

Ivosidenib (cholangiocarcinoma with IDH1 R132 mutation, after at least 1 prior therapy)

Resolution of: 18 January 2024 valid until: unlimited

Entry into force on: 18 January 2024 Federal Gazette, BAnz AT 11 03 2024 B5

Therapeutic indication (according to the marketing authorisation of 4 May 2023):

Tibsovo monotherapy is indicated for the treatment of adult patients with locally advanced or metastatic cholangiocarcinoma with an IDH1 R132 mutation who were previously treated by at least one prior line of systemic therapy.

Therapeutic indication of the resolution (resolution of 18 January 2024):

See therapeutic indication according to marketing authorisation.

1. Extent of the additional benefit and significance of the evidence

Ivosidenib is approved as a medicinal product for the treatment of rare diseases under Regulation (EC) No. 141/2000 of the European Parliament and the Council of 16 December 1999 on orphan drugs. In accordance with Section 35a, paragraph 1, sentence 11, 1st half of the sentence SGB V, the additional medical benefit is considered to be proven through the grant of the marketing authorisation.

The Federal Joint Committee (G-BA) determines the extent of the additional benefit for the number of patients and patient groups for which there is a therapeutically significant additional benefit in accordance with Chapter 5 Section 12, paragraph 1, number 1, sentence 2 of its Rules of Procedure (VerfO) in conjunction with Section 5, paragraph 8 AM-NutzenV, indicating the significance of the evidence. This quantification of the additional benefit is based on the criteria laid out in Chapter 5 Section 5, paragraph 7, numbers 1 to 4 of the Rules of Procedure (VerfO).

Adults with locally advanced or metastatic cholangiocarcinoma with an IDH1 R132 mutation who were previously treated by at least one prior line of systemic therapy

Extent of the additional benefit and significance of the evidence of ivosidenib:

Hint for a non-quantifiable additional benefit since the scientific data does not allow quantification.

Study results according to endpoints:1

Adults with locally advanced or metastatic cholangiocarcinoma with an IDH1 R132 mutation who were previously treated by at least one prior line of systemic therapy

Summary of results for relevant clinical endpoints

Endpoint category	Direction of effect/ risk of bias	Summary
Mortality	\leftrightarrow	No relevant difference for the benefit assessment.
Morbidity	n.a.	There are no assessable data.
Health-related quality of life	n.a.	There are no assessable data.
Side effects	\leftrightarrow	Overall, no relevant differences for the benefit assessment; in detail, advantages in some specific AEs.

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

 $\uparrow \uparrow$: statistically significant and relevant positive effect with high reliability of data

 $\downarrow \downarrow$: statistically significant and relevant negative effect with high reliability of data

 \emptyset : No data available.

n.a.: not assessable

ClarIDHy study

- RCT, double-blind, phase III
- Ivosidenib + BSC vs placebo + BSC
- Data cut-off from 31 May 2020

Mortality

Endpoint	Ivosidenib + BSC			Placebo + BSC	Intervention vs control
	N Median survival time in months [95% CI] Patients with event n (%)		N	Median survival time in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD) ^a
Overall survival					
	126	10.3 [7.8; 12.4] 100 (79.4)	61	7.5 [4.8; 11.1] 50 (82.0)	0.79 [0.56; 1.12] 0.19

¹ Data from the dossier assessment of the G-BA (published on 16. Oktober 2023), unless otherwise indicated.

Morbidity

Endpoint	Ivosidenib + BSC			Placebo + BSC	Intervention vs control	
	N Median time to event in months [95% CI]		N	Median time to event in months [95% CI]	HR [95% CI] p value	
		Patients with event n (%)		Patients with event n (%)	Absolute difference (AD) ^a	
Progression-free survival (PFS) ^b						
Data cut-off from 31 January 2019	124	2.7 [1.6; 4.2] 76 (61.3)	[1.6; 4.2] [1.4; 1.6]		0.37 [0.25; 0.54] < 0.0001 AD = +1.3 months	
Symptomatology (EORTC QLQ-C30 and EORTC QLQ-BIL21)						
No usable data available						
General health status (EQ-5D VAS)						
	No usable data available					

Health-related quality of life

Endpoint	Ivosidenib + BSC		ii	Placebo + BSC	Intervention vs control
	N Median time to event in months [95% CI] Patients with event n (%)		N Median time to event in months [95% CI] Patients with event n (%)		HR [95% CI] p value Absolute difference (AD)ª
Functional scales (EORTC QLQ-C30 and EORTC QLQ-BIL21)					
No usable data available					

Side effects^c

Endpoint	Ivosidenib + BSC		Placebo + BSC		Intervention vs control
	N	Median time to event in months [95% CI]	N	Median time to event in months [95% CI]	HR [95% CI] p value
		Patients with event n (%)		Patients with event n (%)	Absolute difference (AD) ^a
Total adverse events (prese	nted ad	ditionally)			
	123	0.5 [0.3; 0.5] 120 (97.6)	59	0.4 [0.3; 0.5] 57 (96.6)	-
Serious adverse events (SAE	Ξ)				
	123	18.8 [8.9; NE] 42 (34.1)	59	NE [NE; NE] 14 (23.7)	1.00 [0.54; 1.88] 0.99
Severe adverse events (CTC	AE grad	le ≥ 3)			
	123	7.4 [3.0; 13.4] 62 (50.4)	59	6.5 [2.6; NE] 22 (37.3)	1.01 [0.61; 1.67] 0.97
Therapy discontinuation du	e to adv	verse events			
	123	NE [NE; NE] 9 (7.3)	59	6.9 [NE; NE] 5 (8.5)	0.47 [0.14; 1.53] 0.20
SAE with incidence ≥ 5% or a preferred term (PT) [PT only					arm (SOC) and
Gastrointestinal disorders (SOC)	123	NE [NE; NE] 13 (10.6)	59	NE [NE; NE] 4 (6.8)	1.08 [0.34; 3.47] 0.89
Infections and infestations (SOC)	123	NE [NE; NE] 12 (9.8)	59	NE [NE; NE] 5 (8.5)	0.61 [0.20; 1.89] 0.39
Hepatobiliary disorders (SOC)	123	NE [NE; NE] 13 (10.6)	59	NE [NE; NE] 1 (1.7)	3.61 [0.45; 28.66] 0.19
Metabolism and nutrition disorders (SOC)	123	NE [NE; NE] 3 (2.4)	59	NE [NE; NE] 4 (6.8)	0.33 [0.07; 1.47] 0.12

Severe adverse events (CTCAE grade \geq 3) with incidence \geq 5% or \geq 10 events and \geq 1% of patients in at least one study arm (SOC) and preferred term (PT) [PT only with statistically significant difference]

Endpoint	Ivosidenib + BSC			Placebo + BSC	Intervention vs control
	N	Median time to event in months [95% CI] Patients with event n (%)	N	Median time to event in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD) ^a
General disorders and administration site conditions (SOC)	123	NE [21.5; NE] 8 (6.5)	59	NE [NE; NE] 3 (5.1)	0.74 [0.19; 2.96] 0.67
Blood and lymphatic system disorders (SOC)	123	NE [NE; NE] 9 (7.3)	59	NE [NE; NE] O (0)	n.a. [n.c.; n.c.] -
Gastrointestinal disorders (SOC)	123	NE [NE; NE] 23 (18.7)	59	NE [NE; NE] 5 (8.5)	1.53 [0.56; 4.13] 0.40
Infections and infestations (SOC)	123	NE [16.1; NE] 15 (12.2)	59	NE [NE; NE] 4 (6.8)	0.96 [0.30; 3.08] 0.95
Hepatobiliary disorders (SOC)	123	NE [24.7; NE] 15 (12.2)	59	6.9 [NE; NE] 2 (3.4)	1.82 [0.39; 8.49] 0.44
Metabolism and nutrition disorders (SOC)	123	NE [NE; NE] 15 (12.2)	59	6.5 [6.5; NE] 10 (16.9)	0.47 [0.20; 1.10] 0.07
Investigations (SOC)	123	NE [NE; NE] 16 (13.0)	59	NE [4.8; NE] 8 (13.6)	0.63 [0.26; 1.54] 0.31
AEs with incidence \geq 10% in the placebo arm or \geq 10 and \geq 1% in the ivosidenib arm and statistically significant difference between the treatment arms according to SOC and PT					
Dyspnoea (PT)	123	NE [NE; NE] 13 (10.6)	59	NE [NE; NE] 10 (16.9)	0.28 [0.11; 0.70] 0.003
Hypercalcaemia (PT)	123	NE [NE; NE] 3 (2.4)	59	NE [NE; NE] 7 (11.9)	0.17 [0.04; 0.67] 0.004

^a Indication of absolute difference (AD) only in case of statistically significant difference; own calculation

Abbreviations used:

AD = absolute difference; BSC = best supportive care; CTCAE = Common Terminology Criteria for Adverse Events; EORTC QLQ-BIL21 = European Organisation for Research and Treatment of Cancer — Quality of Life

^b For the placebo arm, the evaluation includes all events prior to a possible treatment switch to ivosidenib, which was only permitted after disease progression. The analysis is based on all randomised patients at the 1st data cut-off from 31.01.2019. This does not correspond to the ITT population of the study, as 2 additional subjects were randomised after this data cut-off.

^c The safety analyses were performed on the basis of the safety population. For the placebo arm, censoring was performed at treatment change.

Endpoint	Ivosidenib + BSC			Placebo + BSC	Intervention vs control
	N	Median time to event in months [95% CI] Patients with event n (%)	N	Median time to event in months [95% CI] Patients with event n (%)	HR [95% CI] p value Absolute difference (AD) ^a

Questionnaire — Cholangiocarcinoma and Gallbladder Cancer Module; EORTC QLQ-C30 = European Organisation for Research and Treatment of Cancer — Core Quality of Life Questionnaire; EQ-5D VAS = visual analogue scale of the European Quality of Life - 5 Dimensions; HR = hazard ratio; CI = confidence interval; N = number of patients evaluated; n = number of patients with (at least one) event; n.c. = not calculable; NE = not estimable; PT = preferred term; SOC = MedDRA system organ class; vs = versus

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

Adults with locally advanced or metastatic cholangiocarcinoma with an IDH1 R132 mutation who were previously treated by at least one prior line of systemic therapy

approx. 80 – 160 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 Tibsovo (active ingredient: ivosidenib) at the following publicly accessible link (last access: 5 October 2023):

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

Treatment with ivosidenib should only be initiated and monitored by specialists in internal medicine, haematology, and oncology, internal medicine and gastroenterology, and specialists participating in the Oncology Agreement experienced in the treatment of adults with cholangiocarcinoma.

An electrocardiogram (ECG) must be performed before start of treatment and at least once a week during the first 3 weeks of therapy.

4. Treatment costs

Annual treatment costs:

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Designation of the therapy	Annual treatment costs/ patient
Medicinal product to be assessed:	
Ivosidenib	€ 211,017.69

Costs after deduction of statutory rebates (LAUER-TAXE®) as last revised: 1 January 2024

Costs for additionally required SHI services: not applicable

Designation of medicinal products with new active ingredients according to Section 35a, paragraph 3, sentence 4 SGB V that can be used in a combination therapy with the assessed medicinal product

In the context of the designation of medicinal products with new active ingredients pursuant to Section 35a, paragraph 3, sentence 4 SGB V, the following findings are made:

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 No designation of medicinal products with new active ingredients that can be used in combination therapy pursuant to Section 35a, paragraph 3, sentence 4 SGB V, as the active ingredient to be assessed is an active ingredient authorised in monotherapy.

The designation of combinations exclusively serves the implementation of the combination discount according to Section 130e SGB V between health insurance funds and pharmaceutical companies. The findings made neither restrict the scope of treatment required to fulfil the medical treatment mandate, nor do they make statements about expediency or economic feasibility.