max	24.1, 48.4	25.0, 57.2
	Observed Value		
	n	5	8
	Mean	45.13	42.14
	SD, SE	13.857, 6.197	14.436, 5.104
	Median	51.08	44.72
	Q1, Q3	48.36, 51.08	29.96, 55.51
	Min, Max	20.7, 54.5	19.5, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	5.81	-1.99
	SD, SE	6.995, 3.128	14.938, 5.281
	Median	4.55	0.00
	Q1, Q3	2.72, 10.68	-16.33, 8.40
	Min, Max	-3.4, 14.5	-20.7, 20.7
	GEE <sup>1</sup>		
	LS Mean (SE)	4.49 (3.544)	-1.16 (4.592)
	95% C.I.	-2.46, 11.43	-10.16, 7.84
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	5.64	
	95% C.I. of difference	-6.00, 17.29	
	P-value	0.3422	
	HedgesG (95% CI)	0.528 (-0.608, 1.664)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	n	10	12
	Mean	40.39	38.48
	SD, SE	10.780, 3.409	16.956, 4.895
	Median	43.02	43.82
	Q1, Q3	32.94, 47.68	29.39, 50.74
	Min, Max	24.1, 57.2	-0.9, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	10	12
	Mean	40.39	38.48
	SD, SE	10.780, 3.409	16.956, 4.895
	Median	43.02	43.82
	Q1, Q3	32.94, 47.68	29.39, 50.74
	Min, Max	24.1, 57.2	-0.9, 57.2
	Observed Value		
	n	10	12
	Mean	42.99	39.97
	SD, SE	9.305, 2.943	14.752, 4.259
	Median	41.77	43.92
	Q1, Q3	37.68, 47.68	26.32, 52.45
	Min, Max	25.0, 57.2	18.9, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	2.60	1.49
	SD, SE	9.818, 3.105	12.980, 3.747
	Median	4.43	0.00
	Q1, Q3	0.00, 9.07	-7.04, 10.22
	Min, Max	-18.8, 13.4	-21.6, 21.8
	GEE <sup>1</sup>		
	LS Mean (SE)	2.99 (2.435)	1.17 (3.030)
	95% C.I.	-1.79, 7.76	-4.77, 7.11
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.81	
	95% C.I. of difference	-5.82, 9.45	
	P-value	0.6414	
	HedgesG (95% CI)	0.087 (-0.752, 0.927)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	10	12
	Mean	40.39	38.48
	SD, SE	10.780, 3.409	16.956, 4.895
	Median	43.02	43.82
	Q1, Q3	32.94, 47.68	29.39, 50.74
	Min, Max	24.1, 57.2	-0.9, 57.2
	Observed Value		
	n	10	12
	Mean	48.33	39.94
	SD, SE	7.174, 2.269	14.527, 4.194
	Median	50.40	46.32
	Q1, Q3	41.55, 54.49	29.96, 49.72
	Min, Max	37.4, 57.2	13.2, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	7.94	1.46
	SD, SE	8.476, 2.680	10.753, 3.104
	Median	7.47	-2.25
	Q1, Q3	2.72, 9.07	-3.96, 7.40
	Min, Max	-3.4, 27.7	-13.6, 28.8
	GEE <sup>1</sup>		
	LS Mean (SE)	8.32 (1.859)	1.14 (2.506)
	95% C.I.	4.68, 11.97	-3.77, 6.05
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	7.18	
	95% C.I. of difference	1.09, 13.27	
	P-value	0.0209	
	HedgesG (95% CI)	0.607 (-0.251, 1.465)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	10	12
	Mean	40.39	38.48
	SD, SE	10.780, 3.409	16.956, 4.895
	Median	43.02	43.82
	Q1, Q3	32.94, 47.68	29.39, 50.74
	Min, Max	24.1, 57.2	-0.9, 57.2
	Observed Value		
	n	10	12
	Mean	46.61	40.36
	SD, SE	8.037, 2.542	16.108, 4.650
	Median	49.72	47.45
	Q1, Q3	37.43, 51.08	24.28, 53.81
	Min, Max	34.1, 57.2	14.3, 54.5

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

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Table 2.9.1.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	6.22	1.88
	SD, SE	9.476, 2.997	7.307, 2.109
	Median	4.99	2.73
	Q1, Q3	0.00, 12.26	-2.27, 5.90
	Min, Max	-8.4, 24.3	-13.0, 15.2
	GEE <sup>1</sup>		
	LS Mean (SE)	6.60 (2.215)	1.56 (2.171)
	95% C.I.	2.26, 10.94	-2.70, 5.81
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	5.04	
	95% C.I. of difference	-1.04, 11.13	
	P-value	0.1044	
	HedgesG (95% CI)	0.477 (-0.374, 1.328)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	n	10	9
	Mean	42.16	43.89
	SD, SE	9.337, 2.952	12.944, 4.315
	Median	43.02	45.85
	Q1, Q3	37.68, 47.68	45.63, 51.08
	Min, Max	24.1, 57.2	19.5, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Baseline		
	n	10	9
	Mean	42.16	43.89
	SD, SE	9.337, 2.952	12.944, 4.315
	Median	43.02	45.85
	Q1, Q3	37.68, 47.68	45.63, 51.08
	Min, Max	24.1, 57.2	19.5, 57.2
	Observed Value		
	n	10	9
	Mean	44.33	47.65
	SD, SE	9.378, 2.966	11.037, 3.679
	Median	46.77	51.08
	Q1, Q3	37.68, 49.04	41.30, 57.21
	Min, Max	25.0, 57.2	24.1, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	2.17	3.75
	SD, SE	9.423, 2.980	15.930, 5.310
	Median	4.43	0.00
	Q1, Q3	0.00, 8.36	-4.55, 11.36
	Min, Max	-18.8, 13.4	-21.6, 32.2
	GEE <sup>1</sup>		
	LS Mean (SE)	2.64 (2.591)	4.69 (4.007)
	95% C.I.	-2.44, 7.72	-3.16, 12.55
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-2.05	
	95% C.I. of difference	-10.53, 6.42	
	P-value	0.6351	
	HedgesG (95% CI)	-0.111 (-1.012, 0.791)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Baseline		
	n	10	9
	Mean	42.16	43.89
	SD, SE	9.337, 2.952	12.944, 4.315
	Median	43.02	45.85
	Q1, Q3	37.68, 47.68	45.63, 51.08
	Min, Max	24.1, 57.2	19.5, 57.2
	Observed Value		
	n	10	9
	Mean	47.33	43.24
	SD, SE	7.393, 2.338	14.628, 4.876
	Median	49.72	48.36
	Q1, Q3	41.30, 51.08	32.01, 53.81
	Min, Max	37.4, 57.2	13.2, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	5.17	-0.65
	SD, SE	5.186, 1.640	13.198, 4.399
	Median	6.36	-2.73
	Q1, Q3	0.00, 8.85	-6.35, 0.00
	Min, Max	-3.4, 13.4	-14.5, 29.5
	GEE <sup>1</sup>		
	LS Mean (SE)	5.64 (1.981)	0.29 (4.169)
	95% C.I.	1.75, 9.52	-7.88, 8.46
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	5.35	
	95% C.I. of difference	-2.63, 13.33	
	P-value	0.1890	
	HedgesG (95% CI)	0.536 (-0.380, 1.453)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Baseline		
	n	10	9
	Mean	42.16	43.89
	SD, SE	9.337, 2.952	12.944, 4.315
	Median	43.02	45.85
	Q1, Q3	37.68, 47.68	45.63, 51.08
	Min, Max	24.1, 57.2	19.5, 57.2
	Observed Value		
	n	10	9
	Mean	48.38	45.76
	SD, SE	6.974, 2.205	12.951, 4.317
	Median	49.72	53.81
	Q1, Q3	44.74, 54.49	43.81, 54.49
	Min, Max	36.5, 57.2	23.4, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	6.22	1.86
	SD, SE	7.759, 2.454	10.853, 3.618
	Median	8.98	3.40
	Q1, Q3	0.00, 12.26	-1.82, 3.84
	Min, Max	-8.4, 14.5	-20.7, 20.7
	GEE <sup>1</sup>		
	LS Mean (SE)	6.68 (2.002)	2.80 (3.728)
	95% C.I.	2.76, 10.61	-4.51, 10.11
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	3.88	
	95% C.I. of difference	-2.76, 10.52	
	P-value	0.2517	
	HedgesG (95% CI)	0.421 (-0.489, 1.331)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	n	5	11
	Mean	35.78	38.16
	SD, SE	11.170, 4.995	17.157, 5.173
	Median	33.16	41.08
	Q1, Q3	26.78, 46.53	30.41, 53.81
	Min, Max	24.1, 48.4	-0.9, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Baseline		
	n	5	11
	Mean	35.78	38.16
	SD, SE	11.170, 4.995	17.157, 5.173
	Median	33.16	41.08
	Q1, Q3	26.78, 46.53	30.41, 53.81
	Min, Max	24.1, 48.4	-0.9, 57.2
	Observed Value		
	n	5	11
	Mean	41.13	39.74
	SD, SE	10.740, 4.803	15.518, 4.679
	Median	42.23	31.99
	Q1, Q3	39.26, 48.36	28.58, 57.21
	Min, Max	24.1, 51.8	18.9, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	5.36	1.59
	SD, SE	5.521, 2.469	8.904, 2.685
	Median	5.23	1.58
	Q1, Q3	0.00, 9.07	-1.83, 3.41
	Min, Max	0.0, 12.5	-11.8, 21.6
	GEE <sup>1</sup>		
	LS Mean (SE)	5.22 (1.647)	1.65 (2.425)
	95% C.I.	1.99, 8.44	-3.10, 6.40
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	3.57	
	95% C.I. of difference	-1.98, 9.12	
	P-value	0.2075	
	HedgesG (95% CI)	0.412 (-0.654, 1.479)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Baseline		
	n	5	11
	Mean	35.78	38.16
	SD, SE	11.170, 4.995	17.157, 5.173
	Median	33.16	41.08
	Q1, Q3	26.78, 46.53	30.41, 53.81
	Min, Max	24.1, 48.4	-0.9, 57.2
	Observed Value		
	n	5	11
	Mean	43.82	41.48
	SD, SE	14.494, 6.482	11.164, 3.366
	Median	48.36	44.95
	Q1, Q3	42.23, 54.49	37.68, 50.40
	Min, Max	19.5, 54.5	16.1, 53.8

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	8.04	3.32
	SD, SE	12.353, 5.524	11.675, 3.520
	Median	7.96	0.00
	Q1, Q3	0.00, 9.07	-4.52, 9.07
	Min, Max	-4.5, 27.7	-13.0, 28.8
	GEE <sup>1</sup>		
	LS Mean (SE)	7.91 (4.306)	3.39 (2.559)
	95% C.I.	-0.53, 16.35	-1.63, 8.40
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	4.52	
	95% C.I. of difference	-5.44, 14.48	
	P-value	0.3740	
	HedgesG (95% CI)	0.352 (-0.713, 1.416)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Baseline		
	n	5	11
	Mean	35.78	38.16
	SD, SE	11.170, 4.995	17.157, 5.173
	Median	33.16	41.08
	Q1, Q3	26.78, 46.53	30.41, 53.81
	Min, Max	24.1, 48.4	-0.9, 57.2
	Observed Value		
	n	5	11
	Mean	41.59	37.24
	SD, SE	13.833, 6.186	16.208, 4.887
	Median	51.08	43.81
	Q1, Q3	34.06, 51.08	19.54, 51.08
	Min, Max	20.7, 51.1	14.3, 57.2

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.9.1.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PHS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	5.81	-0.92
	SD, SE	10.749, 4.807	11.136, 3.358
	Median	2.72	0.00
	Q1, Q3	0.90, 4.55	-12.95, 9.07
	Min, Max	-3.4, 24.3	-19.1, 15.2
	GEE <sup>1</sup>		
	LS Mean (SE)	5.67 (3.956)	-0.86 (2.977)
	95% C.I.	-2.08, 13.43	-6.69, 4.98
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	6.53	
	95% C.I. of difference	-3.30, 16.37	
	P-value	0.1930	
	HedgesG (95% CI)	0.540 (-0.534, 1.614)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	N <sub>1</sub>	5	8
	Baseline		
	n	5	8
	Mean	52.84	50.47
	SD, SE	10.830, 4.843	11.813, 4.176
	Median	56.93	55.15
	Q1, Q3	43.57, 62.28	40.44, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 24		
	Baseline		
	n	5	8
	Mean	52.84	50.47
	SD, SE	10.830, 4.843	11.813, 4.176
	Median	56.93	55.15
	Q1, Q3	43.57, 62.28	40.44, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3
	Observed Value		
	n	5	8
	Mean	56.76	51.37
	SD, SE	7.959, 3.559	10.712, 3.787
	Median	59.61	55.60
	Q1, Q3	59.61, 59.61	42.23, 59.61
	Min, Max	42.7, 62.3	33.8, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	3.92	0.90
	SD, SE	7.200, 3.220	3.688, 1.304
	Median	2.68	1.34
	Q1, Q3	0.00, 3.55	-2.22, 4.02
	Min, Max	-2.7, 16.0	-4.4, 5.4
	GEE <sup>1</sup>		
	LS Mean (SE)	4.20 (2.468)	0.72 (1.138)
	95% C.I.	-0.63, 9.04	-1.51, 2.95
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	3.48	
	95% C.I. of difference	-1.95, 8.92	
	P-value	0.2091	
	HedgesG (95% CI)	0.494 (-0.640, 1.627)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 40		
	Baseline		
	n	5	8
	Mean	52.84	50.47
	SD, SE	10.830, 4.843	11.813, 4.176
	Median	56.93	55.15
	Q1, Q3	43.57, 62.28	40.44, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3
	Observed Value		
	n	5	8
	Mean	51.41	50.14
	SD, SE	10.845, 4.850	12.809, 4.529
	Median	54.26	55.60
	Q1, Q3	49.81, 56.93	35.99, 60.95
	Min, Max	33.8, 62.3	33.8, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	-1.43	-0.33
	SD, SE	8.489, 3.796	6.222, 2.200
	Median	0.00	-0.45
	Q1, Q3	-5.35, 0.00	-3.56, 4.45
	Min, Max	-12.5, 10.7	-11.6, 8.0
	GEE <sup>1</sup>		
	LS Mean (SE)	-1.14 (3.224)	-0.51 (2.120)
	95% C.I.	-7.46, 5.18	-4.66, 3.65
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.63	
	95% C.I. of difference	-8.25, 6.98	
	P-value	0.8704	
	HedgesG (95% CI)	-0.131 (-1.250, 0.987)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Week 64		
	Baseline		
	n	5	8
	Mean	52.84	50.47
	SD, SE	10.830, 4.843	11.813, 4.176
	Median	56.93	55.15
	Q1, Q3	43.57, 62.28	40.44, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3
	Observed Value		
	n	5	8
	Mean	53.37	53.37
	SD, SE	11.668, 5.218	10.307, 3.644
	Median	59.61	56.94
	Q1, Q3	51.59, 59.61	44.46, 62.28
	Min, Max	33.8, 62.3	37.3, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity <= 2.5	Change from Baseline		
	n	5	8
	Mean	0.54	2.90
	SD, SE	5.143, 2.300	7.012, 2.479
	Median	0.00	2.67
	Q1, Q3	-2.67, 2.68	-2.22, 9.36
	Min, Max	-5.3, 8.0	-8.0, 11.6
	GEE <sup>1</sup>		
	LS Mean (SE)	0.82 (2.272)	2.72 (2.035)
	95% C.I.	-3.63, 5.27	-1.27, 6.71
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-1.90	
	95% C.I. of difference	-7.94, 4.14	
	P-value	0.5372	
	HedgesG (95% CI)	-0.316 (-1.440, 0.808)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	N <sub>1</sub>	10	12
	Baseline		
	n	10	12
	Mean	49.72	54.33
	SD, SE	9.444, 2.986	7.574, 2.186
	Median	52.48	56.93
	Q1, Q3	39.12, 56.93	51.14, 59.61
	Min, Max	35.5, 62.3	39.1, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 24		
	Baseline		
	n	10	12
	Mean	49.72	54.33
	SD, SE	9.444, 2.986	7.574, 2.186
	Median	52.48	56.93
	Q1, Q3	39.12, 56.93	51.14, 59.61
	Min, Max	35.5, 62.3	39.1, 62.3
	Observed Value		
	n	10	12
	Mean	50.34	51.36
	SD, SE	7.746, 2.450	8.565, 2.472
	Median	50.25	54.26
	Q1, Q3	46.24, 56.93	44.91, 56.93
	Min, Max	38.2, 62.3	32.9, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	0.62	-2.97
	SD, SE	7.511, 2.375	7.319, 2.113
	Median	1.33	-2.68
	Q1, Q3	0.00, 3.57	-9.81, 2.67
	Min, Max	-17.8, 9.8	-13.4, 9.8
	GEE <sup>1</sup>		
	LS Mean (SE)	-0.46 (1.891)	-2.07 (1.943)
	95% C.I.	-4.17, 3.25	-5.88, 1.74
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.61	
	95% C.I. of difference	-3.85, 7.07	
	P-value	0.5636	
	HedgesG (95% CI)	0.445 (-0.404, 1.295)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 40		
	Baseline		
	n	10	12
	Mean	49.72	54.33
	SD, SE	9.444, 2.986	7.574, 2.186
	Median	52.48	56.93
	Q1, Q3	39.12, 56.93	51.14, 59.61
	Min, Max	35.5, 62.3	39.1, 62.3
	Observed Value		
	n	10	12
	Mean	53.28	53.00
	SD, SE	8.877, 2.807	6.511, 1.879
	Median	54.26	54.26
	Q1, Q3	50.69, 62.28	47.13, 58.27
	Min, Max	34.7, 62.3	43.6, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	3.56	-1.34
	SD, SE	5.408, 1.710	7.393, 2.134
	Median	3.12	0.00
	Q1, Q3	0.00, 8.02	-8.02, 2.23
	Min, Max	-5.3, 11.6	-11.6, 11.6
	GEE <sup>1</sup>		
	LS Mean (SE)	2.48 (1.627)	-0.44 (1.656)
	95% C.I.	-0.71, 5.67	-3.68, 2.81
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	2.92	
	95% C.I. of difference	-1.68, 7.51	
	P-value	0.2135	
	HedgesG (95% CI)	0.684 (-0.179, 1.547)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Week 64		
	Baseline		
	n	10	12
	Mean	49.72	54.33
	SD, SE	9.444, 2.986	7.574, 2.186
	Median	52.48	56.93
	Q1, Q3	39.12, 56.93	51.14, 59.61
	Min, Max	35.5, 62.3	39.1, 62.3
	Observed Value		
	n	10	12
	Mean	51.41	54.34
	SD, SE	8.241, 2.606	7.451, 2.151
	Median	51.59	56.93
	Q1, Q3	46.24, 56.93	50.25, 59.61
	Min, Max	38.2, 62.3	36.4, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

Note: This is DRAFT version and may not be fully validated.

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Table 2.10.2.64.1  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Rickets severity

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Rickets severity > 2.5	Change from Baseline		
	n	10	12
	Mean	1.69	0.00
	SD, SE	9.583, 3.030	5.677, 1.639
	Median	-1.34	-1.34
	Q1, Q3	-6.25, 10.69	-2.68, 3.57
	Min, Max	-8.0, 16.9	-8.0, 11.6
	GEE <sup>1</sup>		
	LS Mean (SE)	0.61 (2.327)	0.90 (1.493)
	95% C.I.	-3.95, 5.17	-2.02, 3.83
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.30	
	95% C.I. of difference	-5.76, 5.17	
	P-value	0.9156	
	HedgesG (95% CI)	0.202 (-0.639, 1.043)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	N <sub>1</sub>	10	9
	Baseline		
	n	10	9
	Mean	49.72	55.05
	SD, SE	10.404, 3.290	6.981, 2.327
	Median	49.80	56.93
	Q1, Q3	39.12, 59.61	54.26, 59.61
	Min, Max	35.5, 62.3	41.8, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 24		
	Baseline		
	n	10	9
	Mean	49.72	55.05
	SD, SE	10.404, 3.290	6.981, 2.327
	Median	49.80	56.93
	Q1, Q3	39.12, 59.61	54.26, 59.61
	Min, Max	35.5, 62.3	41.8, 62.3
	Observed Value		
	n	10	9
	Mean	51.68	51.59
	SD, SE	8.674, 2.743	9.066, 3.022
	Median	52.92	56.93
	Q1, Q3	46.24, 59.61	46.24, 56.93
	Min, Max	38.2, 62.3	32.9, 59.6

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	1.96	-3.47
	SD, SE	9.053, 2.863	4.143, 1.381
	Median	2.67	-2.68
	Q1, Q3	-2.67, 8.02	-4.45, -1.77
	Min, Max	-17.8, 16.0	-10.7, 2.7
	GEE <sup>1</sup>		
	LS Mean (SE)	1.12 (2.442)	-2.38 (1.868)
	95% C.I.	-3.67, 5.90	-6.04, 1.28
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	3.49	
	95% C.I. of difference	-2.31, 9.30	
	P-value	0.2380	
	HedgesG (95% CI)	0.683 (-0.243, 1.610)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 40		
	Baseline		
	n	10	9
	Mean	49.72	55.05
	SD, SE	10.404, 3.290	6.981, 2.327
	Median	49.80	56.93
	Q1, Q3	39.12, 59.61	54.26, 59.61
	Min, Max	35.5, 62.3	41.8, 62.3
	Observed Value		
	n	10	9
	Mean	52.03	50.40
	SD, SE	8.331, 2.634	8.685, 2.895
	Median	52.93	51.59
	Q1, Q3	49.81, 56.93	46.24, 54.26
	Min, Max	34.7, 62.3	33.8, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	2.32	-4.65
	SD, SE	7.394, 2.338	5.471, 1.824
	Median	3.12	-4.45
	Q1, Q3	-0.89, 8.02	-10.69, 0.00
	Min, Max	-12.5, 11.6	-11.6, 1.8
	GEE <sup>1</sup>		
	LS Mean (SE)	1.47 (2.125)	-3.57 (2.167)
	95% C.I.	-2.69, 5.64	-7.81, 0.68
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	5.04	
	95% C.I. of difference	-0.26, 10.34	
	P-value	0.0624	
	HedgesG (95% CI)	0.960 ( 0.009, 1.911)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Week 64		
	Baseline		
	n	10	9
	Mean	49.72	55.05
	SD, SE	10.404, 3.290	6.981, 2.327
	Median	49.80	56.93
	Q1, Q3	39.12, 59.61	54.26, 59.61
	Min, Max	35.5, 62.3	41.8, 62.3
	Observed Value		
	n	10	9
	Mean	51.50	53.86
	SD, SE	7.808, 2.469	8.073, 2.691
	Median	51.59	56.93
	Q1, Q3	46.24, 56.93	51.59, 59.61
	Min, Max	38.2, 62.3	37.3, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Male	Change from Baseline		
	n	10	9
	Mean	1.78	-1.19
	SD, SE	9.076, 2.870	5.157, 1.719
	Median	-1.34	-2.67
	Q1, Q3	-5.34, 8.02	-4.45, 2.68
	Min, Max	-8.0, 16.9	-8.0, 5.4
	GEE <sup>1</sup>		
	LS Mean (SE)	0.94 (2.159)	-0.10 (2.097)
	95% C.I.	-3.29, 5.17	-4.21, 4.01
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.04	
	95% C.I. of difference	-4.25, 6.32	
	P-value	0.7001	
	HedgesG (95% CI)	0.358 (-0.549, 1.266)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	N <sub>1</sub>	5	11
	Baseline		
	n	5	11
	Mean	52.84	50.94
	SD, SE	8.626, 3.858	10.980, 3.311
	Median	54.26	54.26
	Q1, Q3	51.59, 56.93	39.12, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 24		
	Baseline		
	n	5	11
	Mean	52.84	50.94
	SD, SE	8.626, 3.858	10.980, 3.311
	Median	54.26	54.26
	Q1, Q3	51.59, 56.93	39.12, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3
	Observed Value		
	n	5	11
	Mean	54.08	51.18
	SD, SE	7.652, 3.422	9.756, 2.941
	Median	54.26	51.59
	Q1, Q3	51.59, 59.61	43.57, 59.61
	Min, Max	42.7, 62.3	33.8, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	1.25	0.25
	SD, SE	1.734, 0.775	7.422, 2.238
	Median	0.00	2.67
	Q1, Q3	0.00, 2.68	-2.67, 5.35
	Min, Max	0.0, 3.6	-13.4, 9.8
	GEE <sup>1</sup>		
	LS Mean (SE)	1.40 (0.477)	0.17 (1.823)
	95% C.I.	0.47, 2.34	-3.40, 3.75
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	1.23	
	95% C.I. of difference	-2.36, 4.82	
	P-value	0.5029	
	HedgesG (95% CI)	0.140 (-0.919, 1.198)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 40		
	Baseline		
	n	5	11
	Mean	52.84	50.94
	SD, SE	8.626, 3.858	10.980, 3.311
	Median	54.26	54.26
	Q1, Q3	51.59, 56.93	39.12, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3
	Observed Value		
	n	5	11
	Mean	53.90	53.04
	SD, SE	11.779, 5.268	10.079, 3.039
	Median	56.93	56.93
	Q1, Q3	54.26, 62.28	46.24, 62.28
	Min, Max	33.8, 62.3	34.7, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	1.07	2.11
	SD, SE	5.857, 2.619	6.415, 1.934
	Median	0.00	2.67
	Q1, Q3	0.00, 0.00	-2.67, 8.02
	Min, Max	-5.3, 10.7	-10.7, 11.6
	GEE <sup>1</sup>		
	LS Mean (SE)	1.22 (2.948)	2.03 (1.651)
	95% C.I.	-4.56, 7.00	-1.20, 5.27
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-0.81	
	95% C.I. of difference	-7.46, 5.84	
	P-value	0.8109	
	HedgesG (95% CI)	-0.147 (-1.205, 0.912)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Week 64		
	Baseline		
	n	5	11
	Mean	52.84	50.94
	SD, SE	8.626, 3.858	10.980, 3.311
	Median	54.26	54.26
	Q1, Q3	51.59, 56.93	39.12, 59.61
	Min, Max	39.1, 62.3	31.1, 62.3
	Observed Value		
	n	5	11
	Mean	53.19	54.02
	SD, SE	12.354, 5.525	9.150, 2.759
	Median	59.61	56.93
	Q1, Q3	48.01, 62.28	46.24, 62.28
	Min, Max	33.8, 62.3	36.4, 62.3

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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Table 2.10.2.64.2  
Subgroup Analysis on Change in SF-10 Standard Score (PSS-10) from Baseline  
(FAS - Baseline Age = 5 Years, Week 64)  
Subgroup: Gender

Subgroup	Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
Sex = Female	Change from Baseline		
	n	5	11
	Mean	0.35	3.08
	SD, SE	6.865, 3.070	6.604, 1.991
	Median	0.00	2.67
	Q1, Q3	-5.35, 2.68	-2.67, 10.70
	Min, Max	-6.3, 10.7	-8.0, 11.6
	GEE <sup>1</sup>		
	LS Mean (SE)	0.51 (3.218)	3.01 (1.515)
	95% C.I.	-5.80, 6.82	0.04, 5.98
	Difference(KRN23 – Oral Phosphate/Active Vitamin D)	-2.50	
	95% C.I. of difference	-9.53, 4.53	
	P-value	0.4858	
	HedgesG (95% CI)	-0.361 (-1.425, 0.704)	

The generalized estimation equation (GEE) model includes change from baseline as the dependent variable, treatment group, visit, interaction between treatment group by visit and baseline RSS stratification as factors, baseline 6MWT as a covariate, with exchangeable covariance structure. The LS Mean, SE, 95% CI and 2-sided p-value are from the GEE model.

Data source: ADSL.sas7bdat Program source: t-sf10.sas

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**Table 7.2.1.40.1**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 40)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity <= 2.5	N <sub>i</sub>	10	12
	Patients with TEAE - n(%)	10 (100.0%)	9 (75.0%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	25.0%	
	Logistic Regression <sup>1</sup>		
	Percentage of Patients - %	100.0%	75.0%
	95% C.I.	0.0%, 100.0%	40.6%, 92.9%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9770	
	RR <sup>2</sup> (95% CI), P-value	159848 (0.000, 403E189), 0.9564	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.250 (0.005, 0.495)	
	P-value	0.2208	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1.** The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

**2.** RR: Relative Risk

**3.** ARR: Adjusted Relative Risk

**4.** ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat, ADTTEAE40TE.sas7bdat Program source: TTE\_Log\_Sub\_Wk40.sas

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**Table 7.2.1.40.1**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 40)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity > 2.5	N <sub>i</sub>	19	20
	Patients with TEAE - n(%)	18 (94.7%)	17 (85.0%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	9.7%	
	Logistic Regression <sup>1</sup>		
	Percentage of Patients - %	95.2%	86.8%
	95% C.I.	69.8%, 99.4%	61.6%, 96.4%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	3.039	
	95% C.I. of odds ratio	0.261, 35.397	
	P-value	0.3646	
	RR <sup>2</sup> (95% CI), P-value	0.351 (0.040, 3.086), 0.6050	
	ARR <sup>3</sup> (95% CI), P-value	3.038 (0.283, 32.578), 0.3585	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.097 (-0.089, 0.283)	
	P-value	0.6050	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1.** The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

**2.** RR: Relative Risk

**3.** ARR: Adjusted Relative Risk

**4.** ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat, ADTTEAE40TE.sas7bdat Program source: TTE\_Log\_Sub\_Wk40.sas

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**Table 7.2.1.64.1**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 64)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity <= 2.5	N <sub>i</sub>	10	12
	Patients with TEAE - n(%)	10 (100.0%)	9 (75.0%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	25.0%	
	GLMM <sup>1</sup>		
	Percentage of Patients - %	100.0%	75.0%
	95% C.I.	0.0%, 100.0%	40.6%, 92.9%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9770	
	RR <sup>2</sup> (95% CI), P-value	159848 (0.000, 403E189), 0.9564	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.250 (0.005, 0.495)	
	P-value	0.2208	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1. The Generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction, and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source:** ADSL.sas7bdat, ADTTEAE64TE.sas7bdat **Program source:** TTE\_Log\_Sub\_Wk64.sas

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**Table 7.2.1.64.1**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 64)**  
**Subgroup: Rickets severity**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Rickets severity > 2.5	N <sub>i</sub>	19	20
	Patients with TEAE - n(%)	19 (100.0%)	18 (90.0%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	10.0%	
	GLMM <sup>1</sup>		
	Percentage of Patients - %	100.0%	89.8%
	95% C.I.	0.0%, 100.0%	65.8%, 97.6%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9705	
	RR <sup>2</sup> (95% CI), P-value	50104.6 (0.000, 205E131), 0.9429	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.100 (-0.031, 0.231)	
	P-value	0.4872	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1. The Generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction, and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source:** ADSL.sas7bdat, ADTTEAE64TE.sas7bdat    **Program source:** TTE\_Log\_Sub\_Wk64.sas

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**Table 7.2.1.40.4**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 40)**  
**Subgroup: Age**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Age <5 Years	N <sub>i</sub>	14	12
	Patients with TEAE - n(%)	14 (100.0%)	10 (83.3%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	16.7%	
	Logistic Regression <sup>1</sup>		
	Percentage of Patients - %	100.0%	83.9%
	95% C.I.	0.0%, 100.0%	49.7%, 96.5%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9733	
	RR <sup>2</sup> (95% CI), P-value	59250.9 (0.000, 229E123), 0.9382	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.167 (-0.044, 0.378)	
	P-value	0.2031	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1.** The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

**2.** RR: Relative Risk

**3.** ARR: Adjusted Relative Risk

**4.** ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat, ADTTEAE40TE.sas7bdat Program source: TTE\_Log\_Sub\_Wk40.sas

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**Table 7.2.1.40.4**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 40)**  
**Subgroup: Age**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Age ≥ 5 Years	N <sub>i</sub>	15	20
	Patients with TEAE - n(%)	14 (93.3%)	16 (80.0%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	13.3%	
	Logistic Regression <sup>1</sup>		
	Percentage of Patients - %	93.3%	80.0%
	95% C.I.	62.9%, 99.1%	56.1%, 92.6%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	3.485	
	95% C.I. of odds ratio	0.316, 38.406	
	P-value	0.2973	
	RR <sup>2</sup> (95% CI), P-value	0.333 (0.041, 2.686), 0.3650	
	ARR <sup>3</sup> (95% CI), P-value	3.484 (0.346, 35.066), 0.2894	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.133 (-0.083, 0.349)	
	P-value	0.3650	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1.** The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

**2.** RR: Relative Risk

**3.** ARR: Adjusted Relative Risk

**4.** ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat, ADTTEAE40TE.sas7bdat Program source: TTE\_Log\_Sub\_Wk40.sas



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**Table 7.2.1.64.4**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 64)**  
**Subgroup: Age**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Age <5 Years	N <sub>i</sub>	14	12
	Patients with TEAE - n(%)	14 (100.0%)	10 (83.3%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	16.7%	
	GLMM <sup>1</sup>		
	Percentage of Patients - %	100.0%	83.9%
	95% C.I.	0.0%, 100.0%	49.7%, 96.5%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9733	
	RR <sup>2</sup> (95% CI), P-value	59250.9 (0.000, 229E123), 0.9382	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.167 (-0.044, 0.378)	
	P-value	0.2031	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1. The Generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction, and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source:** ADSL.sas7bdat, ADTTEAE64TE.sas7bdat **Program source:** TTE\_Log\_Sub\_Wk64.sas

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**Table 7.2.1.64.4**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 64)**  
**Subgroup: Age**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Age ≥ 5 Years	N <sub>i</sub>	15	20
	Patients with TEAE - n(%)	15 (100.0%)	17 (85.0%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	15.0%	
	GLMM <sup>1</sup>		
	Percentage of Patients - %	100.0%	87.2%
	95% C.I.	0.0%, 100.0%	60.9%, 96.7%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9724	
	RR <sup>2</sup> (95% CI), P-value	108132 (0.000, 275E177), 0.9549	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.150 (-0.006, 0.306)	
	P-value	0.2437	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1. The Generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction, and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source:** ADSL.sas7bdat, ADTTEAE64TE.sas7bdat **Program source:** TTE\_Log\_Sub\_Wk64.sas

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**Table 7.2.1.40.2**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 40)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Male	N <sub>i</sub>	13	14
	Patients with TEAE - n(%)	12 (92.3%)	9 (64.3%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	28.0%	
	Logistic Regression <sup>1</sup>		
	Percentage of Patients - %	92.3%	64.3%
	95% C.I.	56.3%, 99.1%	35.1%, 85.8%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	6.696	
	95% C.I. of odds ratio	0.565, 79.337	
	P-value	0.1253	
	RR <sup>2</sup> (95% CI), P-value	0.215 (0.029, 1.607), 0.1647	
	ARR <sup>3</sup> (95% CI), P-value	6.696 (0.643, 69.672), 0.1116	
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.280 (-0.010, 0.570)	
	P-value	0.1647	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1.** The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

**2.** RR: Relative Risk

**3.** ARR: Adjusted Relative Risk

**4.** ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat, ADTTEAE40TE.sas7bdat Program source: TTE\_Log\_Sub\_Wk40.sas

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**Table 7.2.1.40.2**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 40)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Female	N <sub>i</sub>	16	18
	Patients with TEAE - n(%)	16 (100.0%)	17 (94.4%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	5.6%	
	Logistic Regression <sup>1</sup>		
	Percentage of Patients - %	100.0%	100.0%
	95% C.I.	0.0%, 100.0%	0.0%, 100.0%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9870	
	RR <sup>2</sup> (95% CI), P-value	35655.7 (0.000, 139E188), 0.9617	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.056 (-0.050, 0.161)	
	P-value	1.0000	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1.** The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

**2.** RR: Relative Risk

**3.** ARR: Adjusted Relative Risk

**4.** ARD: Absolute Risk Difference

Data source: ADSL.sas7bdat, ADTTEAE40TE.sas7bdat Program source: TTE\_Log\_Sub\_Wk40.sas

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**Table 7.2.1.64.2**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 64)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Male	N <sub>i</sub>	13	14
	Patients with TEAE - n(%)	13 (100.0%)	10 (71.4%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	28.6%	
	GLMM <sup>1</sup>		
	Percentage of Patients - %	100.0%	71.4%
	95% C.I.	0.0%, 100.0%	39.9%, 90.4%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9730	
	RR <sup>2</sup> (95% CI), P-value	144806 (0.000, 367E153), 0.9464	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.286 (0.049, 0.522)	
	P-value	0.0978	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1. The Generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction, and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source:** ADSL.sas7bdat, ADTTEAE64TE.sas7bdat    **Program source:** TTE\_Log\_Sub\_Wk64.sas

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**Table 7.2.1.64.2**  
**Subgroup Analysis: Logistic Regression on TEAEs**  
**(Safety Analysis Set - Week 64)**  
**Subgroup: Gender**

<b>Subgroup</b>	<b>Statistics</b>	<b>KRN23 (N=29)</b>	<b>Oral Phosphate/Active Vitamin D (N=32)</b>
Sex = Female	N <sub>i</sub>	16	18
	Patients with TEAE - n(%)	16 (100.0%)	17 (94.4%)
	Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	5.6%	
	GLMM <sup>1</sup>		
	Percentage of Patients - %	100.0%	100.0%
	95% C.I.	0.0%, 100.0%	0.0%, 100.0%
	Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
	95% C.I. of odds ratio	<0.001, >999.999	
	P-value	0.9870	
	RR <sup>2</sup> (95% CI), P-value	35655.7 (0.000, 139E188), 0.9617	
	ARR <sup>3</sup> (95% CI), P-value		
	ARD <sup>4</sup>		
	Difference (95% C.I.)	0.056 (-0.050, 0.161)	
	P-value	1.0000	

**Note:** All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

**1. The Generalized linear mixed model (GLMM) includes treatment, visit, treatment by visit interaction, and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.**

**2. RR: Relative Risk**

**3. ARR: Adjusted Relative Risk**

**4. ARD: Absolute Risk Difference**

**Data source:** ADSL.sas7bdat, ADTTEAE64TE.sas7bdat    **Program source:** TTE\_Log\_Sub\_Wk64.sas

Kyowa Kirin Pharmaceutical Development, Inc.  
Adhoc Analysis of UX023-CL301

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Table 4.1.1.9.2.40.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)

Period from Baseline to Week 40

RSS Total Score > 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	15 (78.9%)	3 (15.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	63.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	81.2%	13.0%
95% C.I.	56.5%, 93.5%	3.5%, 38.2%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	28.964	
95% C.I. of odds ratio	4.170, 201.194	
P-value	0.0012	
RR <sup>2</sup> (95% CI), P-value	5.263 (1.807, 15.326), <.0001	
ARR <sup>3</sup> (95% CI), P-value	28.964 (4.458, 188.158), 0.0004	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.639 (0.398, 0.880)	
P-value	<.0001	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 40

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	6 (60.0%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	35.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	57.8%	25.3%
95% C.I.	25.3%, 84.7%	7.3%, 59.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.051	
95% C.I. of odds ratio	0.538, 30.479	
P-value	0.1625	
RR <sup>2</sup> (95% CI), P-value	2.400 (0.797, 7.231), 0.1920	
ARR <sup>3</sup> (95% CI), P-value	4.051 (0.616, 26.619), 0.1453	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.350 (-0.040, 0.740)	
P-value	0.1920	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas



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Table 4.1.1.9.2.40.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 40

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	10 (71.4%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	46.4%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	72.1%	24.2%
95% C.I.	42.8%, 89.9%	7.2%, 56.6%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	8.109	
95% C.I. of odds ratio	1.215, 54.131	
P-value	0.0322	
RR <sup>2</sup> (95% CI), P-value	2.857 (1.015, 8.039), 0.0472	
ARR <sup>3</sup> (95% CI), P-value	8.109 (1.342, 48.991), 0.0226	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.464 (0.124, 0.805)	
P-value	0.0472	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 40

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	11 (73.3%)	3 (15.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	58.3%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	73.6%	14.4%
95% C.I.	45.5%, 90.4%	4.3%, 38.5%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	16.586	
95% C.I. of odds ratio	2.741, 100.359	
P-value	0.0033	
RR <sup>2</sup> (95% CI), P-value	4.889 (1.649, 14.497), 0.0012	
ARR <sup>3</sup> (95% CI), P-value	16.586 (2.934, 93.759), 0.0015	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.583 (0.310, 0.856)	
P-value	0.0012	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 40

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	10 (76.9%)	0 (3.3%) *
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	73.6%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	100.0%	0.0%
95% C.I.	0.0%, 100.0%	0.0%, 100.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
95% C.I. of odds ratio	<0.001, >999.999	
P-value	0.9330	
RR <sup>2</sup> (95% CI), P-value	23.077 (1.488, 357.91), <.0001	
ARR <sup>3</sup> (95% CI), P-value	124.630 (2.786, 5575.59), 0.0128**	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.736 (0.490, 0.982)	
P-value	<.0001	

\* In the event of zero cells, the correction value of 0.5 is added to each cell frequency of the corresponding fourfold table

\*\* Penalized likelihood is used to deal with quasi-complete separation problem.

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 40

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	11 (68.8%)	6 (33.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	35.4%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	69.8%	32.4%
95% C.I.	41.8%, 88.2%	14.2%, 58.1%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.824	
95% C.I. of odds ratio	0.934, 24.913	
P-value	0.0596	
RR <sup>2</sup> (95% CI), P-value	2.063 (0.992, 4.289), 0.0844	
ARR <sup>3</sup> (95% CI), P-value	4.824 (0.998, 23.318), 0.0503	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.354 (0.040, 0.669)	
P-value	0.0844	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score &gt; 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	17 (89.5%)	4 (20.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	69.5%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	92.9%	14.6%
95% C.I.	71.3%, 98.6%	3.7%, 43.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	77.244	
95% C.I. of odds ratio	7.220, 826.358	
P-value	0.0007	
RR <sup>2</sup> (95% CI), P-value	4.474 (1.837, 10.894), <.0001	
ARR <sup>3</sup> (95% CI), P-value	77.244 (7.836, 761.384), 0.0002	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.695 (0.472, 0.918)	
P-value	<.0001	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	8 (80.0%)	4 (33.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	46.7%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	80.7%	31.7%
95% C.I.	42.7%, 95.9%	10.5%, 64.6%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	9.005	
95% C.I. of odds ratio	0.937, 86.594	
P-value	0.0563	
RR <sup>2</sup> (95% CI), P-value	2.400 (1.018, 5.661), 0.0427	
ARR <sup>3</sup> (95% CI), P-value	9.005 (1.090, 74.389), 0.0413	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.467 (0.103, 0.831)	
P-value	0.0427	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	13 (92.9%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	67.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	93.8%	22.0%
95% C.I.	62.7%, 99.3%	5.7%, 56.7%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	53.697	
95% C.I. of odds ratio	3.431, 840.475	
P-value	0.0065	
RR <sup>2</sup> (95% CI), P-value	3.714 (1.379, 10.003), 0.0008	
ARR <sup>3</sup> (95% CI), P-value	53.690 (3.964, 727.204), 0.0027	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.679 (0.399, 0.958)	
P-value	0.0008	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	12 (80.0%)	5 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	55.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	80.1%	24.9%
95% C.I.	51.7%, 93.8%	10.3%, 48.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	12.127	
95% C.I. of odds ratio	2.222, 66.193	
P-value	0.0053	
RR <sup>2</sup> (95% CI), P-value	3.200 (1.438, 7.123), 0.0020	
ARR <sup>3</sup> (95% CI), P-value	12.126 (2.369, 62.076), 0.0027	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.550 (0.273, 0.827)	
P-value	0.0020	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas



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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	10 (76.9%)	1 (7.1%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	69.8%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	80.6%	3.9%
95% C.I.	43.1%, 95.8%	0.2%, 46.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	102.092	
95% C.I. of odds ratio	2.685, >999.999	
P-value	0.0150	
RR <sup>2</sup> (95% CI), P-value	10.769 (1.592, 72.871), 0.0003	
ARR <sup>3</sup> (95% CI), P-value	102.078 (3.251, 3205.63), 0.0085	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.698 (0.432, 0.964)	
P-value	0.0003	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = General disorders and administration site conditions		
Patients with TEAE - n(%)	15 (93.8%)	7 (38.9%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	54.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	94.4%	37.2%
95% C.I.	65.5%, 99.3%	17.2%, 62.8%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	28.392	
95% C.I. of odds ratio	2.353, 342.573	
P-value	0.0101	
RR <sup>2</sup> (95% CI), P-value	2.411 (1.333, 4.361), 0.0011	
ARR <sup>3</sup> (95% CI), P-value	28.386 (2.601, 309.756), 0.0061	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.549 (0.294, 0.803)	
P-value	0.0011	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 40

RSS Total Score > 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	9 (47.4%)	2 (10.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	37.4%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	49.3%	7.4%
95% C.I.	25.2%, 73.7%	1.3%, 32.1%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	12.142	
95% C.I. of odds ratio	1.469, 100.370	
P-value	0.0219	
RR <sup>2</sup> (95% CI), P-value	4.737 (1.171, 19.163), 0.0138	
ARR <sup>3</sup> (95% CI), P-value	12.141 (1.580, 93.292), 0.0164	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.374 (0.114, 0.634)	
P-value	0.0138	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 40

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	4 (40.0%)	2 (16.7%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	23.3%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	38.7%	17.6%
95% C.I.	13.2%, 72.5%	3.9%, 52.7%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	2.965	
95% C.I. of odds ratio	0.328, 26.805	
P-value	0.3134	
RR <sup>2</sup> (95% CI), P-value	2.400 (0.549, 10.495), 0.3476	
ARR <sup>3</sup> (95% CI), P-value	2.965 (0.380, 23.124), 0.2997	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.233 (-0.136, 0.603)	
P-value	0.3476	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 40

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	8 (57.1%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	32.1%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	58.2%	23.5%
95% C.I.	30.8%, 81.4%	6.8%, 56.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.550	
95% C.I. of odds ratio	0.709, 29.194	
P-value	0.1053	
RR <sup>2</sup> (95% CI), P-value	2.286 (0.776, 6.730), 0.1302	
ARR <sup>3</sup> (95% CI), P-value	4.550 (0.782, 26.477), 0.0917	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.321 (-0.035, 0.678)	
P-value	0.1302	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.40.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 40

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	5 (33.3%)	1 (5.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	28.3%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	33.4%	4.8%
95% C.I.	14.0%, 60.6%	0.6%, 29.5%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	9.897	
95% C.I. of odds ratio	0.909, 107.755	
P-value	0.0593	
RR <sup>2</sup> (95% CI), P-value	6.667 (0.867, 51.270), 0.0640	
ARR <sup>3</sup> (95% CI), P-value	9.897 (0.995, 98.457), 0.0505	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.283 (0.026, 0.540)	
P-value	0.0640	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.40.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 40

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	7 (53.8%)	0 (3.3%) *
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	50.5%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	99.7%	0.0%
95% C.I.	0.0%, 100.0%	0.0%, 100.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
95% C.I. of odds ratio	<0.001, >999.999	
P-value	0.9348	
RR <sup>2</sup> (95% CI), P-value	16.154 (1.011, 258.13), 0.0026	
ARR <sup>3</sup> (95% CI), P-value	45.824 (1.575, 1333.55), 0.0262**	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.505 (0.219, 0.791)	
P-value	0.0026	

\* In the event of zero cells, the correction value of 0.5 is added to each cell frequency of the corresponding fourfold table

\*\* Penalized likelihood is used to deal with quasi-complete separation problem.

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.40.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 40

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	6 (37.5%)	4 (22.2%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	15.3%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	28.5%	22.5%
95% C.I.	10.0%, 58.9%	7.7%, 50.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	1.372	
95% C.I. of odds ratio	0.238, 7.909	
P-value	0.7152	
RR <sup>2</sup> (95% CI), P-value	1.688 (0.578, 4.925), 0.4569	
ARR <sup>3</sup> (95% CI), P-value	1.372 (0.255, 7.370), 0.7127	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.153 (-0.152, 0.458)	
P-value	0.4569	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score &gt; 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	10 (52.6%)	2 (10.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	42.6%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	56.8%	6.5%
95% C.I.	29.8%, 80.3%	1.1%, 31.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	18.989	
95% C.I. of odds ratio	1.935, 186.303	
P-value	0.0130	
RR <sup>2</sup> (95% CI), P-value	5.263 (1.321, 20.968), 0.0057	
ARR <sup>3</sup> (95% CI), P-value	18.989 (2.094, 172.169), 0.0089	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.426 (0.166, 0.686)	
P-value	0.0057	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	6 (60.0%)	4 (33.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	26.7%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	59.1%	32.5%
95% C.I.	26.3%, 85.4%	11.1%, 65.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	2.998	
95% C.I. of odds ratio	0.423, 21.256	
P-value	0.2544	
RR <sup>2</sup> (95% CI), P-value	1.800 (0.698, 4.639), 0.3913	
ARR <sup>3</sup> (95% CI), P-value	2.998 (0.482, 18.638), 0.2390	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.267 (-0.137, 0.671)	
P-value	0.3913	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	10 (71.4%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	46.4%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	72.4%	23.7%
95% C.I.	43.0%, 90.1%	6.9%, 56.5%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	8.424	
95% C.I. of odds ratio	1.229, 57.754	
P-value	0.0315	
RR <sup>2</sup> (95% CI), P-value	2.857 (1.015, 8.039), 0.0472	
ARR <sup>3</sup> (95% CI), P-value	8.424 (1.360, 52.195), 0.0220	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.464 (0.124, 0.805)	
P-value	0.0472	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	6 (40.0%)	3 (15.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	25.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	39.2%	11.9%
95% C.I.	17.0%, 67.0%	3.1%, 36.5%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.759	
95% C.I. of odds ratio	0.784, 28.896	
P-value	0.0876	
RR <sup>2</sup> (95% CI), P-value	2.667 (0.792, 8.974), 0.1292	
ARR <sup>3</sup> (95% CI), P-value	4.759 (0.839, 26.992), 0.0781	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.250 (-0.043, 0.543)	
P-value	0.1292	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	7 (53.8%)	0 (3.3%) *
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	50.5%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	99.7%	0.0%
95% C.I.	0.0%, 100.0%	0.0%, 100.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	>999.999	
95% C.I. of odds ratio	<0.001, >999.999	
P-value	0.9348	
RR <sup>2</sup> (95% CI), P-value	16.154 (1.011, 258.13), 0.0026	
ARR <sup>3</sup> (95% CI), P-value	45.824 (1.575, 1333.55), 0.0262**	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.505 (0.219, 0.791)	
P-value	0.0026	
* In the event of zero cells, the correction value of 0.5 is added to each cell frequency of the corresponding fourfold table		
** Penalized likelihood is used to deal with quasi-complete separation problem.		

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = General disorders and administration site conditions, and Preferred Term = Pyrexia		
Patients with TEAE - n(%)	9 (56.3%)	6 (33.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	22.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	50.2%	36.0%
95% C.I.	24.8%, 75.5%	16.3%, 61.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	1.792	
95% C.I. of odds ratio	0.375, 8.569	
P-value	0.4522	
RR <sup>2</sup> (95% CI), P-value	1.688 (0.771, 3.693), 0.2998	
ARR <sup>3</sup> (95% CI), P-value	1.792 (0.399, 8.046), 0.4463	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.229 (-0.097, 0.556)	
P-value	0.2998	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score &gt; 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Gastrointestinal disorders		
Patients with TEAE - n(%)	15 (78.9%)	10 (50.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	28.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	80.5%	47.1%
95% C.I.	55.5%, 93.2%	25.5%, 69.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.629	
95% C.I. of odds ratio	0.976, 21.954	
P-value	0.0535	
RR <sup>2</sup> (95% CI), P-value	1.579 (0.962, 2.593), 0.0958	
ARR <sup>3</sup> (95% CI), P-value	4.629 (1.030, 20.804), 0.0457	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.289 (0.004, 0.575)	
P-value	0.0958	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Gastrointestinal disorders		
Patients with TEAE - n(%)	8 (80.0%)	7 (58.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	21.7%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	81.4%	56.3%
95% C.I.	43.6%, 96.1%	26.1%, 82.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	3.412	
95% C.I. of odds ratio	0.371, 31.347	
P-value	0.2602	
RR <sup>2</sup> (95% CI), P-value	1.371 (0.776, 2.425), 0.3808	
ARR <sup>3</sup> (95% CI), P-value	3.412 (0.431, 27.013), 0.2450	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.217 (-0.157, 0.590)	
P-value	0.3808	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Gastrointestinal disorders		
Patients with TEAE - n(%)	11 (78.6%)	5 (41.7%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	36.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	78.8%	41.4%
95% C.I.	49.0%, 93.5%	17.2%, 70.5%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	5.271	
95% C.I. of odds ratio	0.847, 32.797	
P-value	0.0727	
RR <sup>2</sup> (95% CI), P-value	1.886 (0.915, 3.886), 0.1054	
ARR <sup>3</sup> (95% CI), P-value	5.271 (0.932, 29.793), 0.0600	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.369 (0.017, 0.721)	
P-value	0.1054	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Gastrointestinal disorders		
Patients with TEAE - n(%)	12 (80.0%)	12 (60.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	20.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	80.0%	60.3%
95% C.I.	51.7%, 93.7%	37.3%, 79.5%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	2.641	
95% C.I. of odds ratio	0.525, 13.293	
P-value	0.2300	
RR <sup>2</sup> (95% CI), P-value	1.333 (0.860, 2.067), 0.2814	
ARR <sup>3</sup> (95% CI), P-value	2.641 (0.558, 12.505), 0.2210	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.200 (-0.095, 0.495)	
P-value	0.2814	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = Gastrointestinal disorders		
Patients with TEAE - n(%)	11 (84.6%)	8 (57.1%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	27.5%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	80.7%	53.5%
95% C.I.	44.4%, 95.6%	25.5%, 79.5%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	3.633	
95% C.I. of odds ratio	0.481, 27.466	
P-value	0.2001	
RR <sup>2</sup> (95% CI), P-value	1.481 (0.890, 2.465), 0.2087	
ARR <sup>3</sup> (95% CI), P-value	3.633 (0.534, 24.692), 0.1871	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.275 (-0.050, 0.600)	
P-value	0.2087	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = Gastrointestinal disorders		
Patients with TEAE - n(%)	12 (75.0%)	9 (50.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	25.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	74.0%	50.9%
95% C.I.	45.6%, 90.6%	27.8%, 73.7%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	2.744	
95% C.I. of odds ratio	0.543, 13.855	
P-value	0.2129	
RR <sup>2</sup> (95% CI), P-value	1.500 (0.873, 2.578), 0.1717	
ARR <sup>3</sup> (95% CI), P-value	2.744 (0.580, 12.980), 0.2031	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.250 (-0.064, 0.564)	
P-value	0.1717	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.40.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)

Period from Baseline to Week 40

RSS Total Score > 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	10 (52.6%)	5 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	27.6%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	52.0%	25.4%
95% C.I.	29.6%, 73.7%	10.5%, 49.8%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	3.179	
95% C.I. of odds ratio	0.767, 13.176	
P-value	0.1077	
RR <sup>2</sup> (95% CI), P-value	2.105 (0.881, 5.029), 0.1053	
ARR <sup>3</sup> (95% CI), P-value	3.179 (0.805, 12.544), 0.0987	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.276 (-0.018, 0.570)	
P-value	0.1053	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.40.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 40

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	8 (80.0%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	55.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	79.5%	25.2%
95% C.I.	41.7%, 95.5%	7.3%, 59.1%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	11.537	
95% C.I. of odds ratio	1.219, 109.171	
P-value	0.0346	
RR <sup>2</sup> (95% CI), P-value	3.200 (1.145, 8.944), 0.0300	
ARR <sup>3</sup> (95% CI), P-value	11.536 (1.417, 93.888), 0.0222	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.550 (0.201, 0.899)	
P-value	0.0300	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.40.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 40

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	9 (64.3%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	39.3%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	62.2%	20.3%
95% C.I.	31.1%, 85.7%	4.8%, 56.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	6.473	
95% C.I. of odds ratio	0.876, 47.858	
P-value	0.0659	
RR <sup>2</sup> (95% CI), P-value	2.571 (0.895, 7.384), 0.0618	
ARR <sup>3</sup> (95% CI), P-value	6.473 (0.973, 43.080), 0.0535	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.393 (0.042, 0.744)	
P-value	0.0618	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.40.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 40

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	9 (60.0%)	5 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	35.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	59.9%	25.0%
95% C.I.	33.7%, 81.4%	10.4%, 48.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.482	
95% C.I. of odds ratio	0.993, 20.220	
P-value	0.0510	
RR <sup>2</sup> (95% CI), P-value	2.400 (1.011, 5.696), 0.0796	
ARR <sup>3</sup> (95% CI), P-value	4.482 (1.052, 19.101), 0.0426	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.350 (0.038, 0.662)	
P-value	0.0796	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas



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Table 4.1.1.9.2.40.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 40

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	7 (53.8%)	3 (21.4%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	32.4%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	55.5%	22.1%
95% C.I.	25.7%, 81.8%	6.7%, 52.6%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.401	
95% C.I. of odds ratio	0.718, 26.967	
P-value	0.1044	
RR <sup>2</sup> (95% CI), P-value	2.513 (0.818, 7.719), 0.1201	
ARR <sup>3</sup> (95% CI), P-value	4.401 (0.790, 24.516), 0.0909	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.324 (-0.022, 0.670)	
P-value	0.1201	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.40.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 40

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	11 (68.8%)	5 (27.8%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	41.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	66.4%	25.3%
95% C.I.	36.7%, 87.1%	9.0%, 53.7%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	5.833	
95% C.I. of odds ratio	0.999, 34.076	
P-value	0.0502	
RR <sup>2</sup> (95% CI), P-value	2.475 (1.096, 5.591), 0.0374	
ARR <sup>3</sup> (95% CI), P-value	5.833 (1.072, 31.736), 0.0413	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.410 (0.102, 0.717)	
P-value	0.0374	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score > 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	13 (68.4%)	5 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	43.4%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	68.1%	24.8%
95% C.I.	43.3%, 85.6%	10.0%, 49.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	6.470	
95% C.I. of odds ratio	1.462, 28.639	
P-value	0.0154	
RR <sup>2</sup> (95% CI), P-value	2.737 (1.208, 6.203), 0.0104	
ARR <sup>3</sup> (95% CI), P-value	6.470 (1.539, 27.202), 0.0108	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.434 (0.152, 0.717)	
P-value	0.0104	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	8 (80.0%)	4 (33.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	46.7%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	81.8%	34.2%
95% C.I.	44.3%, 96.2%	11.7%, 67.2%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	8.626	
95% C.I. of odds ratio	0.918, 81.028	
P-value	0.0584	
RR <sup>2</sup> (95% CI), P-value	2.400 (1.018, 5.661), 0.0427	
ARR <sup>3</sup> (95% CI), P-value	8.625 (1.067, 69.716), 0.0433	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.467 (0.103, 0.831)	
P-value	0.0427	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	10 (71.4%)	4 (33.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	38.1%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	70.3%	25.0%
95% C.I.	34.9%, 91.3%	6.0%, 63.7%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	7.115	
95% C.I. of odds ratio	0.834, 60.680	
P-value	0.0709	
RR <sup>2</sup> (95% CI), P-value	2.143 (0.901, 5.095), 0.1131	
ARR <sup>3</sup> (95% CI), P-value	7.115 (0.934, 54.217), 0.0583	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.381 (0.024, 0.738)	
P-value	0.1131	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	11 (73.3%)	5 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	48.3%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	73.5%	24.7%
95% C.I.	45.4%, 90.2%	10.1%, 48.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	8.444	
95% C.I. of odds ratio	1.683, 42.366	
P-value	0.0111	
RR <sup>2</sup> (95% CI), P-value	2.933 (1.294, 6.648), 0.0068	
ARR <sup>3</sup> (95% CI), P-value	8.444 (1.789, 39.860), 0.0070	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.483 (0.190, 0.777)	
P-value	0.0068	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	8 (61.5%)	4 (28.6%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	33.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	66.1%	29.8%
95% C.I.	34.0%, 88.1%	10.8%, 59.7%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.608	
95% C.I. of odds ratio	0.771, 27.539	
P-value	0.0903	
RR <sup>2</sup> (95% CI), P-value	2.154 (0.847, 5.476), 0.1283	
ARR <sup>3</sup> (95% CI), P-value	4.608 (0.847, 25.070), 0.0771	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.330 (-0.025, 0.685)	
P-value	0.1283	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = Respiratory, thoracic and mediastinal disorders		
Patients with TEAE - n(%)	13 (81.3%)	5 (27.8%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	53.5%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	82.2%	25.1%
95% C.I.	51.7%, 95.2%	8.9%, 53.2%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	13.801	
95% C.I. of odds ratio	1.866, 102.079	
P-value	0.0119	
RR <sup>2</sup> (95% CI), P-value	2.925 (1.339, 6.389), 0.0026	
ARR <sup>3</sup> (95% CI), P-value	13.801 (2.023, 94.169), 0.0074	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.535 (0.253, 0.816)	
P-value	0.0026	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score &gt; 2.5

Statistics	KRN23 (N=19)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Respiratory, thoracic and mediastinal disorders, and Preferred Term = Cough		
Patients with TEAE - n(%)	10 (52.6%)	3 (15.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	37.6%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	52.1%	14.1%
95% C.I.	29.7%, 73.7%	4.2%, 37.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	6.627	
95% C.I. of odds ratio	1.323, 33.204	
P-value	0.0228	
RR <sup>2</sup> (95% CI), P-value	3.509 (1.137, 10.831), 0.0187	
ARR <sup>3</sup> (95% CI), P-value	6.626 (1.398, 31.400), 0.0172	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.376 (0.103, 0.650)	
P-value	0.0187	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.1  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Disease Severity (RSS Total Score > 2.5 vs. RSS Total Score ≤ 2.5)  
Period from Baseline to Week 64

RSS Total Score ≤ 2.5

Statistics	KRN23 (N=10)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Respiratory, thoracic and mediastinal disorders, and Preferred Term = Cough		
Patients with TEAE - n(%)	5 (50.0%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	25.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	55.8%	21.0%
95% C.I.	22.8%, 84.3%	4.3%, 60.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.738	
95% C.I. of odds ratio	0.443, 50.623	
P-value	0.1846	
RR <sup>2</sup> (95% CI), P-value	2.000 (0.627, 6.377), 0.3777	
ARR <sup>3</sup> (95% CI), P-value	4.738 (0.520, 43.184), 0.1677	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.250 (-0.145, 0.645)	
P-value	0.3777	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age &lt; 5 Years

Statistics	KRN23 (N=14)	Oral Phosphate/Active Vitamin D (N=12)
System Organ Class = Respiratory, thoracic and mediastinal disorders, and Preferred Term = Cough		
Patients with TEAE - n(%)	8 (57.1%)	2 (16.7%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	40.5%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	47.3%	7.8%
95% C.I.	16.2%, 80.6%	0.7%, 49.6%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	10.631	
95% C.I. of odds ratio	1.005, 112.495	
P-value	0.0496	
RR <sup>2</sup> (95% CI), P-value	3.429 (0.894, 13.147), 0.0511	
ARR <sup>3</sup> (95% CI), P-value	10.630 (1.137, 99.359), 0.0382	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.405 (0.071, 0.739)	
P-value	0.0511	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.2  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Age (< 5 years vs. ≥ 5 years)  
Period from Baseline to Week 64

Age ≥ 5 Years

Statistics	KRN23 (N=15)	Oral Phosphate/Active Vitamin D (N=20)
System Organ Class = Respiratory, thoracic and mediastinal disorders, and Preferred Term = Cough		
Patients with TEAE - n(%)	7 (46.7%)	4 (20.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	26.7%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	45.9%	18.4%
95% C.I.	22.0%, 71.8%	6.2%, 43.3%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	3.765	
95% C.I. of odds ratio	0.733, 19.338	
P-value	0.1086	
RR <sup>2</sup> (95% CI), P-value	2.333 (0.833, 6.536), 0.1440	
ARR <sup>3</sup> (95% CI), P-value	3.765 (0.780, 18.177), 0.0988	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.267 (-0.041, 0.574)	
P-value	0.1440	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Male

Statistics	KRN23 (N=13)	Oral Phosphate/Active Vitamin D (N=14)
System Organ Class = Respiratory, thoracic and mediastinal disorders, and Preferred Term = Cough		
Patients with TEAE - n(%)	6 (46.2%)	2 (14.3%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	31.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	52.1%	15.1%
95% C.I.	22.4%, 80.3%	3.5%, 46.8%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	6.115	
95% C.I. of odds ratio	0.760, 49.216	
P-value	0.0856	
RR <sup>2</sup> (95% CI), P-value	3.231 (0.788, 13.247), 0.1032	
ARR <sup>3</sup> (95% CI), P-value	6.114 (0.848, 44.095), 0.0725	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.319 (-0.008, 0.646)	
P-value	0.1032	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 4.1.1.9.2.64.3  
Logistic Regression on Treatment Emergent Adverse Events by System Organ Class and Preferred Term

Safety Analysis Set by Sex (Male vs. Female)  
Period from Baseline to Week 64

Sex = Female

Statistics	KRN23 (N=16)	Oral Phosphate/Active Vitamin D (N=18)
System Organ Class = Respiratory, thoracic and mediastinal disorders, and Preferred Term = Cough		
Patients with TEAE - n(%)	9 (56.3%)	4 (22.2%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	34.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	56.0%	21.2%
95% C.I.	29.3%, 79.6%	7.3%, 47.9%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.730	
95% C.I. of odds ratio	0.854, 26.195	
P-value	0.0736	
RR <sup>2</sup> (95% CI), P-value	2.531 (0.963, 6.652), 0.0764	
ARR <sup>3</sup> (95% CI), P-value	4.729 (0.915, 24.445), 0.0637	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.340 (0.030, 0.650)	
P-value	0.0764	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-soc-pt-sub.sas

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Table 12.7.3.1.9.1.64.1  
Logistic Regression on Any Dental Conditions  
Safety Analysis Set  
Period from Baseline to Week 64  
by Disease Type

RSS Total Score > 2.5

Statistics	KRN23 (N = 19)	Oral Phosphate/Active Vitamin D (N = 20)
Patients with ANY dental condition - n(%)	8 (42.1%)	3 (15.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	27.1%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	41.7%	13.8%
95% C.I.	21.6%, 65.2%	4.1%, 37.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	4.489	
95% C.I. of odds ratio	0.888, 22.700	
P-value	0.0683	
RR <sup>2</sup> (95% CI), P-value	2.807 (0.872, 9.035), 0.0824	
ARR <sup>3</sup> (95% CI), P-value	4.489 (0.939, 21.462), 0.0600	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.271 (-0.001, 0.543)	
P-value	0.0824	
* In the event of zero cells, the correction value of 0.5 is added to each cell frequency of the corresponding fourfold table		

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-dental-con-subg.sas

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Table 12.7.3.1.9.1.64.1  
Logistic Regression on Any Dental Conditions  
Safety Analysis Set  
Period from Baseline to Week 64  
by Disease Type

RSS Total Score <= 2.5

Statistics	KRN23 (N = 10)	Oral Phosphate/Active Vitamin D (N = 12)
Patients with ANY dental condition - n(%)	4 (40.0%)	2 (16.7%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	23.3%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	36.6%	9.5%
95% C.I.	10.4%, 74.2%	1.3%, 45.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	5.519	
95% C.I. of odds ratio	0.487, 62.489	
P-value	0.1565	
RR <sup>2</sup> (95% CI), P-value	2.400 (0.549, 10.495), 0.3476	
ARR <sup>3</sup> (95% CI), P-value	5.519 (0.574, 53.100), 0.1392	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.233 (-0.136, 0.603)	
P-value	0.3476	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-dental-con-subg.sas



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Table 12.7.3.1.9.1.64.2  
Logistic Regression on Any Dental Conditions  
Safety Analysis Set  
Period from Baseline to Week 64  
by Age Group

Age <5 Years

Statistics	KRN23 (N = 14)	Oral Phosphate/Active Vitamin D (N = 12)
Patients with ANY dental condition - n(%)	3 (21.4%)	2 (16.7%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	4.8%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	21.5%	16.1%
95% C.I.	6.6%, 51.5%	3.6%, 49.6%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	1.429	
95% C.I. of odds ratio	0.172, 11.880	
P-value	0.7308	
RR <sup>2</sup> (95% CI), P-value	1.286 (0.256, 6.461), 1.0000	
ARR <sup>3</sup> (95% CI), P-value	1.429 (0.192, 10.629), 0.7276	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.048 (-0.253, 0.349)	
P-value	1.0000	

\* In the event of zero cells, the correction value of 0.5 is added to each cell frequency of the corresponding fourfold table

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment as factor, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-dental-con-subg.sas

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Table 12.7.3.1.9.1.64.2  
Logistic Regression on Any Dental Conditions  
Safety Analysis Set  
Period from Baseline to Week 64  
by Age Group

Age >= 5 Years

Statistics	KRN23 (N = 15)	Oral Phosphate/Active Vitamin D (N = 20)
Patients with ANY dental condition - n(%)	9 (60.0%)	3 (15.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	45.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	60.2%	14.9%
95% C.I.	34.0%, 81.6%	4.6%, 38.6%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	8.642	
95% C.I. of odds ratio	1.616, 46.228	
P-value	0.0133	
RR <sup>2</sup> (95% CI), P-value	4.000 (1.302, 12.285), 0.0107	
ARR <sup>3</sup> (95% CI), P-value	8.641 (1.721, 43.383), 0.0088	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.450 (0.157, 0.743)	
P-value	0.0107	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment as factor, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-dental-con-subg.sas

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Table 12.7.3.1.9.1.64.3  
Logistic Regression on Any Dental Conditions  
Safety Analysis Set  
Period from Baseline to Week 64  
by Sex

Sex = Male

Statistics	KRN23 (N = 13)	Oral Phosphate/Active Vitamin D (N = 14)
Patients with ANY dental condition - n(%)	10 (76.9%)	4 (28.6%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	48.4%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	83.7%	30.6%
95% C.I.	50.2%, 96.3%	10.9%, 61.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	11.587	
95% C.I. of odds ratio	1.489, 90.175	
P-value	0.0214	
RR <sup>2</sup> (95% CI), P-value	2.692 (1.117, 6.492), 0.0213	
ARR <sup>3</sup> (95% CI), P-value	11.583 (1.658, 80.923), 0.0135	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.484 (0.154, 0.813)	
P-value	0.0213	

\* In the event of zero cells, the correction value of 0.5 is added to each cell frequency of the corresponding fourfold table

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-dental-con-subg.sas

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Table 12.7.3.1.9.1.64.3  
Logistic Regression on Any Dental Conditions  
Safety Analysis Set  
Period from Baseline to Week 64  
by Sex

Sex = Female

Statistics	KRN23 (N = 16)	Oral Phosphate/Active Vitamin D (N = 18)
Patients with ANY dental condition - n(%)	2 (12.5%)	1 (5.6%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	6.9%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	0.0%	0.0%
95% C.I.	0.0%, 100.0%	0.0%, 100.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	9.130	
95% C.I. of odds ratio	0.312, 267.137	
P-value	0.1910	
RR <sup>2</sup> (95% CI), P-value	2.250 (0.225, 22.533), 0.5909	
ARR <sup>3</sup> (95% CI), P-value	4.528 (0.356, 57.563), 0.2443**	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.069 (-0.124, 0.263)	
P-value	0.5909	

\*\* Penalized likelihood is used to deal with quasi-complete separation problem.

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-dental-con-subg.sas

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Table 14.3.1.12.1.9.1.64.2  
Logistic Regression on Treatment-Emergent Adverse Events Hypersensitivity  
Safety Analysis Set  
Period from Baseline to Week 64  
by Age Group

Age &lt;5 Years

Statistics	KRN23 (N = 14)	Oral Phosphate/Active Vitamin D (N = 12)
Patients with TEAE - n(%)	8 (57.1%)	3 (25.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	32.1%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	50.1%	16.4%
95% C.I.	19.9%, 80.3%	2.9%, 56.8%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	5.110	
95% C.I. of odds ratio	0.657, 39.739	
P-value	0.1135	
RR <sup>2</sup> (95% CI), P-value	2.286 (0.776, 6.730), 0.1302	
ARR <sup>3</sup> (95% CI), P-value	5.110 (0.732, 35.679), 0.0999	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.321 (-0.035, 0.678)	
P-value	0.1302	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment as factor, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

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Table 14.3.1.12.1.9.1.64.2  
Logistic Regression on Treatment-Emergent Adverse Events Hypersensitivity  
Safety Analysis Set  
Period from Baseline to Week 64  
by Age Group

Age >= 5 Years

Statistics	KRN23 (N = 15)	Oral Phosphate/Active Vitamin D (N = 20)
Patients with TEAE - n(%)	3 (20.0%)	3 (15.0%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	5.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	17.9%	11.9%
95% C.I.	4.9%, 47.7%	3.0%, 37.2%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	1.605	
95% C.I. of odds ratio	0.237, 10.884	
P-value	0.6183	
RR <sup>2</sup> (95% CI), P-value	1.333 (0.312, 5.704), 1.0000	
ARR <sup>3</sup> (95% CI), P-value	1.605 (0.254, 10.125), 0.6149	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.050 (-0.206, 0.306)	
P-value	1.0000	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment as factor, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-eoi-hsens-subg.sas

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Table 14.3.1.12.1.9.1.64.3  
Logistic Regression on Treatment-Emergent Adverse Events Hypersensitivity  
Safety Analysis Set  
Period from Baseline to Week 64  
by Sex

Sex = Male

Statistics	KRN23 (N = 13)	Oral Phosphate/Active Vitamin D (N = 14)
Patients with TEAE - n(%)	2 (15.4%)	3 (21.4%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	6.0%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	8.2%	5.9%
95% C.I.	0.6%, 57.2%	0.3%, 54.4%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	1.442	
95% C.I. of odds ratio	0.104, 20.059	
P-value	0.7763	
RR <sup>2</sup> (95% CI), P-value	0.718 (0.142, 3.636), 1.0000	
ARR <sup>3</sup> (95% CI), P-value	1.442 (0.119, 17.466), 0.7737	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.060 (-0.231, 0.351)	
P-value	1.0000	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-eoi-hsens-subg.sas

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Table 14.3.1.12.1.9.1.64.3  
Logistic Regression on Treatment-Emergent Adverse Events Hypersensitivity  
Safety Analysis Set  
Period from Baseline to Week 64  
by Sex

Sex = Female

Statistics	KRN23 (N = 16)	Oral Phosphate/Active Vitamin D (N = 18)
Patients with TEAE - n(%)	9 (56.3%)	3 (16.7%)
Difference (KRN23 vs Oral Phosphate/Active Vitamin D) - %	39.6%	
Logistic Regression <sup>1</sup>		
Percentage of Patients - %	51.0%	17.1%
95% C.I.	25.2%, 76.3%	5.1%, 44.0%
Odds ratio (KRN23 vs Oral Phosphate/Active Vitamin D)	5.054	
95% C.I. of odds ratio	0.889, 28.750	
P-value	0.0666	
RR <sup>2</sup> (95% CI), P-value	3.375 (1.101, 10.341), 0.0299	
ARR <sup>3</sup> (95% CI), P-value	5.054 (0.953, 26.805), 0.0570	
ARD <sup>4</sup>		
Difference (95% C.I.)	0.396 (0.098, 0.694)	
P-value	0.0299	

Note: All safety events that occurred before first treatment were excluded from the analysis of logistic regression.

1. The logistic regression includes treatment and baseline age stratification factor as factors, baseline total RSS score as a continuous covariate.

2. RR: Relative Risk

3. ARR: Adjusted Relative Risk

4. ARD: Absolute Risk Difference

Data Source: ADSL, ADAE. Program Source: S:\KKPD\ux023\CL301\analysis\develpool\program\Table\t-ae-eoi-hsens-subg.sas