Drug assessment at a glance: A26-48[1]

Olipudase alfa (acid sphingomyelinase deficiency)

23 September 2026

[1] This is a courtesy translation of the summary provided as a service by IQWiG. For further information on the subject matter and the result of the assessment, please refer to the dossier assessment for Project A26-48. The GBA decides on the added benefit.

Research question for the benefit assessment

Population	Paediatric and adult patients with non-central nervous system (CNS) manifestations of acid sphingomyelinase deficiency (ASMD) type A/B or type B
Intervention	olipudase alfa
Comparator	best supportive care
Outcomes	At least one patient-relevant outcome

Overview of positive and negative effects – research question

	Size of the effects	Informative value of the effects
Mortality	Adults: ↔ Children and adolescents: Ø	–
Morbidity	↑ (reduction in spleen volume)	★
Symptoms	↔	–
Health-related quality of life	↔	–
Side effects	↔	–
	Ø No (suitable) data ↔ No advantage or disadvantage ↑ / ↓ Small advantage/disadvantage ↑↑ / ↓↓ Moderate advantage/disadvantage ↑↑↑ / ↓↓↓ Large advantage/disadvantage	– Not applicable ★ Low ★★ Moderate ★★★ High

Overall: an advantage of unclear magnitude with low informative value

Evidence base and noteworthy aspects

- Evidence base:
  - For adults: the double-blind RCT ASCEND comparing olipudase alfa (N=18) with placebo (N=18), in which best supportive care was available in both study arms. After 1 year, all patients were given olipudase alfa and continued treatment for up to 4 further years (non-comparative phase).
  - For children: the open-label, single-arm ASCEND-Peds study (N=20), and the associated open-label, single-arm long-term LTS13632 study, which all paediatric patients entered after completing the ASCEND-Peds study.

- As the patients' initial situation was particularly severe in terms of their increased spleen volume, it was assumed that there was a relevant risk reduction of severe late complications due to the marked reduction in spleen volume.
- A marked reduction in spleen size is not to be expected during the natural course of the disease with best supportive care. The non-comparative data for children and adolescents were therefore taken into account when assessing spleen volume.

Key study findings

Study Outcome category Outcome	olipudase alfa N	Values at baseline Mean (SD)	Mean percentage change Mean (SE)	placebo N	Values at baseline Mean (SD)	Mean percentage change Mean (SE)	olipudase alfa vs. placebo MD [95% CI]; p-value
ASCEND							
Morbidity							
Spleen volume							
Change at Week 52	18	11.7 (4.9)	−39.5 (2.4)	17	11.2 (3.8)	0.5 (2.5)	−39.93 [−47.05; −32.80]; <0.001
Change at Week 236	15	11.7 (4.9)	−59.7 (1.8)			–	
Change at Week 260 (supplementary information)	*13*	*11.7 (4.9)*	*−62.1 (3.0)*			–	

Study Outcome category Outcome	olipudase alfa N	olipudase alfa Patients with event n (%)	placebo N	placebo Patients with event n (%)	olipudase alfa vs. placebo RR [95% CI]; p-value
ASCEND					
Mortality					
All-cause mortality	18	0 (0)	18	0 (0)	–
Side effects					
AEs (supplementary information)	18	18 (100)	18	18 (100)	–
SAEs	18	3 (16.7)	18	4 (22.2)	0.75 [0.19; 3.03]; 0.678
Discontinuation due to AEs	18	0 (0)	18	0 (0)	–
Infusion related reactions	No suitable data				

Outcome category Outcome	olipudase alfa		
	N	Values at baseline Mean (SD)	Change at timepoint Mean (SE)
ASCEND-Peds and LTS13632			
Morbidity			
Spleen volume			
Percentage change at Week 52 (12 months)	20	19.0 (8.8)	−49.2 (2.0)
Percentage change at Week 157 (36 months)	17	19.0 (8.8)	−67.4 (1.5)
Percentage change at Week 417 (96 months) (supplementary information)	*3*	*19.0 (8.8)*	*−74.7 (3.0)*
Height (z-score)			
Change at Week 52	19	−2.1 (0.8)	0.6 (0.1)
Change at Week 183 (42 months)	14	−2.1 (0.8)	1.7 (0.1)
Change at Week 366 (84 months) (supplementary information)	*2*	*−2.1 (0.8)*	*0.9 (NC)*

Study	olipudase alfa	
Outcome category **Outcome**	**N**	**Patients with event** **n (%)**
ASCEND-Peds		
Mortality		
All-cause mortality	20	0 (0)
Side effects		
AEs (supplementary information)	20	20 (100)
SAEs	20	5 (25)
Discontinuation due to AEs	20	0 (0)
Infusion related reactions		No suitable data

References

Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen. Olipudase alfa (Mangel an saurer Sphingomyelinase); Nutzenbewertung gemäß § 35a SGB V; Dossierbewertung [online]. 2026 [Accessed: 05.08.2026]. URL: https://doi.org/10.60584/A26-48.

Gemeinsamer Bundesausschuss. Nutzenbewertungsverfahren zum Wirkstoff Olipudase alfa (Neubewertung Orphan > 30 Mio: Mangel an saurer Sphingomyelinase (ASMD) Typ A/B oder Typ B) [online]. 2026 [Accessed: 06.08.2026]. URL: https://www.g-ba.de/bewertungsverfahren/nutzenbewertung/1340/

English translations for this project are published at https://www.iqwig.de/en/projects/a26-48.html.

Publisher details

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