

Risankizumab

Resolution of: 22 November 2019 Valid until: unlimited

Entry into force on: 22 November 2019 Federal Gazette, BAnz AT 18 12 2019 B1

Therapeutic indication (according to the marketing authorisation of 26 April 2019):

Skyrizi™ is indicated for the treatment of moderate to severe plaque psoriasis in adults who are candidates for systemic therapy.

1. Additional benefit of the medicinal product in relation to the appropriate comparator therapy

a) Adult patients with moderate to severe plaque psoriasis who are not candidates for conventional therapy as part of an initial systemic therapy.

Appropriate comparator therapy:

Adalimumab or guselkumab or ixekizumab or secukinumab

Extent and probability of the additional benefit of risankizumab compared with the appropriate comparator therapy:

An additional benefit is not proven.

b) Adult patients with moderate to severe plaque psoriasis who have responded inadequately to or did not tolerate systemic therapy.

Appropriate comparator therapy:

Adalimumab or brodalumab or guselkumab or infliximab or ixekizumab or secukinumab or ustekinumab

Extent and probability of the additional benefit of Risankizumab compared with ustekinumab:

Proof for a considerable additional benefit.

Study results according to endpoints:1

a) Adult patients with moderate to severe plaque psoriasis who are not candidates for conventional therapy as part of an initial systemic therapy.

No appropriate data compared with the appropriate comparator therapy were provided.

- b) Adult patients with moderate to severe plaque psoriasis who have responded inadequately to or did not tolerate systemic therapy.
- 2 RCT UltIMMa-1 and UltIMMa-2: Risankizumab vs ustekinumab

Mortality

Endpoint		Risankizumab	Ustekinumab		Risankizumab vs ustekinumab
	Ζ	Patients with event n (%)	N Patients with event n (%)		RR [95% CI] ^a ; p value
Overall survival					
UltIMMa-1	100	0 (0)	34	0 (0)	n.c.
UltIMMa-2	90	0 (0)	36 0 (0)		n.c.
Total					n.c.

Morbidity

Endpoint		Risankizumab	Ustekinumab		Risankizumab vs ustekinumab
	N	Patients with event n (%)	N Patients with event n (%)		RR [95% CI] ^a ; p value
Skin symptomate	ology				
Remission (PAS	l 100) ^b				
UltIMMa-1	100	64 (64.0)	34	5 (14.7)	4.47 [1.97; 10.14]; < 0.001
UltIMMa-2	90	56 (62.2)	36 11 (30.6)		2.07 [1.24; 3.47]; 0.006
Total ^c					2.80 [1.80; 4.36]; < 0.001
PASI 90 ^b					
UltIMMa-1	100	86 (86.0)	34	13 (38.2)	2.27 [1.47; 3.50]; < 0.001
UltIMMa-2	90	74 (82.2)	36	17 (47.2)	1.74 [1.21; 2.48]; 0.003

¹ Data from the dossier evaluation of the IQWiG (A19-41) unless otherwise indicated.

Endpoint		Risankizumab	Ustekinumab		Risankizumab vs ustekinumab
	N	Patients with event n (%)	Ν	Patients with event n (%)	RR [95% CI] ^a ; p value
Total ^c					1.97 [1.49; 2.60]; < 0.001
PASI 75 ^b					
UltIMMa-1	100	92 (92.0)	34	25 (73.5)	1.25 [1.01; 1.54] 0.036 ^d
UltIMMa-2	90	85 (94.4)	36	28 (77.8)	1.21 [0.96; 1.53]; 0.110
Total ^c					1.24 [1.08; 1.43]; 0.002
Freedom from sy	/mptoi	ms reported by the pa	atient		
PSS itching 0 ^b					
UltIMMa-1	100	69 (69.0)	34	13 (38.2)	1.76 [1.13; 2.75]; 0.013
UltIMMa-2	90	67 (74.4)	36	14 (38.9)	1.90 [1.25; 2.90]; 0.003
Total					1.85 [1.36; 2.51]; < 0.001
PSS pain 0 ^b					
UltIMMa-1	100	82 (82.0)	34	17 (50.0)	1.59 [1.13; 2.25]; 0.008
UltIMMa-2	90	75 (83.3)	36	21 (58.3)	1.41 [1.06; 1.88]; 0.018
Total					1.49 [1.20; 1.86]; < 0.001
PSS redness 0 ^b					
UltIMMa-1	100	68 (68.0)	34	12 (35.3)	1.97 [1.23; 3.16]; 0.005
UltIMMa-2	90	68 (75.6)	36	15 (41.7)	1.82 [1.22; 2.71] 0.003
Total					1.85 [1.37; 2.52]; < 0.001
PSS burning 0 ^b					
UltIMMa-1	100	85 (85.0)	34	23 (67.6)	1.26 [0.98; 1.61]; 0.070 ^d
UltIMMa-2	90	77 (85.6)	36	21 (58.3)	1.47 [1.10; 1.96]; 0.009
Total					1.34 [1.11; 1.63]; 0.002

Endpoint		Risankizumab			Ustekinumab		Risankizumab vs ustekinumab	
	Z		with event (%)	N		with event (%)	RR [95% CI] ^a ; p value	
Further sympton (especially scaling						No data c	ollected ^e	
Absence of sympo)	otoms	of hands	and feet (P	PASI		No usab	le data ^f	
Absence of symp	otoms	of fingern	ail (NAPSI	finger	0)b,g (addit	tionally show	vn)	
UltIMMa-1	68	34 (50.0)	25	10 (40.0)	1.22 [0.72; 2.06]; 0.454	
UltIMMa-2	50	31 (62.0)	22	9 (4	10.9)	1.52 [0.89; 2.60]; 0.124	
Total ^c							1.38 [0.95; 2.01]; 0.090	
Absence of sym	ptom	s of the so	alp (PSSI	0) b,h				
UltIMMa-1	91	91 77 (84.6)		29	15 (51.7)		1.60 [1.11; 2.31]; 0.011	
UltIMMa-2	80	66 (8	82.5)	28	17 (60.7)		1.37 [1.00; 1.87]; 0.052	
Total ^c							1.48 [1.17; 1.88]; 0.001	
Endpoint		Risankizu	mab		Ustekinumab		Risankizumab vs ustekinumab	
	Ni	Values at start of study MV (SD)	Change at week 52 MV (SE) ^j	Ni	Values at start of study MV (SD)	Change at week 52 MV (SE) ^j	MD [95% CI]; p value ^j	
Health status (EQ	-5D V	AS ^k)						
UltIMMa-1	99	65.95 (23.07)	12.12 (1.63)	33	70.67 (18.16)	6.14 (2.45)	5.98 [0.84; 11.13]; 0.023	
UltIMMa-2	90	66.46 (21.72)	15.80 (1.58)	34	70.50 (21.81)	13.82 (2.48)	1.97 [-3.37; 7.32]; 0.466	
Total ^l							4.30 [0.56; 8.04]; 0.025 Hedges' g: 0.32 [0.04; 0.60]	

Health-related quality of life

Endpoint		Risankizumab	Ustekinumab N Patients with event n (%)		Risankizumab vs ustekinumab
	N	Patients with event n (%)			RR [95% CI] ^a ; p value
DLQI (0 or 1) ^b					
UltIMMa-1	100	75 (75.0)	34	19 (55.9)	1.30 [0.96; 1.75]; 0.089
UltIMMa-2	90	69 (76.7)	36 17 (47.2)		1.63 [1.14; 2.34]; 0.008
Total ^c					1.47 [1.16; 1.86]; 0.001

Side effects

Side effects	l				
Endpoint		Risankizumab	Ustekinumab		Risankizumab vs ustekinumab
	N	Patients with event n (%)	N	Patients with event n (%)	RR [95% CI] ^a ; p value
AEs (additionally	shown)			
UltIMMa-1	100	71 (71.0)	34	28 (82.4)	-
UltIMMa-2	90	63 (70.0)	36	28 (77.8)	-
SAEs					
UltIMMa-1	100	8 (8.0)	34	3 (8.8)	0.91 [0.25; 3.22]; 0.880
UltIMMa-2	90	6 (6.7)	36	3 (8.3)	0.80 [0.21; 3.03]; 0.742
Total ^c					0.85 [0.34; 2.14]; 0.738
Discontinuation	becau	se of AEs			
UltIMMa-1	100	1 (1.0)	34	1 (2.9)	0.34 [0.02; 5.29]; 0.441
UltIMMa-2	90	0 (0.0)	36	1 (2.8)	0.14 [0.01; 3.25]; 0.218
Total ^c					0.18 [0.02; 1.95]; 0.159
Infections and ir	ıfestati	ions (SOC, AE)			
UltIMMa-1	100	47 (47.0)	34	16 (47.1)	1.00 [0.66; 1.51]; > 0.999 ^m
UltIMMa-2	90	43 (47.8)	36	17 (47.2)	1.01 [0.67; 1.52]; 0.978 ^m
Total					1.01 [0.75; 1.34]; 0.971 ⁿ

Endpoint	Endpoint Risankizumab		Ustekinumab		Risankizumab vs ustekinumab
	N	Patients with event n (%)	N	Patients with event n (%)	RR [95% CI] ^a ; p value

- a) RR and CI from generalised linear model with treatment and stratification variables as covariates with a log link for the calculation of the RR. For the meta-analysis, the variable study was also included in the model as a fixed effect.
- b) Missing values were replaced by NRI.
- c) Calculated from the IPD meta-analysis with fixed effect.
- d) The model did not converge and was thus calculated without stratification variables.
- e) In the dossier of the pharmaceutical company, no data are available for further endpoints on patient-reported symptomatology (in particular scaling, cracking, and bleeding) (see Section 2.6.4.3.2).
- f) Only those patients who had palmoplantar involvement at the beginning of the study (PPASI > 0) were evaluated. This was only about one third of the ITT population.
- g) Only those patients who had an involvement of fingernails at the beginning of the study (NAPSI finger > 0) were evaluated. This was only about 64% of the ITT population.
- h) Only those patients who had an involvement of the scalp at the beginning of the study (PSSI > 0) were evaluated. This was > 80% of the ITT population (UltIMMa-1: 91.0% in the risankizumab arm and 85.3% in the ustekinumab arm; UltIMMa-2: 88.9% in the risankizumab arm and 77.8% in the ustekinumab arm).
- i) Number of patients who were taken into account in the evaluation for the calculation of the estimation of the effect; the values at the start of study can be based on other patient figures.
- j) Effect estimation based on an ANCOVA model with treatment, stratification variables, and baseline as covariates. For the meta-analysis, the variable study is additionally included in the model as a fixed effect. Missing values were replaced by LOCF.
- k) A positive change from start of study to end of study means an improvement; a positive group difference means an advantage for risankizumab.
- I) Calculated from meta-analysis.
- m) Calculation by the IQWiG; asymptotic 95% CI; p value from unconditional exact test (CSZ method).
- n) Calculation by the IQWiG, meta-analysis with fixed effect (Mantel-Haenszel method).

ANCOVA: analysis of covariance; DLQI: Dermatology Life Quality Index; EQ-5D: European Quality of Life – 5 Dimensions; CI: confidence interval; LOCF: last observation carried forward; IPD: individual patient data; ITT: Intention to Treat; MD: mean difference; MV: Mean Value; N: Number of patients evaluated; n: number of patients with (at least one) event; NAPSI: Nail Psoriasis Severity Index; n.c.: not calculable; NRI: non-responder imputation; PASI: Psoriasis Area and Severity Index; PPASI: Palmoplantar Psoriasis Area and Severity Index; PSS: Psoriasis Symptom Scale; PSSI: Psoriasis Scalp Severity Index; RCT: randomised controlled study; RR: relative risk; SD: standard deviation; SE: standard error; SAE: serious adverse event; AE: adverse event; VAS: visual analogue scale; vs: versus

2. Number of patients or demarcation of patient groups eligible for treatment

a) Adult patients with moderate to severe plaque psoriasis who are not candidates for conventional therapy as part of an initial systemic therapy.

approx. 3,500 - 24,400 patients

b) Adult patients with moderate to severe plaque psoriasis who have responded inadequately to or did not tolerate systemic therapy.

approx. 32,400 - 97,100 patients

3. Requirements for a quality-assured application

The requirements in the product information are to be taken into account. The European Medicines Agency (EMA) provides the contents of the product information (summary of product characteristics, SmPC) for Skyrizi[®] (active ingredient: risankizumab) at the following publicly accessible link (last access: 20 September 2019):

> https://www.ema.europa.eu/documents/product-information/skyrizi-epar-product-information_de.pdf<

In patients who do not respond after 16 weeks of treatment, discontinuation of treatment should be considered.

4. Treatment costs

Annual treatment costs:

a) Adult patients with moderate to severe plaque psoriasis who are not candidates for conventional therapy as part of an initial systemic therapy.

Designation of the therapy	Annual treatment costs/patient				
Medicinal product to be assessed:					
Risankizumab	€25,149.02				
Additionally required SHI services	€74.45				
Total	€25,223.47				
Appropriate comparator therapy:					
Adalimumab	€11,467.34				
Additionally required SHI services	€180.85				
Total	€11,648.19				
Guselkumab	€21,016.19				
Ixekizumab	€18,086.90				
Secukinumab	€21,104.24				

Costs after deduction of statutory rebates (LAUER-TAXE®) as last revised: 1 November 2019

b) Adult patients with moderate to severe plaque psoriasis who have responded inadequately to or did not tolerate systemic therapy.

Designation of the therapy	Annual treatment costs/patient
Medicinal product to be assessed:	
Risankizumab	€25,149.02
Additionally required SHI services	€74.45
Total	€25,223.47
Appropriate comparator therapy:	
Adalimumab	€11,467.34
Additionally required SHI services	€180.85
Total	€11,648.19
Brodalumab	€17,991.31
Guselkumab	€21,016.19
Infliximab	€17,445.53
Additionally required SHI services	€180.85
Total	€17,626.38
Ixekizumab	€18,086.90
Secukinumab	€21,104.24
Ustekinumab	€21,198.06
Additionally required SHI services	€74.45
Total	€21,272.51

Costs after deduction of statutory rebates (LAUER-TAXE®) as last revised: 1 November 2019

Other services covered by SHI funds:

Designation of the therapy	Type of service	Cost per unit	Number per patient per year	Cost per patient per year					
Medicinal produ	Medicinal product to be assessed								
not applicable	not applicable								
Appropriate comparator therapy									
Infliximab	Surcharge for the preparation of a parenteral solution containing monoclonal antibodies	€71	6.5	€461.50					