

Remdesivir (new therapeutic indication: COVID-19, not requiring supplemental oxygen, increased risk of progressing to severe COVID-19)

Resolution of: 7 July 2022
Entry into force on: 7 July 2022
Federal Gazette, BAnz AT 26 07 2022 B4

Valid until: unlimited

New therapeutic indication (according to the marketing authorisation of 20 December 2021):

Veklury is indicated for the treatment of coronavirus disease 2019 (COVID-19) in:

- adults who do not require supplemental oxygen and who are at increased risk of progressing to severe COVID-19.

Therapeutic indication of the resolution (resolution of 7 July 2022):

See new therapeutic indication according to marketing authorisation.

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

Adults with COVID-19 disease who do not require supplemental oxygen and who are at increased risk of progressing to severe COVID-19

Appropriate comparator therapy:

Therapy according to doctor's instructions

Extent and probability of the additional benefit of remdesivir compared to the appropriate comparator therapy:

Hint for a minor additional benefit

Study results according to endpoints:¹

Adults with COVID-19 disease who do not require supplemental oxygen and who are at increased risk of progressing to severe COVID-19

Summary of results for relevant clinical endpoints

Endpoint category	Direction of effect/ risk of bias	Summary
Mortality	↔	No deaths occurred.
Morbidity	↑	Advantage in total hospitalisation or hospitalisation due to COVID-19
Health-related quality of life	∅	No data available.
Side effects	↔	No relevant differences for the benefit assessment.
Explanations: ↑: statistically significant and relevant positive effect with low/unclear reliability of data ↓: statistically significant and relevant negative effect with low/unclear reliability of data ↑↑: statistically significant and relevant positive effect with high reliability of data ↓↓: statistically significant and relevant negative effect with high reliability of data ↔: no statistically significant or relevant difference ∅: There are no usable data for the benefit assessment. n.a.: not assessable		

GS9012 (PINETREE) study: placebo-controlled phase 3 study

Mortality

Endpoint	Remdesivir		Placebo		Remdesivir vs placebo
	N ^a	Patients with event n (%)	N ^a	Patients with event n (%)	RR [95% CI] p value
Overall mortality	279	0 (0)	283	0 (0)	-

¹ Data from the dossier assessment of the Institute for Quality and Efficiency in Health Care (IQWiG) (A22-04) unless otherwise indicated.

Morbidity

Endpoint	Remdesivir		Placebo		Remdesivir vs Placebo
	N ^a	Patients with event n (%)	N ^a	Patients with event n (%)	RR [95% CI] p value
Total hospitalisation ^c	279	5 (1.8)	283	18 (6.4)	0.28 [0.11; 0.75]; 0.006 ^b
Hospitalisation due to COVID-19	279	2 (0.7)	283	15 (5.3)	0.14 [0.03; 0.59]; 0.002 ^b
Need for intensive medical care due to any cause	279	3 (1.1)	283	3 (1.1)	1.04 [0.21; 5.06]; 0.964 ^d

Health-related quality of life

Endpoints from this category were not collected.

Side effects

Endpoint	Remdesivir		Placebo		Remdesivir vs Placebo
	N ^a	Patients with event n (%)	N ^a	Patients with event n (%)	RR [95% CI] p value
AEs ^e (presented additionally)	279	105 (37.6)	283	112 (39.6)	–
SAEs ^e	279	3 (1.1)	283	6 (2.1)	0.51 [0.13; 2.01]; 0.530 ^f
Severe AEs ^{e, g}	279	8 (2.9)	283	6 (2.1)	1.35 [0.48; 3.85]; 0.601 ^f
Discontinuation due to AEs ^{e, h}	279	0 (0)	283	0 (0)	–

- Number of patients who received at least 1 dose of the study medication (292 vs 292 patients were randomised)
- IQWiG calculation, RR and 95% CI asymptotic; p value unconditional exact test (CSZ method).
- In addition to hospitalisation due to COVID-19, 3 patients each had an event in both arms (intervention arm: atrial fibrillation, congestive heart failure and atrial fibrillation, angina pectoris; control arm: fracture of a lumbar vertebra and road accident, angina pectoris, acute myocardial infarction).
- RR estimated using the Mantel-Haenszel method. 95% CI and p values were calculated using the normal approximation (Wald test). Stratification factors: residents of a care facility (yes vs no), age (< 60 vs ≥ 60 years) and region (USA vs non-USA).
- Overall rate excluding events, classified by the pharmaceutical company as disease-related.
- IQWiG calculation, unconditional exact test (CSZ method)
- Operationalised as DAIDS grade ≥ 3
- All events leading to discontinuation were classified by the pharmaceutical company as disease-related

Abbreviations used:

COVID-19: Coronavirus disease 2019; DAIDS: Division of Acquired Immunodeficiency Syndrome; CI: confidence interval; n: number of patients with (at least 1) event; N: number of patients who received at least 1 dose of the study medication; pU: pharmaceutical company; RCT: randomised controlled trial; RR: relative risk; SAE: serious adverse event; AE: adverse event

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

Adults with COVID-19 disease who do not require supplemental oxygen and who are at increased risk of progressing to severe COVID-19

approx. 218,000 – 1,307,000 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 Veklury (active ingredient: remdesivir) at the following publicly accessible link (last access: 29 March 2022):

https://www.ema.europa.eu/en/documents/product-information/veklury-epar-product-information_en.pdf

This medicinal product was authorised under “special conditions”. This means that further evidence of the benefit of the medicinal product is anticipated. The European Medicines Agency will evaluate new information on this medicinal product at a minimum once per year and update the product information where necessary.

Remdesivir should only be used in clinical settings where patients can be closely monitored.

4. Treatment costs

Annual treatment costs:

Adults with COVID-19 disease who do not require supplemental oxygen and who are at increased risk of progressing to severe COVID-19

Designation of the therapy	Annual treatment costs/ patient
Medicinal product to be assessed:	
Remdesivir ^a	€ 2,189.60
Appropriate comparator therapy:	
Therapy according to doctor's instructions	Different from patient to patient
a. Remdesivir is currently only dispensed as a clinic pack. Accordingly, the active ingredient is not subject to the Pharmaceutical Price Ordinance (Arzneimittelpreisverordnung), and no rebates according to Section 130 or Section 130a SGB V apply. The calculation is based on the purchase price of the clinic pack (information from the pharmaceutical company) plus 19 % value-added tax.	

Costs for additionally required SHI services: not applicable