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# Dossier zur Nutzenbewertung gemäß § 35a SGB V

*Riociguat (Adempas<sup>®</sup>)*

MSD Sharp & Dohme GmbH

**Modul 4 A**

Anhang 4-G

*Kinder und Jugendliche im Alter von unter 18 Jahren  
und einem Körpergewicht von  $\geq 50$  kg mit pulmonaler  
arterieller Hypertonie (PAH) der WHO-FK II bis III*

Ergänzende Analysen

Stand: 26.06.2023

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**1 Datenschnitt: 07. März 2020****1.1 Gesundheitsbezogene Lebensqualität****1.1.1 SF-10****1.1.1.1 Rücklaufquoten**

Tabelle 4G-1: Rücklaufquoten des SF-10 Fragebogens für den körperlichen Gesamtscore (PHS-10)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Rücklaufquoten (N <sup>b</sup> = 24)
<b>SF-10 Questionnaire Physical Summary Score (PHS-10) Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	24 (100.0)
Week 24	21 (87.5)
a: Database Cutoff Date: 07MAR2020 b: Number of participants: safety analysis set c: Participants with non-missing assessment at the given visit PHS-10: Physical Summary Score; SF-10: Quality of life scores (child health-related questionnaire)	

Tabelle 4G-2: Rücklaufquoten des SF-10 Fragebogens für den psychischen Gesamtscore (PSS-10)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Rücklaufquoten (N <sup>b</sup> = 24)
<b>SF-10 Questionnaire Psychosocial Summary Score (PSS-10) Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	24 (100.0)
Week 24	21 (87.5)
a: Database Cutoff Date: 07MAR2020 b: Number of participants: safety analysis set c: Participants with non-missing assessment at the given visit PSS-10: Psychosocial Summary Score; SF-10: Quality of life scores (child health-related questionnaire)	

## 1.1.2 PedsQL

### 1.1.2.1 Rücklaufquoten

Tabelle 4G-3: Rücklaufquoten des PedsQL Gesamtscores

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociquat (N <sup>b</sup> = 24)
<b>PedsQL Total Scale Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (87.5)
Week 24	19 (79.2)
a: Database Cutoff Date: 07MAR2020 b: Number of participants: safety analysis set c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed. PedsQL: Pediatric Quality of Life Inventory	

Tabelle 4G-4: Rücklaufquoten des PedsQL Summenwerts der physischen Gesundheit

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociquat (N <sup>b</sup> = 24)
<b>PedsQL Physical Health Summary Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (87.5)
Week 24	19 (79.2)
a: Database Cutoff Date: 07MAR2020 b: Number of participants: safety analysis set c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed. PedsQL: Pediatric Quality of Life Inventory	

Tabelle 4G-5: Rücklaufquoten des PedsQL Summenwerts der psychosozialen Gesundheit

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociquat (N <sup>b</sup> = 24)
<b>PedsQL Psychosocial Health Summary Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (87.5)
Week 24	19 (79.2)
a: Database Cutoff Date: 07MAR2020 b: Number of participants: safety analysis set c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed. PedsQL: Pediatric Quality of Life Inventory	

Tabelle 4G-6: Rücklaufquoten der PedsQL Dimensionsskala der physischen Funktion

<b>Study: PATENT-CHILD (MK4836)<sup>a</sup></b>	<b>Riociquat (N<sup>b</sup> = 24)</b>
<b>PedsQL Physical Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (87.5)
Week 24	19 (79.2)
<p>a: Database Cutoff Date: 07MAR2020  b: Number of participants: safety analysis set  c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.  PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-7: Rücklaufquoten der PedsQL Dimensionsskala der emotionalen Funktion

<b>Study: PATENT-CHILD (MK4836)<sup>a</sup></b>	<b>Riociquat (N<sup>b</sup> = 24)</b>
<b>PedsQL Emotional Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (87.5)
Week 24	19 (79.2)
<p>a: Database Cutoff Date: 07MAR2020  b: Number of participants: safety analysis set  c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.  PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-8: Rücklaufquoten der PedsQL Dimensionsskala der sozialen Funktion

<b>Study: PATENT-CHILD (MK4836)<sup>a</sup></b>	<b>Riociquat (N<sup>b</sup> = 24)</b>
<b>PedsQL Social Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (87.5)
Week 24	19 (79.2)
<p>a: Database Cutoff Date: 07MAR2020  b: Number of participants: safety analysis set  c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.  PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-9: Rücklaufquoten der PedsQL Dimensionsskala der schulischen Funktion

<b>Study: PATENT-CHILD (MK4836)<sup>a</sup></b>	<b>Riociquat (N<sup>b</sup> = 24)</b>
<b>PedsQL School Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (87.5)
Week 24	19 (79.2)
<p>a: Database Cutoff Date: 07MAR2020  b: Number of participants: safety analysis set  c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.  PedsQL: Pediatric Quality of Life Inventory</p>	

**2 Datenschnitt: 07. Januar 2022 (optionale LTE-Phase)****2.1 Morbidität****2.1.1 Verbesserung der 6-Minuten-Gehstrecke (6MWD)**

Tabelle 4G-10: Veränderung der 6-Minuten-Gehstrecke (Meter) gegenüber Baseline in der optionalen LTE-Phase

Change From Baseline in 6-Minute Walking Distance (meters)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	23.0 (68.8)
Median (Q1; Q3)	16.0 (-15.0; 58.0)
Min; Max	-101.0; 200.0
<b>LTE (Month 3)</b>	
N <sup>c</sup>	13
Mean (SD)	4.5 (74.3)
Median (Q1; Q3)	25.0 (-6.0; 36.0)
Min; Max	-192.0; 109.0
<b>LTE (Month 6)</b>	
N <sup>c</sup>	16
Mean (SD)	5.9 (44.6)
Median (Q1; Q3)	16.5 (-22.5; 34.5)
Min; Max	-98.0; 66.0
<b>LTE (Month 9)</b>	
N <sup>c</sup>	12
Mean (SD)	20.3 (47.9)
Median (Q1; Q3)	24.0 (-1.0; 55.0)
Min; Max	-79.0; 89.0
<b>LTE (Month 12)</b>	
N <sup>c</sup>	12
Mean (SD)	-3.4 (74.8)
Median (Q1; Q3)	1.5 (-52.8; 42.5)
Min; Max	-153.0; 128.5
<b>LTE (Month 15)</b>	
N <sup>c</sup>	10
Mean (SD)	-3.7 (42.8)
Median (Q1; Q3)	-6.6 (-33.0; 23.0)
Min; Max	-66.0; 65.0
<b>LTE (Month 18)</b>	
N <sup>c</sup>	9
Mean (SD)	29.0 (66.7)
Median (Q1; Q3)	34.0 (-21.0; 82.0)
Min; Max	-89.0; 122.0



Change From Baseline in 6-Minute Walking Distance (meters)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	9
Mean (SD)	19.5 (60.5)
Median (Q1; Q3)	27.0 (-15.0; 80.0)
Min; Max	-89.0; 94.0
<b>LTE (Month 24)</b>	
N <sup>c</sup>	4
Mean (SD)	-11.8 (35.4)
Median (Q1; Q3)	-11.0 (-42.0; 18.4)
Min; Max	-48.0; 22.8
<b>LTE (Month 27)</b>	
N <sup>c</sup>	3
Mean (SD)	-12.7 (51.4)
Median (Q1; Q3)	16.0 (-72.0; 18.0)
Min; Max	-72.0; 18.0
<b>LTE (Month 30)</b>	
N <sup>c</sup>	3
Mean (SD)	-4.7 (21.0)
Median (Q1; Q3)	-12.0 (-21.0; 19.0)
Min; Max	-21.0; 19.0
<b>LTE (Month 33)</b>	
N <sup>c</sup>	4
Mean (SD)	-16.3 (28.0)
Median (Q1; Q3)	-22.5 (-36.5; 4.0)
Min; Max	-42.0; 22.0
<b>LTE (Month 36)</b>	
N <sup>c</sup>	3
Mean (SD)	-25.7 (48.8)
Median (Q1; Q3)	-7.0 (-81.0; 11.0)
Min; Max	-81.0; 11.0
<b>LTE (Month 39)</b>	
N <sup>c</sup>	2
Mean (SD)	-26.0 (56.6)
Median (Q1; Q3)	-26.0 (-66.0; 14.0)
Min; Max	-66.0; 14.0
<b>LTE (Month 42)</b>	
N <sup>c</sup>	3
Mean (SD)	-34.0 (16.5)
Median (Q1; Q3)	-33.0 (-51.0; -18.0)
Min; Max	-51.0; -18.0

Change From Baseline in 6-Minute Walking Distance (meters)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	2
Mean (SD)	-29.0 (9.9)
Median (Q1; Q3)	-29.0 (-36.0; -22.0)
Min; Max	-36.0; -22.0
<b>LTE (Month 48)</b>	
N <sup>c</sup>	1
Mean (SD)	-72.0 (-)
Median (Q1; Q3)	-72.0 (-72.0; -72.0)
Min; Max	-72.0; -72.0
<b>LTE (Month 51)</b>	
N <sup>c</sup>	2
Mean (SD)	-52.5 (47.4)
Median (Q1; Q3)	-52.5 (-86.0; -19.0)
Min; Max	-86.0; -19.0
<b>LTE (Month 60)</b>	
N <sup>c</sup>	1
Mean (SD)	-18.0 (-)
Median (Q1; Q3)	-18.0 (-18.0; -18.0)
Min; Max	-18.0; -18.0
<b>LTE (Month 69)</b>	
N <sup>c</sup>	1
Mean (SD)	8.0 (-)
Median (Q1; Q3)	8.0 (8.0; 8.0)
Min; Max	8.0; 8.0
a: Database Cutoff Date: 07JAN2022	
b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
c: Number of participants with non-missing assessments both at baseline and at the given visit	
LTE: Long-Term Extension; Max: Maximum; Min: Minimum; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation	

## 2.1.2 Klinische Verschlechterung

Tabelle 4G-11: Klinische Verschlechterung in der optionalen LTE-Phase

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociguat (N <sup>b</sup> = 21)
<b>Clinical worsening event, n (%)<sup>c</sup></b>	
Participants with clinical worsening	7 (33.3)
Hospitalization for right heart failure	4 (19.0)
Death (all cause mortality)	0 (0.0)
Lung transplantation	2 (9.5)
Pott's anastomosis and/or atrioseptostomy	0 (0.0)
Increase in WHO FC from baseline	2 (9.5)
Symptoms <sup>d</sup> of right heart failure and need for additional PAH therapy	0 (0.0)
a: Database Cutoff Date: 07JAN2022	
b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
c: Every participant is counted a single time for each applicable event	
d: Includes new or worsened symptoms of right heart failure	
FC: Functional Class; PAH: Pulmonary Arterial Hypertension; WHO: World Health Organization	

## 2.2 Gesundheitsbezogene Lebensqualität

### 2.2.1 SF-10

#### 2.2.1.1 Rücklaufquoten

Tabelle 4G-12: Rücklaufquoten des SF-10 Fragebogens für den körperlichen Gesamtscore (PHS-10) (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociquat (N <sup>b</sup> = 21)
<b>SF-10 Questionnaire Physical Summary Score (PHS-10) Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (100.0)
Week 24	21 (100.0)
LTE (Month 3)	18 (85.7)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	13 (61.9)
LTE (Month 12)	9 (42.9)
LTE (Month 15)	7 (33.3)
LTE (Month 18)	6 (28.6)
LTE (Month 21)	5 (23.8)
LTE (Month 24)	3 (14.3)
LTE (Month 27)	3 (14.3)
LTE (Month 30)	3 (14.3)
LTE (Month 33)	3 (14.3)
LTE (Month 36)	2 (9.5)
LTE (Month 39)	2 (9.5)
LTE (Month 42)	2 (9.5)
LTE (Month 45)	2 (9.5)
LTE (Month 48)	1 (4.8)
LTE (Month 51)	1 (4.8)
LTE (Month 54)	1 (4.8)
a: Database Cutoff Date: 07JAN2022	
b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
c: Participants with non-missing assessment at the given visit	
LTE: Long-Term Extension; PHS-10: Physical Summary Score; SF-10: Quality of life scores (child health-related questionnaire)	

Tabelle 4G-13: Rücklaufquoten des SF-10 Fragebogens für den psychischen Gesamtscore (PSS-10) (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Rücklaufquoten (N <sup>b</sup> = 21)
<b>SF-10 Questionnaire Psychosocial Summary Score (PSS-10) Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	21 (100.0)
Week 24	21 (100.0)
LTE (Month 3)	18 (85.7)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	13 (61.9)
LTE (Month 12)	9 (42.9)
LTE (Month 15)	7 (33.3)
LTE (Month 18)	6 (28.6)
LTE (Month 21)	5 (23.8)
LTE (Month 24)	3 (14.3)
LTE (Month 27)	3 (14.3)
LTE (Month 30)	3 (14.3)
LTE (Month 33)	3 (14.3)
LTE (Month 36)	2 (9.5)
LTE (Month 39)	2 (9.5)
LTE (Month 42)	2 (9.5)
LTE (Month 45)	2 (9.5)
LTE (Month 48)	1 (4.8)
LTE (Month 51)	1 (4.8)
LTE (Month 54)	1 (4.8)
a: Database Cutoff Date: 07JAN2022 b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase c: Participants with non-missing assessment at the given visit LTE: Long-Term Extension; PSS-10: Psychosocial Summary Score; SF-10: Quality of life scores (child health-related questionnaire)	

**2.2.1.2 Ergebnisse (Veränderung gegenüber Baseline)**

Tabelle 4G-14: Veränderung des SF-10 körperlichen Gesamtscores (PHS-10) gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in SF-10 Questionnaire Physical Summary Score (PHS-10)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	21
Mean (SD)	5.8 (12.5)
Median (Q1; Q3)	4.5 (0.0; 14.5)
Min; Max	-24.7; 31.8
<b>LTE (Month 3)</b>	
N <sup>c</sup>	18
Mean (SD)	0.7 (14.8)
Median (Q1; Q3)	5.0 (-3.7; 12.5)
Min; Max	-29.9; 17.2
<b>LTE (Month 6)</b>	
N <sup>c</sup>	16
Mean (SD)	2.6 (11.3)
Median (Q1; Q3)	5.7 (-6.2; 11.1)
Min; Max	-15.2; 19.7
<b>LTE (Month 9)</b>	
N <sup>c</sup>	13
Mean (SD)	7.7 (11.1)
Median (Q1; Q3)	11.8 (4.5; 13.6)
Min; Max	-15.0; 21.4
<b>LTE (Month 12)</b>	
N <sup>c</sup>	9
Mean (SD)	7.3 (9.8)
Median (Q1; Q3)	10.0 (4.5; 12.5)
Min; Max	-11.3; 18.6
<b>LTE (Month 15)</b>	
N <sup>c</sup>	7
Mean (SD)	8.8 (10.0)
Median (Q1; Q3)	10.7 (5.7; 15.2)
Min; Max	-11.3; 19.8
<b>LTE (Month 18)</b>	
N <sup>c</sup>	6
Mean (SD)	2.1 (11.8)
Median (Q1; Q3)	4.9 (-11.6; 11.8)
Min; Max	-11.8; 14.5

Change from Baseline in SF-10 Questionnaire Physical Summary Score (PHS-10)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	5
Mean (SD)	9.9 (9.1)
Median (Q1; Q3)	11.4 (7.2; 17.2)
Min; Max	-4.5; 18.0
<b>LTE (Month 24)</b>	
N <sup>c</sup>	3
Mean (SD)	10.8 (7.0)
Median (Q1; Q3)	14.5 (2.7; 15.2)
Min; Max	2.7; 15.2
<b>LTE (Month 27)</b>	
N <sup>c</sup>	3
Mean (SD)	6.1 (8.8)
Median (Q1; Q3)	5.4 (-2.3; 15.2)
Min; Max	-2.3; 15.2
<b>LTE (Month 30)</b>	
N <sup>c</sup>	3
Mean (SD)	11.0 (11.5)
Median (Q1; Q3)	17.2 (-2.3; 18.0)
Min; Max	-2.3; 18.0
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	2.6 (12.7)
Median (Q1; Q3)	2.7 (-10.2; 15.2)
Min; Max	-10.2; 15.2
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	21.9 (0.8)
Median (Q1; Q3)	21.9 (21.4; 22.5)
Min; Max	21.4; 22.5
<b>LTE (Month 39)</b>	
N <sup>c</sup>	2
Mean (SD)	15.0 (2.6)
Median (Q1; Q3)	15.0 (13.2; 16.8)
Min; Max	13.2; 16.8
<b>LTE (Month 42)</b>	
N <sup>c</sup>	2
Mean (SD)	14.6 (3.1)
Median (Q1; Q3)	14.6 (12.5; 16.8)
Min; Max	12.5; 16.8

Change from Baseline in SF-10 Questionnaire Physical Summary Score (PHS-10)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat
	N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	2
Mean (SD)	19.6 (6.2)
Median (Q1; Q3)	19.6 (15.2; 24.1)
Min; Max	15.2; 24.1
<b>LTE (Month 48)</b>	
N <sup>c</sup>	1
Mean (SD)	17.0 (-)
Median (Q1; Q3)	17.0 (17.0; 17.0)
Min; Max	17.0; 17.0
<b>LTE (Month 51)</b>	
N <sup>c</sup>	1
Mean (SD)	17.0 (-)
Median (Q1; Q3)	17.0 (17.0; 17.0)
Min; Max	17.0; 17.0
<b>LTE (Month 54)</b>	
N <sup>c</sup>	1
Mean (SD)	19.8 (-)
Median (Q1; Q3)	19.8 (19.8; 19.8)
Min; Max	19.8; 19.8
a: Database Cutoff Date: 07JAN2022	
b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
c: Number of participants with non-missing assessments both at baseline and at the given visit	
LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PHS-10: Physical Summary Score; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation; SF-10: Quality of life scores (child health-related questionnaire)	



Tabelle 4G-15: Veränderung des SF-10 psychischen Gesamtscores (PSS-10) gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in SF-10 Questionnaire Psychosocial Summary Score (PSS-10)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	21
Mean (SD)	1.1 (6.9)
Median (Q1; Q3)	0.0 (-5.3; 5.3)
Min; Max	-11.6; 13.4
<b>LTE (Month 3)</b>	
N <sup>c</sup>	18
Mean (SD)	-1.8 (9.1)
Median (Q1; Q3)	-3.1 (-10.7; 5.3)
Min; Max	-16.9; 14.2
<b>LTE (Month 6)</b>	
N <sup>c</sup>	16
Mean (SD)	-2.1 (9.7)
Median (Q1; Q3)	0.0 (-9.4; 6.2)
Min; Max	-18.7; 15.1
<b>LTE (Month 9)</b>	
N <sup>c</sup>	13
Mean (SD)	-0.3 (7.6)
Median (Q1; Q3)	-2.7 (-5.3; 5.3)
Min; Max	-11.6; 12.5
<b>LTE (Month 12)</b>	
N <sup>c</sup>	9
Mean (SD)	4.5 (9.0)
Median (Q1; Q3)	6.2 (2.7; 11.6)
Min; Max	-13.4; 13.4
<b>LTE (Month 15)</b>	
N <sup>c</sup>	7
Mean (SD)	0.9 (7.4)
Median (Q1; Q3)	2.7 (-2.7; 6.2)
Min; Max	-13.4; 8.0
<b>LTE (Month 18)</b>	
N <sup>c</sup>	6
Mean (SD)	4.5 (6.1)
Median (Q1; Q3)	5.3 (3.6; 6.2)
Min; Max	-6.2; 12.5

Change from Baseline in SF-10 Questionnaire Psychosocial Summary Score (PSS-10)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	5
Mean (SD)	1.6 (4.8)
Median (Q1; Q3)	1.8 (-2.7; 2.7)
Min; Max	-2.7; 8.9
<b>LTE (Month 24)</b>	
N <sup>c</sup>	3
Mean (SD)	5.0 (11.8)
Median (Q1; Q3)	2.7 (-5.3; 17.8)
Min; Max	-5.3; 17.8
<b>LTE (Month 27)</b>	
N <sup>c</sup>	3
Mean (SD)	-1.2 (14.3)
Median (Q1; Q3)	0.0 (-16.0; 12.5)
Min; Max	-16.0; 12.5
<b>LTE (Month 30)</b>	
N <sup>c</sup>	3
Mean (SD)	-0.3 (11.1)
Median (Q1; Q3)	-5.3 (-8.0; 12.5)
Min; Max	-8.0; 12.5
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	-0.9 (3.1)
Median (Q1; Q3)	-2.7 (-2.7; 2.7)
Min; Max	-2.7; 2.7
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	4.9 (10.7)
Median (Q1; Q3)	4.9 (-2.7; 12.5)
Min; Max	-2.7; 12.5
<b>LTE (Month 39)</b>	
N <sup>c</sup>	2
Mean (SD)	6.2 (1.3)
Median (Q1; Q3)	6.2 (5.3; 7.1)
Min; Max	5.3; 7.1
<b>LTE (Month 42)</b>	
N <sup>c</sup>	2
Mean (SD)	14.3 (12.6)
Median (Q1; Q3)	14.3 (5.3; 23.2)
Min; Max	5.3; 23.2

Change from Baseline in SF-10 Questionnaire Psychosocial Summary Score (PSS-10)	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat
	N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	2
Mean (SD)	6.2 (8.8)
Median (Q1; Q3)	6.2 (0.0; 12.5)
Min; Max	0.0; 12.5
<b>LTE (Month 48)</b>	
N <sup>c</sup>	1
Mean (SD)	12.5 (-)
Median (Q1; Q3)	12.5 (12.5; 12.5)
Min; Max	12.5; 12.5
<b>LTE (Month 51)</b>	
N <sup>c</sup>	1
Mean (SD)	12.5 (-)
Median (Q1; Q3)	12.5 (12.5; 12.5)
Min; Max	12.5; 12.5
<b>LTE (Month 54)</b>	
N <sup>c</sup>	1
Mean (SD)	12.5 (-)
Median (Q1; Q3)	12.5 (12.5; 12.5)
Min; Max	12.5; 12.5
a: Database Cutoff Date: 07JAN2022	
b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
c: Number of participants with non-missing assessments both at baseline and at the given visit	
LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PSS-10: Psychosocial Summary Score; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation; SF-10: Quality of life scores (child health-related questionnaire)	

## 2.2.2 PedsQL

### 2.2.2.1 Rücklaufquoten

Tabelle 4G-16: Rücklaufquoten des PedsQL Gesamtscores (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociquat (N <sup>b</sup> = 21)
<b>PedsQL Total Scale Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	19 (90.5)
Week 24	19 (90.5)
LTE (Month 3)	16 (76.2)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	15 (71.4)
LTE (Month 12)	14 (66.7)
LTE (Month 15)	14 (66.7)
LTE (Month 18)	14 (66.7)
LTE (Month 21)	12 (57.1)
LTE (Month 24)	8 (38.1)
LTE (Month 27)	7 (33.3)
LTE (Month 30)	6 (28.6)
LTE (Month 33)	5 (23.8)
LTE (Month 36)	4 (19.0)
LTE (Month 39)	3 (14.3)
LTE (Month 42)	3 (14.3)
LTE (Month 45)	3 (14.3)
LTE (Month 48)	2 (9.5)
LTE (Month 51)	2 (9.5)
LTE (Month 54)	1 (4.8)
LTE (Month 60)	1 (4.8)
LTE (Month 66)	1 (4.8)
LTE (Month 69)	1 (4.8)
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-17: Rücklaufquoten des PedsQL Summenwerts der physischen Gesundheit (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociguat (N <sup>b</sup> = 21)
<b>PedsQL Physical Health Summary Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	19 (90.5)
Week 24	19 (90.5)
LTE (Month 3)	16 (76.2)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	15 (71.4)
LTE (Month 12)	14 (66.7)
LTE (Month 15)	14 (66.7)
LTE (Month 18)	14 (66.7)
LTE (Month 21)	12 (57.1)
LTE (Month 24)	8 (38.1)
LTE (Month 27)	7 (33.3)
LTE (Month 30)	6 (28.6)
LTE (Month 33)	5 (23.8)
LTE (Month 36)	4 (19.0)
LTE (Month 39)	3 (14.3)
LTE (Month 42)	3 (14.3)
LTE (Month 45)	3 (14.3)
LTE (Month 48)	2 (9.5)
LTE (Month 51)	2 (9.5)
LTE (Month 54)	1 (4.8)
LTE (Month 60)	1 (4.8)
LTE (Month 66)	1 (4.8)
LTE (Month 69)	1 (4.8)
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-18: Rücklaufquoten des PedsQL Summenwerts der psychosozialen Gesundheit (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociguat (N <sup>b</sup> = 21)
<b>PedsQL Psychosocial Health Summary Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	19 (90.5)
Week 24	19 (90.5)
LTE (Month 3)	16 (76.2)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	15 (71.4)
LTE (Month 12)	14 (66.7)
LTE (Month 15)	14 (66.7)
LTE (Month 18)	14 (66.7)
LTE (Month 21)	12 (57.1)
LTE (Month 24)	8 (38.1)
LTE (Month 27)	7 (33.3)
LTE (Month 30)	6 (28.6)
LTE (Month 33)	5 (23.8)
LTE (Month 36)	4 (19.0)
LTE (Month 39)	3 (14.3)
LTE (Month 42)	3 (14.3)
LTE (Month 45)	3 (14.3)
LTE (Month 48)	2 (9.5)
LTE (Month 51)	2 (9.5)
LTE (Month 54)	1 (4.8)
LTE (Month 60)	1 (4.8)
LTE (Month 66)	1 (4.8)
LTE (Month 69)	1 (4.8)
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-19: Rücklaufquoten der PedsQL Dimensionsskala der physischen Funktion (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociguat (N <sup>b</sup> = 21)
<b>PedsQL Physical Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	19 (90.5)
Week 24	19 (90.5)
LTE (Month 3)	16 (76.2)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	15 (71.4)
LTE (Month 12)	14 (66.7)
LTE (Month 15)	14 (66.7)
LTE (Month 18)	14 (66.7)
LTE (Month 21)	12 (57.1)
LTE (Month 24)	8 (38.1)
LTE (Month 27)	7 (33.3)
LTE (Month 30)	6 (28.6)
LTE (Month 33)	5 (23.8)
LTE (Month 36)	4 (19.0)
LTE (Month 39)	3 (14.3)
LTE (Month 42)	3 (14.3)
LTE (Month 45)	3 (14.3)
LTE (Month 48)	2 (9.5)
LTE (Month 51)	2 (9.5)
LTE (Month 54)	1 (4.8)
LTE (Month 60)	1 (4.8)
LTE (Month 66)	1 (4.8)
LTE (Month 69)	1 (4.8)
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-20: Rücklaufquoten der PedsQL Dimensionsskala der emotionalen Funktion (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociguat (N <sup>b</sup> = 21)
<b>PedsQL Emotional Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	19 (90.5)
Week 24	19 (90.5)
LTE (Month 3)	16 (76.2)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	15 (71.4)
LTE (Month 12)	14 (66.7)
LTE (Month 15)	14 (66.7)
LTE (Month 18)	14 (66.7)
LTE (Month 21)	12 (57.1)
LTE (Month 24)	8 (38.1)
LTE (Month 27)	7 (33.3)
LTE (Month 30)	6 (28.6)
LTE (Month 33)	5 (23.8)
LTE (Month 36)	4 (19.0)
LTE (Month 39)	3 (14.3)
LTE (Month 42)	3 (14.3)
LTE (Month 45)	3 (14.3)
LTE (Month 48)	2 (9.5)
LTE (Month 51)	2 (9.5)
LTE (Month 54)	1 (4.8)
LTE (Month 60)	1 (4.8)
LTE (Month 66)	1 (4.8)
LTE (Month 69)	1 (4.8)
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; PedsQL: Pediatric Quality of Life Inventory</p>	



Tabelle 4G-21: Rücklaufquoten der PedsQL Dimensionsskala der sozialen Funktion (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociguat (N <sup>b</sup> = 21)
<b>PedsQL Social Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	19 (90.5)
Week 24	19 (90.5)
LTE (Month 3)	16 (76.2)
LTE (Month 6)	16 (76.2)
LTE (Month 9)	15 (71.4)
LTE (Month 12)	14 (66.7)
LTE (Month 15)	14 (66.7)
LTE (Month 18)	14 (66.7)
LTE (Month 21)	12 (57.1)
LTE (Month 24)	8 (38.1)
LTE (Month 27)	7 (33.3)
LTE (Month 30)	6 (28.6)
LTE (Month 33)	5 (23.8)
LTE (Month 36)	4 (19.0)
LTE (Month 39)	3 (14.3)
LTE (Month 42)	3 (14.3)
LTE (Month 45)	3 (14.3)
LTE (Month 48)	2 (9.5)
LTE (Month 51)	2 (9.5)
LTE (Month 54)	1 (4.8)
LTE (Month 60)	1 (4.8)
LTE (Month 66)	1 (4.8)
LTE (Month 69)	1 (4.8)
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; PedsQL: Pediatric Quality of Life Inventory</p>	

Tabelle 4G-22: Rücklaufquoten der PedsQL Dimensionsskala der schulischen Funktion (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociquat (N <sup>b</sup> = 21)
<b>PedsQL School Functioning Dimension Score Completion Percentages, n (%)<sup>c</sup></b>	
Baseline	19 (90.5)
Week 24	19 (90.5)
LTE (Month 3)	15 (71.4)
LTE (Month 6)	15 (71.4)
LTE (Month 9)	14 (66.7)
LTE (Month 12)	13 (61.9)
LTE (Month 15)	13 (61.9)
LTE (Month 18)	14 (66.7)
LTE (Month 21)	12 (57.1)
LTE (Month 24)	8 (38.1)
LTE (Month 27)	7 (33.3)
LTE (Month 30)	6 (28.6)
LTE (Month 33)	5 (23.8)
LTE (Month 36)	4 (19.0)
LTE (Month 39)	3 (14.3)
LTE (Month 42)	3 (14.3)
LTE (Month 45)	3 (14.3)
LTE (Month 48)	2 (9.5)
LTE (Month 51)	2 (9.5)
LTE (Month 54)	1 (4.8)
LTE (Month 60)	1 (4.8)
LTE (Month 66)	1 (4.8)
LTE (Month 69)	1 (4.8)
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Participants with non-missing assessment at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; PedsQL: Pediatric Quality of Life Inventory</p>	

**2.2.2.2 Ergebnisse (Veränderung gegenüber Baseline)**

Tabelle 4G-23: Veränderung des PedsQL Gesamtscores gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in PedsQL Total Scale Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	3.5 (10.8)
Median (Q1; Q3)	3.3 (-6.5; 15.2)
Min; Max	-12.0; 21.7
<b>LTE (Month 3)</b>	
N <sup>c</sup>	16
Mean (SD)	3.4 (8.8)
Median (Q1; Q3)	2.7 (-3.8; 10.3)
Min; Max	-8.7; 19.6
<b>LTE (Month 6)</b>	
N <sup>c</sup>	15
Mean (SD)	5.1 (8.1)
Median (Q1; Q3)	1.1 (0.0; 6.5)
Min; Max	-3.3; 23.9
<b>LTE (Month 9)</b>	
N <sup>c</sup>	14
Mean (SD)	5.6 (11.0)
Median (Q1; Q3)	3.8 (-3.3; 10.6)
Min; Max	-7.6; 25.0
<b>LTE (Month 12)</b>	
N <sup>c</sup>	13
Mean (SD)	13.7 (12.6)
Median (Q1; Q3)	12.0 (2.2; 23.9)
Min; Max	-2.2; 38.0
<b>LTE (Month 15)</b>	
N <sup>c</sup>	12
Mean (SD)	14.6 (13.3)
Median (Q1; Q3)	13.0 (2.7; 24.5)
Min; Max	-2.2; 35.3
<b>LTE (Month 18)</b>	
N <sup>c</sup>	12
Mean (SD)	8.8 (14.6)
Median (Q1; Q3)	6.5 (-3.8; 22.3)
Min; Max	-8.7; 33.7

Change from Baseline in PedsQL Total Scale Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	10
Mean (SD)	9.0 (14.7)
Median (Q1; Q3)	3.8 (-4.3; 21.7)
Min; Max	-6.5; 32.6
<b>LTE (Month 24)</b>	
N <sup>c</sup>	6
Mean (SD)	8.3 (11.8)
Median (Q1; Q3)	7.1 (-1.1; 8.7)
Min; Max	-2.2; 30.4
<b>LTE (Month 27)</b>	
N <sup>c</sup>	5
Mean (SD)	1.5 (10.6)
Median (Q1; Q3)	1.1 (-3.3; 8.7)
Min; Max	-13.0; 14.1
<b>LTE (Month 30)</b>	
N <sup>c</sup>	4
Mean (SD)	3.3 (6.6)
Median (Q1; Q3)	2.2 (-1.6; 8.2)
Min; Max	-3.3; 12.0
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	0.7 (2.7)
Median (Q1; Q3)	1.1 (-2.2; 3.3)
Min; Max	-2.2; 3.3
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	2.2 (3.1)
Median (Q1; Q3)	2.2 (0.0; 4.3)
Min; Max	0.0; 4.3
<b>LTE (Month 39)</b>	
N <sup>c</sup>	1
Mean (SD)	-2.2 (-)
Median (Q1; Q3)	-2.2 (-2.2; -2.2)
Min; Max	-2.2; -2.2
<b>LTE (Month 42)</b>	
N <sup>c</sup>	1
Mean (SD)	3.3 (-)
Median (Q1; Q3)	3.3 (3.3; 3.3)
Min; Max	3.3; 3.3

Change from Baseline in PedsQL Total Scale Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	1
Mean (SD)	5.4 (-)
Median (Q1; Q3)	5.4 (5.4; 5.4)
Min; Max	5.4; 5.4
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Number of participants with non-missing assessments both at baseline and at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation</p>	

Tabelle 4G-24: Veränderung des PedsQL Summenwerts der physischen Gesundheit gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in PedsQL Physical Health Summary Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	4.3 (13.5)
Median (Q1; Q3)	6.3 (-6.3; 12.5)
Min; Max	-21.9; 31.3
<b>LTE (Month 3)</b>	
N <sup>c</sup>	16
Mean (SD)	4.7 (12.7)
Median (Q1; Q3)	1.6 (-3.1; 17.2)
Min; Max	-21.9; 25.0
<b>LTE (Month 6)</b>	
N <sup>c</sup>	15
Mean (SD)	7.3 (11.7)
Median (Q1; Q3)	6.3 (0.0; 12.5)
Min; Max	-12.5; 31.3
<b>LTE (Month 9)</b>	
N <sup>c</sup>	14
Mean (SD)	6.5 (13.0)
Median (Q1; Q3)	6.3 (0.0; 18.8)
Min; Max	-15.6; 31.3
<b>LTE (Month 12)</b>	
N <sup>c</sup>	13
Mean (SD)	15.4 (8.6)
Median (Q1; Q3)	12.5 (9.4; 25.0)
Min; Max	3.1; 28.1
<b>LTE (Month 15)</b>	
N <sup>c</sup>	12
Mean (SD)	15.9 (12.3)
Median (Q1; Q3)	12.5 (7.8; 23.4)
Min; Max	3.1; 46.9
<b>LTE (Month 18)</b>	
N <sup>c</sup>	12
Mean (SD)	13.3 (15.0)
Median (Q1; Q3)	9.4 (4.7; 23.4)
Min; Max	-9.4; 46.9

Change from Baseline in PedsQL Physical Health Summary Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	10
Mean (SD)	9.7 (16.5)
Median (Q1; Q3)	9.4 (-3.1; 18.8)
Min; Max	-9.4; 43.8
<b>LTE (Month 24)</b>	
N <sup>c</sup>	6
Mean (SD)	9.4 (9.3)
Median (Q1; Q3)	7.8 (6.3; 12.5)
Min; Max	-3.1; 25.0
<b>LTE (Month 27)</b>	
N <sup>c</sup>	5
Mean (SD)	1.3 (20.1)
Median (Q1; Q3)	0.0 (-3.1; 3.1)
Min; Max	-25.0; 31.3
<b>LTE (Month 30)</b>	
N <sup>c</sup>	4
Mean (SD)	6.3 (18.6)
Median (Q1; Q3)	6.3 (-7.8; 20.3)
Min; Max	-15.6; 28.1
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	6.3 (9.4)
Median (Q1; Q3)	6.3 (-3.1; 15.6)
Min; Max	-3.1; 15.6
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	0.0 (4.4)
Median (Q1; Q3)	0.0 (-3.1; 3.1)
Min; Max	-3.1; 3.1
<b>LTE (Month 39)</b>	
N <sup>c</sup>	1
Mean (SD)	6.3 (-)
Median (Q1; Q3)	6.3 (6.3; 6.3)
Min; Max	6.3; 6.3
<b>LTE (Month 42)</b>	
N <sup>c</sup>	1
Mean (SD)	9.4 (-)
Median (Q1; Q3)	9.4 (9.4; 9.4)
Min; Max	9.4; 9.4

Change from Baseline in PedsQL Physical Health Summary Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	1
Mean (SD)	21.9 (-)
Median (Q1; Q3)	21.9 (21.9; 21.9)
Min; Max	21.9; 21.9
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Number of participants with non-missing assessments both at baseline and at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation</p>	



Tabelle 4G-25: Veränderung des PedsQL Summenwerts der psychosozialen Gesundheit gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in PedsQL Psychosocial Health Summary Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	3.1 (11.2)
Median (Q1; Q3)	1.7 (-6.7; 11.7)
Min; Max	-11.7; 26.7
<b>LTE (Month 3)</b>	
N <sup>c</sup>	16
Mean (SD)	2.9 (9.2)
Median (Q1; Q3)	3.3 (-5.0; 9.2)
Min; Max	-13.3; 20.0
<b>LTE (Month 6)</b>	
N <sup>c</sup>	15
Mean (SD)	4.2 (8.7)
Median (Q1; Q3)	1.8 (-3.3; 6.7)
Min; Max	-8.3; 21.7
<b>LTE (Month 9)</b>	
N <sup>c</sup>	14
Mean (SD)	5.5 (12.2)
Median (Q1; Q3)	2.5 (-5.0; 15.0)
Min; Max	-8.3; 28.3
<b>LTE (Month 12)</b>	
N <sup>c</sup>	13
Mean (SD)	13.1 (15.4)
Median (Q1; Q3)	11.7 (1.7; 23.3)
Min; Max	-6.7; 43.3
<b>LTE (Month 15)</b>	
N <sup>c</sup>	12
Mean (SD)	14.2 (16.8)
Median (Q1; Q3)	11.7 (0.0; 25.8)
Min; Max	-6.7; 50.0
<b>LTE (Month 18)</b>	
N <sup>c</sup>	12
Mean (SD)	6.4 (17.2)
Median (Q1; Q3)	0.8 (-6.7; 21.7)
Min; Max	-16.7; 36.7

Change from Baseline in PedsQL Psychosocial Health Summary Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	10
Mean (SD)	8.7 (15.1)
Median (Q1; Q3)	5.0 (-5.0; 20.0)
Min; Max	-6.7; 35.0
<b>LTE (Month 24)</b>	
N <sup>c</sup>	6
Mean (SD)	7.8 (13.8)
Median (Q1; Q3)	5.0 (0.0; 10.0)
Min; Max	-6.7; 33.3
<b>LTE (Month 27)</b>	
N <sup>c</sup>	5
Mean (SD)	1.7 (7.2)
Median (Q1; Q3)	1.7 (-3.3; 5.0)
Min; Max	-6.7; 11.7
<b>LTE (Month 30)</b>	
N <sup>c</sup>	4
Mean (SD)	1.7 (1.9)
Median (Q1; Q3)	1.7 (0.0; 3.3)
Min; Max	0.0; 3.3
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	-2.2 (1.0)
Median (Q1; Q3)	-1.7 (-3.3; -1.7)
Min; Max	-3.3; -1.7
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	3.3 (2.4)
Median (Q1; Q3)	3.3 (1.7; 5.0)
Min; Max	1.7; 5.0
<b>LTE (Month 39)</b>	
N <sup>c</sup>	1
Mean (SD)	-6.7 (-)
Median (Q1; Q3)	-6.7 (-6.7; -6.7)
Min; Max	-6.7; -6.7
<b>LTE (Month 42)</b>	
N <sup>c</sup>	1
Mean (SD)	0.0 (-)
Median (Q1; Q3)	0.0 (0.0; 0.0)
Min; Max	0.0; 0.0

Change from Baseline in PedsQL Psychosocial Health Summary Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat
	N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	1
Mean (SD)	-3.3 (-)
Median (Q1; Q3)	-3.3 (-3.3; -3.3)
Min; Max	-3.3; -3.3
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Number of participants with non-missing assessments both at baseline and at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation</p>	

Tabelle 4G-26: Veränderung der PedsQL Dimensionsskala der physischen Funktion gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in PedsQL Physical Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	4.3 (13.5)
Median (Q1; Q3)	6.3 (-6.3; 12.5)
Min; Max	-21.9; 31.3
<b>LTE (Month 3)</b>	
N <sup>c</sup>	16
Mean (SD)	4.7 (12.7)
Median (Q1; Q3)	1.6 (-3.1; 17.2)
Min; Max	-21.9; 25.0
<b>LTE (Month 6)</b>	
N <sup>c</sup>	15
Mean (SD)	7.3 (11.7)
Median (Q1; Q3)	6.3 (0.0; 12.5)
Min; Max	-12.5; 31.3
<b>LTE (Month 9)</b>	
N <sup>c</sup>	14
Mean (SD)	6.5 (13.0)
Median (Q1; Q3)	6.3 (0.0; 18.8)
Min; Max	-15.6; 31.3
<b>LTE (Month 12)</b>	
N <sup>c</sup>	13
Mean (SD)	15.4 (8.6)
Median (Q1; Q3)	12.5 (9.4; 25.0)
Min; Max	3.1; 28.1
<b>LTE (Month 15)</b>	
N <sup>c</sup>	12
Mean (SD)	15.9 (12.3)
Median (Q1; Q3)	12.5 (7.8; 23.4)
Min; Max	3.1; 46.9
<b>LTE (Month 18)</b>	
N <sup>c</sup>	12
Mean (SD)	13.3 (15.0)
Median (Q1; Q3)	9.4 (4.7; 23.4)
Min; Max	-9.4; 46.9

Change from Baseline in PedsQL Physical Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	10
Mean (SD)	9.7 (16.5)
Median (Q1; Q3)	9.4 (-3.1; 18.8)
Min; Max	-9.4; 43.8
<b>LTE (Month 24)</b>	
N <sup>c</sup>	6
Mean (SD)	9.4 (9.3)
Median (Q1; Q3)	7.8 (6.3; 12.5)
Min; Max	-3.1; 25.0
<b>LTE (Month 27)</b>	
N <sup>c</sup>	5
Mean (SD)	1.3 (20.1)
Median (Q1; Q3)	0.0 (-3.1; 3.1)
Min; Max	-25.0; 31.3
<b>LTE (Month 30)</b>	
N <sup>c</sup>	4
Mean (SD)	6.3 (18.6)
Median (Q1; Q3)	6.3 (-7.8; 20.3)
Min; Max	-15.6; 28.1
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	6.3 (9.4)
Median (Q1; Q3)	6.3 (-3.1; 15.6)
Min; Max	-3.1; 15.6
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	0.0 (4.4)
Median (Q1; Q3)	0.0 (-3.1; 3.1)
Min; Max	-3.1; 3.1
<b>LTE (Month 39)</b>	
N <sup>c</sup>	1
Mean (SD)	6.3 (-)
Median (Q1; Q3)	6.3 (6.3; 6.3)
Min; Max	6.3; 6.3
<b>LTE (Month 42)</b>	
N <sup>c</sup>	1
Mean (SD)	9.4 (-)
Median (Q1; Q3)	9.4 (9.4; 9.4)
Min; Max	9.4; 9.4

Change from Baseline in PedsQL Physical Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat
	N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	1
Mean (SD)	21.9 (-)
Median (Q1; Q3)	21.9 (21.9; 21.9)
Min; Max	21.9; 21.9
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Number of participants with non-missing assessments both at baseline and at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation</p>	

Tabelle 4G-27: Veränderung der PedsQL Dimensionsskala der emotionalen Funktion gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in PedsQL Emotional Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	0.3 (12.7)
Median (Q1; Q3)	0.0 (-5.0; 5.0)
Min; Max	-25.0; 25.0
<b>LTE (Month 3)</b>	
N <sup>c</sup>	16
Mean (SD)	2.8 (10.5)
Median (Q1; Q3)	0.0 (-5.0; 10.0)
Min; Max	-15.0; 25.0
<b>LTE (Month 6)</b>	
N <sup>c</sup>	15
Mean (SD)	0.7 (12.4)
Median (Q1; Q3)	0.0 (-10.0; 15.0)
Min; Max	-20.0; 25.0
<b>LTE (Month 9)</b>	
N <sup>c</sup>	14
Mean (SD)	2.5 (13.3)
Median (Q1; Q3)	2.5 (-10.0; 10.0)
Min; Max	-20.0; 20.0
<b>LTE (Month 12)</b>	
N <sup>c</sup>	13
Mean (SD)	6.9 (17.1)
Median (Q1; Q3)	10.0 (-5.0; 20.0)
Min; Max	-25.0; 30.0
<b>LTE (Month 15)</b>	
N <sup>c</sup>	12
Mean (SD)	12.1 (21.3)
Median (Q1; Q3)	5.0 (-5.0; 30.0)
Min; Max	-10.0; 50.0
<b>LTE (Month 18)</b>	
N <sup>c</sup>	12
Mean (SD)	1.7 (22.8)
Median (Q1; Q3)	0.0 (-12.5; 12.5)
Min; Max	-30.0; 50.0

Change from Baseline in PedsQL Emotional Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	10
Mean (SD)	2.5 (22.1)
Median (Q1; Q3)	0.0 (-15.0; 20.0)
Min; Max	-30.0; 45.0
<b>LTE (Month 24)</b>	
N <sup>c</sup>	6
Mean (SD)	-2.5 (25.0)
Median (Q1; Q3)	0.0 (-25.0; 10.0)
Min; Max	-35.0; 35.0
<b>LTE (Month 27)</b>	
N <sup>c</sup>	5
Mean (SD)	-9.0 (7.4)
Median (Q1; Q3)	-10.0 (-10.0; -5.0)
Min; Max	-20.0; 0.0
<b>LTE (Month 30)</b>	
N <sup>c</sup>	4
Mean (SD)	-3.8 (12.5)
Median (Q1; Q3)	-2.5 (-12.5; 5.0)
Min; Max	-20.0; 10.0
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	-11.7 (5.8)
Median (Q1; Q3)	-15.0 (-15.0; -5.0)
Min; Max	-15.0; -5.0
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	-5.0 (0.0)
Median (Q1; Q3)	-5.0 (-5.0; -5.0)
Min; Max	-5.0; -5.0
<b>LTE (Month 39)</b>	
N <sup>c</sup>	1
Mean (SD)	-20.0 (-)
Median (Q1; Q3)	-20.0 (-20.0; -20.0)
Min; Max	-20.0; -20.0
<b>LTE (Month 42)</b>	
N <sup>c</sup>	1
Mean (SD)	0.0 (-)
Median (Q1; Q3)	0.0 (0.0; 0.0)
Min; Max	0.0; 0.0



Change from Baseline in PedsQL Emotional Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat
	N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	1
Mean (SD)	-10.0 (-)
Median (Q1; Q3)	-10.0 (-10.0; -10.0)
Min; Max	-10.0; -10.0
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Number of participants with non-missing assessments both at baseline and at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation</p>	

Tabelle 4G-28: Veränderung der PedsQL Dimensionsskala der sozialen Funktion gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in PedsQL Social Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	2.1 (12.8)
Median (Q1; Q3)	0.0 (-5.0; 5.0)
Min; Max	-30.0; 30.0
<b>LTE (Month 3)</b>	
N <sup>c</sup>	16
Mean (SD)	0.9 (14.3)
Median (Q1; Q3)	0.0 (-2.5; 5.0)
Min; Max	-35.0; 30.0
<b>LTE (Month 6)</b>	
N <sup>c</sup>	15
Mean (SD)	2.6 (13.6)
Median (Q1; Q3)	0.0 (-5.0; 10.0)
Min; Max	-21.3; 40.0
<b>LTE (Month 9)</b>	
N <sup>c</sup>	14
Mean (SD)	6.4 (20.5)
Median (Q1; Q3)	5.0 (-5.0; 10.0)
Min; Max	-20.0; 55.0
<b>LTE (Month 12)</b>	
N <sup>c</sup>	13
Mean (SD)	16.9 (23.0)
Median (Q1; Q3)	10.0 (5.0; 20.0)
Min; Max	-10.0; 65.0
<b>LTE (Month 15)</b>	
N <sup>c</sup>	12
Mean (SD)	14.6 (18.6)
Median (Q1; Q3)	10.0 (5.0; 17.5)
Min; Max	-5.0; 65.0
<b>LTE (Month 18)</b>	
N <sup>c</sup>	12
Mean (SD)	9.2 (15.5)
Median (Q1; Q3)	10.0 (-2.5; 15.0)
Min; Max	-10.0; 50.0

Change from Baseline in PedsQL Social Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	10
Mean (SD)	11.5 (16.0)
Median (Q1; Q3)	10.0 (5.0; 15.0)
Min; Max	-10.0; 50.0
<b>LTE (Month 24)</b>	
N <sup>c</sup>	6
Mean (SD)	15.0 (14.5)
Median (Q1; Q3)	15.0 (5.0; 25.0)
Min; Max	-5.0; 35.0
<b>LTE (Month 27)</b>	
N <sup>c</sup>	5
Mean (SD)	9.0 (20.7)
Median (Q1; Q3)	5.0 (-5.0; 5.0)
Min; Max	-5.0; 45.0
<b>LTE (Month 30)</b>	
N <sup>c</sup>	4
Mean (SD)	5.0 (10.8)
Median (Q1; Q3)	7.5 (-2.5; 12.5)
Min; Max	-10.0; 15.0
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	1.7 (7.6)
Median (Q1; Q3)	0.0 (-5.0; 10.0)
Min; Max	-5.0; 10.0
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	0.0 (7.1)
Median (Q1; Q3)	0.0 (-5.0; 5.0)
Min; Max	-5.0; 5.0
<b>LTE (Month 39)</b>	
N <sup>c</sup>	1
Mean (SD)	-5.0 (-)
Median (Q1; Q3)	-5.0 (-5.0; -5.0)
Min; Max	-5.0; -5.0
<b>LTE (Month 42)</b>	
N <sup>c</sup>	1
Mean (SD)	-10.0 (-)
Median (Q1; Q3)	-10.0 (-10.0; -10.0)
Min; Max	-10.0; -10.0

Change from Baseline in PedsQL Social Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat
	N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	1
Mean (SD)	-10.0 (-)
Median (Q1; Q3)	-10.0 (-10.0; -10.0)
Min; Max	-10.0; -10.0
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Number of participants with non-missing assessments both at baseline and at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation</p>	

Tabelle 4G-29: Veränderung der PedsQL Dimensionsskala der schulischen Funktion gegenüber Baseline in der optionalen LTE-Phase

Change from Baseline in PedsQL School Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>Week 24</b>	
N <sup>c</sup>	19
Mean (SD)	6.8 (16.8)
Median (Q1; Q3)	5.0 (-5.0; 20.0)
Min; Max	-20.0; 40.0
<b>LTE (Month 3)</b>	
N <sup>c</sup>	15
Mean (SD)	4.3 (13.5)
Median (Q1; Q3)	5.0 (-10.0; 15.0)
Min; Max	-15.0; 30.0
<b>LTE (Month 6)</b>	
N <sup>c</sup>	14
Mean (SD)	8.9 (13.0)
Median (Q1; Q3)	7.5 (0.0; 15.0)
Min; Max	-5.0; 40.0
<b>LTE (Month 9)</b>	
N <sup>c</sup>	13
Mean (SD)	6.5 (14.2)
Median (Q1; Q3)	0.0 (-5.0; 15.0)
Min; Max	-10.0; 40.0
<b>LTE (Month 12)</b>	
N <sup>c</sup>	12
Mean (SD)	15.8 (18.6)
Median (Q1; Q3)	12.5 (0.0; 30.0)
Min; Max	-10.0; 50.0
<b>LTE (Month 15)</b>	
N <sup>c</sup>	11
Mean (SD)	12.7 (17.4)
Median (Q1; Q3)	15.0 (-5.0; 20.0)
Min; Max	-10.0; 40.0
<b>LTE (Month 18)</b>	
N <sup>c</sup>	12
Mean (SD)	8.3 (24.2)
Median (Q1; Q3)	7.5 (-10.0; 27.5)
Min; Max	-35.0; 45.0

Change from Baseline in PedsQL School Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat N <sup>b</sup> =21
<b>LTE (Month 21)</b>	
N <sup>c</sup>	10
Mean (SD)	12.0 (18.3)
Median (Q1; Q3)	15.0 (-5.0; 25.0)
Min; Max	-10.0; 45.0
<b>LTE (Month 24)</b>	
N <sup>c</sup>	6
Mean (SD)	10.8 (15.0)
Median (Q1; Q3)	7.5 (0.0; 10.0)
Min; Max	0.0; 40.0
<b>LTE (Month 27)</b>	
N <sup>c</sup>	5
Mean (SD)	5.0 (13.7)
Median (Q1; Q3)	5.0 (0.0; 15.0)
Min; Max	-15.0; 20.0
<b>LTE (Month 30)</b>	
N <sup>c</sup>	4
Mean (SD)	3.8 (13.1)
Median (Q1; Q3)	5.0 (-7.5; 15.0)
Min; Max	-10.0; 15.0
<b>LTE (Month 33)</b>	
N <sup>c</sup>	3
Mean (SD)	3.3 (12.6)
Median (Q1; Q3)	5.0 (-10.0; 15.0)
Min; Max	-10.0; 15.0
<b>LTE (Month 36)</b>	
N <sup>c</sup>	2
Mean (SD)	15.0 (0.0)
Median (Q1; Q3)	15.0 (15.0; 15.0)
Min; Max	15.0; 15.0
<b>LTE (Month 39)</b>	
N <sup>c</sup>	1
Mean (SD)	5.0 (-)
Median (Q1; Q3)	5.0 (5.0; 5.0)
Min; Max	5.0; 5.0
<b>LTE (Month 42)</b>	
N <sup>c</sup>	1
Mean (SD)	10.0 (-)
Median (Q1; Q3)	10.0 (10.0; 10.0)
Min; Max	10.0; 10.0

Change from Baseline in PedsQL School Functioning Dimension Score	Study: PATENT-CHILD (MK4836) <sup>a</sup>
	Riociguat
	N <sup>b</sup> =21
<b>LTE (Month 45)</b>	
N <sup>c</sup>	1
Mean (SD)	10.0 (-)
Median (Q1; Q3)	10.0 (10.0; 10.0)
Min; Max	10.0; 10.0
<p>a: Database Cutoff Date: 07JAN2022</p> <p>b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase</p> <p>c: Number of participants with non-missing assessments both at baseline and at the given visit, including imputation. If 50% or more items in the scale are completed, missing items are imputed with the mean of completed items in the respective scale. If more than 50% of the items are missing, the scale score is not computed.</p> <p>LTE: Long-Term Extension; Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation</p>	

## 2.3 Unerwünschte Ereignisse

Tabelle 4G-30: Unerwünschte Ereignisse (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Participants with Event n (%)
	<b>Riociguat</b> (N <sup>b</sup> = 21)
<b>Adverse Events<sup>c</sup></b>	
Any Adverse Events	20 (95.2)
Any Serious Adverse Events	9 (42.9)
Moderate Intensity Adverse Events	10 (47.6)
Severe Intensity Adverse Events	5 (23.8)
Adverse Events Leading to Treatment Discontinuation	3 (14.3)
Any Adverse Events of Special Interest	4 (19.0)
Symptomatic hypotension	2 (9.5)
Hemoptosis	2 (9.5)
Bone and/or growth anomalies	0 (0.0)
a: Database Cutoff Date: 07JAN2022	
b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
c: Adverse events started or worsened after treatment start date, including those recorded in the main study treatment (24 weeks) phase	

Tabelle 4G-31: Unerwünschte Ereignisse nach SOC/PT (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Participants with Event n (%)
	<b>Riociguat</b> (N <sup>d</sup> = 21)
<b>Adverse Events by SOC and PT<sup>b, c</sup></b>	
Participants with one or more adverse events	20 (95.2)
Cardiac disorders	4 (19.0)
Gastrointestinal disorders	8 (38.1)
Abdominal pain	4 (19.0)
Diarrhoea	3 (14.3)
General disorders and administration site conditions	6 (28.6)
Chest pain	3 (14.3)
Infections and infestations	17 (81.0)
Gastroenteritis	5 (23.8)
Nasopharyngitis	8 (38.1)
Upper respiratory tract infection	6 (28.6)
Investigations	3 (14.3)
Musculoskeletal and connective tissue disorders	4 (19.0)
Nervous system disorders	9 (42.9)
Dizziness	3 (14.3)
Headache	9 (42.9)
Psychiatric disorders	3 (14.3)
Respiratory, thoracic and mediastinal disorders	8 (38.1)
Pulmonary arterial hypertension	3 (14.3)
Skin and subcutaneous tissue disorders	6 (28.6)
Acne	3 (14.3)
Surgical and medical procedures	4 (19.0)
Vascular disorders	3 (14.3)
Hypotension	3 (14.3)
a: Database Cutoff Date: 07JAN2022	
b: Adverse events started or worsened after treatment start date, including those recorded in the main study treatment (24 weeks) phase	
c: A system organ class or specific adverse event appears on this report only if its incidence $\geq 10\%$ or (incidence $\geq 1\%$ and in at least 10 participants)	
d: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
PT: Preferred Term; SOC: System Organ Class	



Tabelle 4G-32: Schwerwiegende unerwünschte Ereignisse nach SOC/PT (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Participants with Event n (%)
<b>Serious Adverse Events by SOC and PT<sup>b, c</sup></b>	<b>Riociguat (N<sup>d</sup> = 21)</b>
Participants with one or more adverse events	9 (42.9)
Cardiac disorders	3 (14.3)
Right ventricular failure	2 (9.5)
General disorders and administration site conditions	2 (9.5)
Respiratory, thoracic and mediastinal disorders	4 (19.0)
Pulmonary arterial hypertension	2 (9.5)
Surgical and medical procedures	3 (14.3)
Lung transplant	2 (9.5)
a: Database Cutoff Date: 07JAN2022	
b: Adverse events started or worsened after treatment start date, including those recorded in the main study treatment (24 weeks) phase	
c: A system organ class or specific adverse event appears on this report only if its incidence $\geq 5\%$ or (incidence $\geq 1\%$ and in at least 10 participants)	
d: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
PT: Preferred Term; SOC: System Organ Class	

Tabelle 4G-33: Moderate unerwünschte Ereignisse nach SOC/PT (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Participants with Event n (%)
<b>Moderate Intensity Adverse Events by SOC and PT<sup>b, c</sup></b>	<b>Riociguat (N<sup>d</sup> = 21)</b>
Participants with one or more adverse events	10 (47.6)
Gastrointestinal disorders	2 (9.5)
Abdominal pain	2 (9.5)
General disorders and administration site conditions	2 (9.5)
Chest pain	2 (9.5)
Infections and infestations	5 (23.8)
Gastroenteritis	2 (9.5)
Nervous system disorders	2 (9.5)
Respiratory, thoracic and mediastinal disorders	3 (14.3)
Pulmonary arterial hypertension	2 (9.5)
Skin and subcutaneous tissue disorders	3 (14.3)
a: Database Cutoff Date: 07JAN2022	
b: Adverse events started or worsened after treatment start date, including those recorded in the main study treatment (24 weeks) phase	
c: A system organ class or specific adverse event appears on this report only if its incidence $\geq 5\%$ or (incidence $\geq 1\%$ and in at least 10 participants)	
d: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
PT: Preferred Term; SOC: System Organ Class	

Tabelle 4G-34: Schwere unerwünschte Ereignisse nach SOC/PT (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Participants with Event n (%)
<b>Severe Intensity Adverse Events by SOC and PT<sup>b, c</sup></b>	<b>Riociguat (N<sup>d</sup> = 21)</b>
Participants with one or more adverse events	5 (23.8)
Cardiac disorders	3 (14.3)
Right ventricular failure	2 (9.5)
Surgical and medical procedures	2 (9.5)
Lung transplant	2 (9.5)
a: Database Cutoff Date: 07JAN2022	
b: Adverse events started or worsened after treatment start date, including those recorded in the main study treatment (24 weeks) phase	
c: A system organ class or specific adverse event appears on this report only if its incidence $\geq 5\%$ or (incidence $\geq 1\%$ and in at least 10 participants)	
d: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
PT: Preferred Term; SOC: System Organ Class	

Tabelle 4G-35: Therapieabbruch aufgrund eines unerwünschten Ereignisses nach SOC/PT (optionale LTE-Phase)

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Participants with Event n (%)
<b>Adverse Events Leading to Treatment Discontinuation by SOC and PT<sup>b, c</sup></b>	<b>Riociguat (N<sup>d</sup> = 21)</b>
Participants with one or more adverse events	3 (14.3)
Respiratory, thoracic and mediastinal disorders	1 (4.8)
Pulmonary arterial hypertension	1 (4.8)
Surgical and medical procedures	2 (9.5)
Lung transplant	2 (9.5)
a: Database Cutoff Date: 07JAN2022	
b: Adverse events started or worsened after treatment start date, including those recorded in the main study treatment (24 weeks) phase	
c: A system organ class or specific adverse event appears on this report only if its incidence is $> 0\%$	
d: Number of participants: safety analysis set, participants who entered the optional long-term extension phase	
PT: Preferred Term; SOC: System Organ Class	

## 2.4 Sonstige Analysen

Tabelle 4G-36: Abbruch der Studie und der Studienmedikation

<b>Study: PATENT-CHILD (MK4836)<sup>a</sup></b>	<b>Riociguat n (%)</b>
Participants in population <sup>b</sup>	21
<b>Status For Trial<sup>c</sup></b>	
Completed	4 (19.0)
Discontinued	10 (47.6)
Adverse Event	4 (19.0)
Lack Of Efficacy	1 (4.8)
Other <sup>d</sup>	1 (4.8)
Physician Decision	3 (14.3)
Withdrawal By Subject	1 (4.8)
Ongoing	7 (33.3)
<b>Status For Study Medication In Trial</b>	
Started	21
Completed	5 (23.8)
Discontinued	9 (42.9)
Adverse Event	3 (14.3)
Lack Of Efficacy	1 (4.8)
Other <sup>d</sup>	1 (4.8)
Physician Decision	3 (14.3)
Withdrawal By Subject	1 (4.8)
Ongoing	7 (33.3)
a: Database Cutoff Date: 07JAN2022 b: Number of participants: safety analysis set, participants who entered the optional long-term extension phase c: Based on the study status including safety follow-up d: Participant incorrectly classified as discontinued due to eCRF data entry error, yet they are still ongoing eCRF: electronic Case Report Form	

Tabelle 4G-37: Behandlungsdauer und Beobachtungszeitraum

Study: PATENT-CHILD (MK4836) <sup>a</sup>	Riociguat
<b>Duration of Treatment (Weeks)<sup>b</sup></b>	
N <sup>c</sup>	21
Mean (SD)	124.5 (74.9)
Median (Q1; Q3)	122.7 (64.1; 153.0)
Min; Max	28.6; 311.9
<b>Follow-up Time (Weeks)<sup>d</sup></b>	
N <sup>c</sup>	21
Mean (SD)	129.5 (73.6)
Median (Q1; Q3)	122.7 (73.9; 153.1)
Min; Max	37.6; 320.6
<b>Observation Period</b>	
<b>6-Minute Walking Distance (Weeks)<sup>e</sup></b>	
N <sup>c</sup>	21
Mean (SD)	118.3 (76.0)
Median (Q1; Q3)	114.7 (64.1; 153.1)
Min; Max	23.7; 312.0
<b>Adverse Events / Serious Adverse Events (Weeks)<sup>f</sup></b>	
N <sup>c</sup>	21
Mean (SD)	129.5 (73.7)
Median (Q1; Q3)	122.7 (73.9; 153.4)
Min; Max	37.6; 320.9
<b>SF-10 (Weeks)<sup>g</sup></b>	
N <sup>c</sup>	21
Mean (SD)	119.2 (75.4)
Median (Q1; Q3)	114.7 (64.1; 153.1)
Min; Max	23.7; 312.0
<b>PedsQL (Weeks)<sup>g</sup></b>	
N <sup>c</sup>	21
Mean (SD)	119.2 (74.6)
Median (Q1; Q3)	114.7 (64.1; 153.1)
Min; Max	23.7; 298.6
a: Database Cutoff Date: 07JAN2022 b: Calculated from date of first dose until date of last dose c: Number of participants: safety analysis set, participants who entered the optional long-term extension phase d: Calculated from date of first dose until date of death, date of last contact, or the database cutoff date if the participant is still alive e: Calculated from date of first dose until date of last assessment during the optional long-term extension phase f: Calculated from date of first dose to the earliest of date of last visit + 2 days, date of death, or the database cutoff date if the participant is still alive g: Calculated from date of first dose until date of last questionnaire assessment during the optional long-term extension phase Max: Maximum; Min: Minimum; PedsQL: Pediatric Quality of Life Inventory; Q1: First Quartile; Q3: Third Quartile; SD: Standard Deviation; SF-10: Quality of life scores (child health-related questionnaire)	