

A 3-YEAR LANDMARK OVERALL SURVIVAL ANALYSIS OF RP1 PLUS NIVOLUMAB IN PATIENTS WITH ANTI-PD-1-FAILED MELANOMA FROM THE IGNYTE CLINICAL TRIAL

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Key Takeaway Points

RP1 + NIVOLUMAB IN ANTI-PD-1-FAILED MELANOMA

1

- **Deep and durable responses**
- **Long-term clinical benefit**

2

- **mOS: 32.9 months**
- **3-year OS: 47.8% (83.5% among responders)**
- **Consistent benefit across clinically relevant patient subgroups**

3

RP1 + nivolumab continues to demonstrate:

- **Favorable safety profile**
- **No new safety signals**

mOS, median OS; OS, overall survival; PD-1, programmed cell death protein 1.

Background

- While advanced melanoma has a high mortality rate, survival for patients treated with anti-PD-1 therapy typically plateaus at 3 to 4 years^{1,2}
 - Patients alive at **3 years** are therefore likely to have **prolonged benefit**²
- **RP1** (vusolimogene oderparepvec) is an HSV-1–based oncolytic immunotherapy expressing **GM-CSF** and a fusogenic glycoprotein (**GALV-GP-R-**)³
- The IGNYTE trial evaluated RP1 + nivolumab for the treatment of patients with advanced melanoma that had confirmed progression on anti-PD-1 therapy^{4,5}
 - As of the October 15, 2024, data cutoff, the **ORR^a** by RECIST 1.1 was **33.6% (16.4% CR)** and the median **DOR** was **24.8 months**⁵

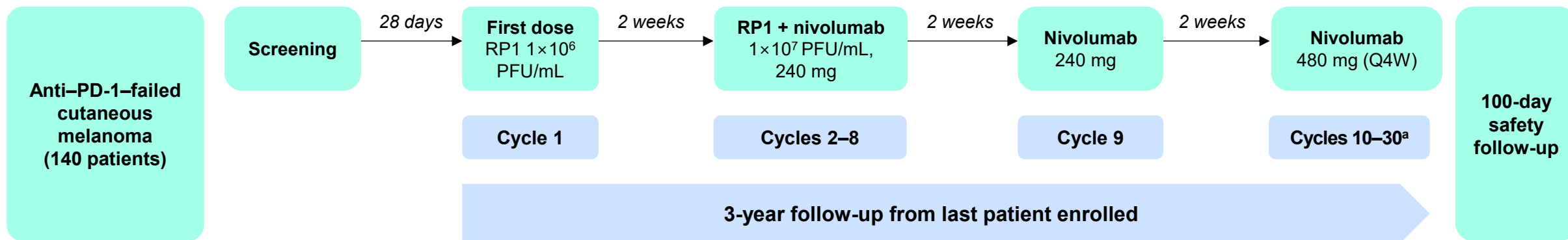
Objective: Present 3-year survival analysis of patients treated with RP1 + nivolumab from IGNYTE

^aORR per RECIST 1.1 by blinded independent central review.

CR, complete response; DOR, duration of response; GALV-GP-R-, gibbon ape leukemia virus glycoprotein with the R sequence deleted; GM-CSF, granulocyte-macrophage colony-stimulating factor; HSV-1, herpes simplex virus type 1; ORR, objective response rate; PD-1, programmed cell death protein 1; RECIST 1.1, Response Evaluation Criteria in Solid Tumors version 1.1.

1. Robertson BM, et al. *Nat Cancer*. 2024;5(7):964-82. 2. Michielin O, et al. *J Immunother Cancer*. 2020;8(2):e000948. 3. Thomas S, et al. *J Immunother Cancer*. 2019;7(1):214. 4. Wong MK, et al. *J Clin Oncol*. 2025;43(33):2589-99. 5. Wise-Draper TM, et al. *J Immunother Cancer*. 2025;13(suppl 3):1327.

Study Design



Tumor response assessment: Radiographic imaging at baseline, every 8 weeks from first dose, and every 12 weeks after confirmation of response

Key eligibility

- Anti-PD-1–failed advanced melanoma; measurable disease; adequate organ function; no prior oncolytic therapy; ECOG performance status 0–1

Primary objective

- Safety and efficacy using mRECIST^b by independent central review (also assessed by RECIST 1.1)

Secondary objectives

- ORR by investigator assessment (mRECIST^b)
- DOR, CR rate, and PFS by central and investigator assessment, 1-year and 2-year OS

Criteria for prior anti-PD-1 failure

- **Confirmed progression while being treated with at least 8 weeks of anti-PD-1 therapy, alone or in combination; anti-PD-1 must be the last prior therapy**
- Patients on prior adjuvant therapy must have confirmed progression while being treated with adjuvant treatment (PD can be confirmed by biopsy)

Primary analysis conducted when all patients had ≥ 12 months of follow-up

^aRP1 can be reinitiated beyond 8 cycles if protocol-specified criteria are met. ^bFor mRECIST, PD must be confirmed by further progression at least 4 weeks after initial PD to better allow for pseudoprogression compared with RECIST 1.1.

CR, complete response; DOR, duration of response; ECOG, Eastern Cooperative Oncology Group; mRECIST, modified RECIST 1.1; ORR, objective response rate; OS, overall survival; PD, progressive disease; PD-1, programmed cell death protein 1; PFS, progression-free survival; PFU, plaque-forming units; Q4W, every 4 weeks; RECIST 1.1, Response Evaluation Criteria in Solid Tumors version 1.1.

Baseline Clinical Characteristics

Patients, n (%)	N = 140
Age, median (range), y	62 (21–91)
Sex	
Female	45 (32.1)
Male	95 (67.9)
Stage^a	
IIIB/IIIC/IVM1a	71 (50.7)
IVM1b/c/d	69 (49.3)
BRAF status^a	
Wild-type	89 (63.6)
Mutant	51 (36.4)
LDH level	
LDH ≤ULN	92 (65.7)
LDH >ULN	47 (33.6)
Unknown	1 (0.7)

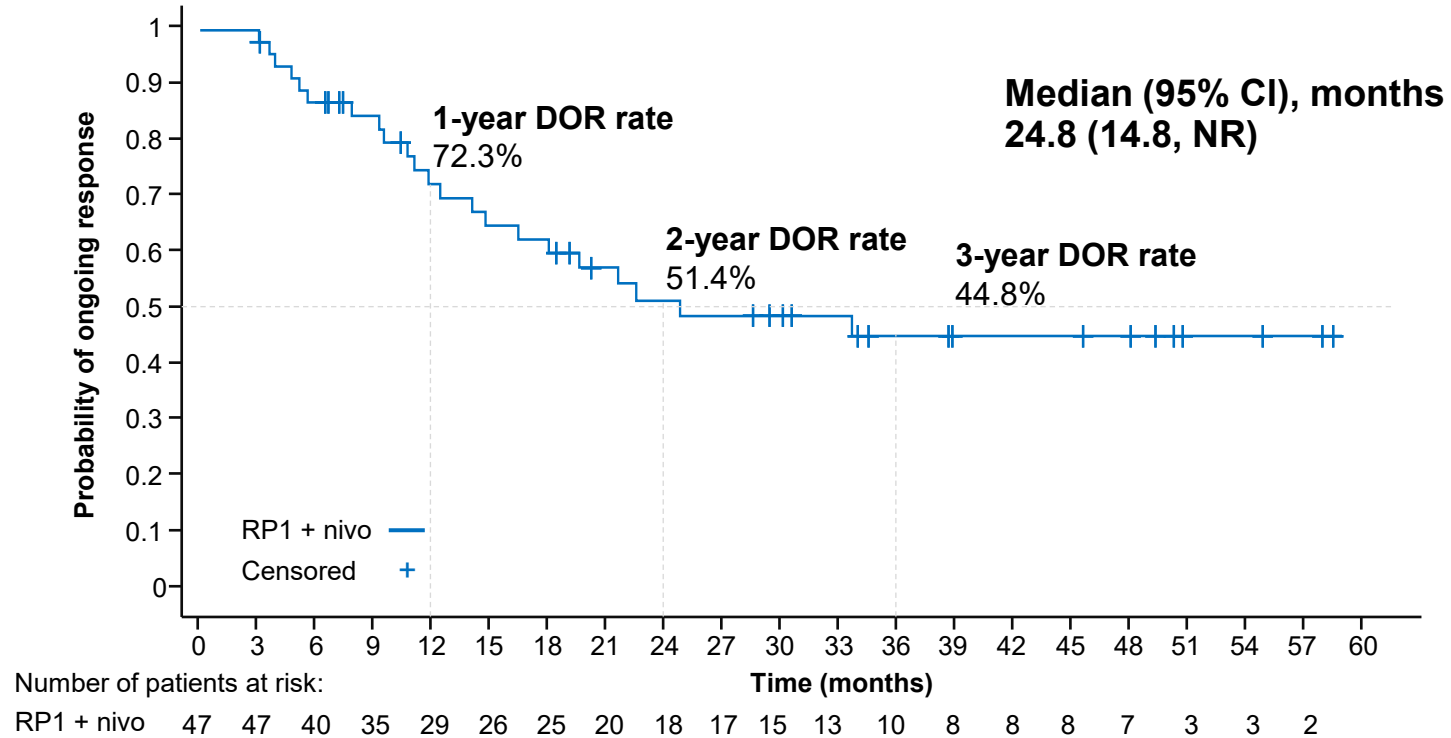
Patients, n (%)	N = 140
PD-L1 tumor expression^a	
Positive (≥1%)	45 (32.1)
Negative (<1%)	78 (55.7)
Undetermined or missing	17 (12.1)
Prior therapy	
Anti-PD-1	
Anti-PD-1 only as adjuvant therapy	36 (25.7)
Anti-PD-1 as advanced/metastatic therapy	104 (74.3)
Anti-CTLA-4	
Anti-PD-1 combined with anti-CTLA-4	61 (43.6)
Anti-PD-1 treated with anti-CTLA-4 sequentially	4 (2.9)
BRAF/MEK therapy	17 (12.1)
Anti-PD-1 resistance category^a	
Primary resistance ^b	91 (65.0)
Secondary resistance ^{c,d}	49 (35.0)

- Due to the requirement that patients must have confirmed PD on an immediate prior anti-PD-1–based therapy, most patients had 1 or 2 prior lines of therapy; **96% received the prior course of anti-PD-1 for ≥12 weeks**
- The median (95% CI) follow-up per reverse KM at the time of this analysis was 39.0 months (37.2, 41.6)

Data cutoff: March 8, 2026. ^aDenotes a patient(s) was recategorized at extended follow up. ^bPrimary resistance: progressed within 6 months of starting the immediate prior course of anti-PD-1 therapy. ^cSecondary resistance: progressed after 6 months of treatment on the immediate prior course of anti-PD-1 therapy. ^dIncludes 1 patient with unknown resistance status.

CI, confidence interval; CTLA-4, cytotoxic T-lymphocyte antigen 4; LDH, lactate dehydrogenase; KM, Kaplan Meier; PD, progressive disease; PD-1, programmed cell death protein 1; PD-L1, programmed death-ligand 1; ULN, upper limit of normal.

Efficacy: Duration of Response Among Responders by BICR RECIST 1.1

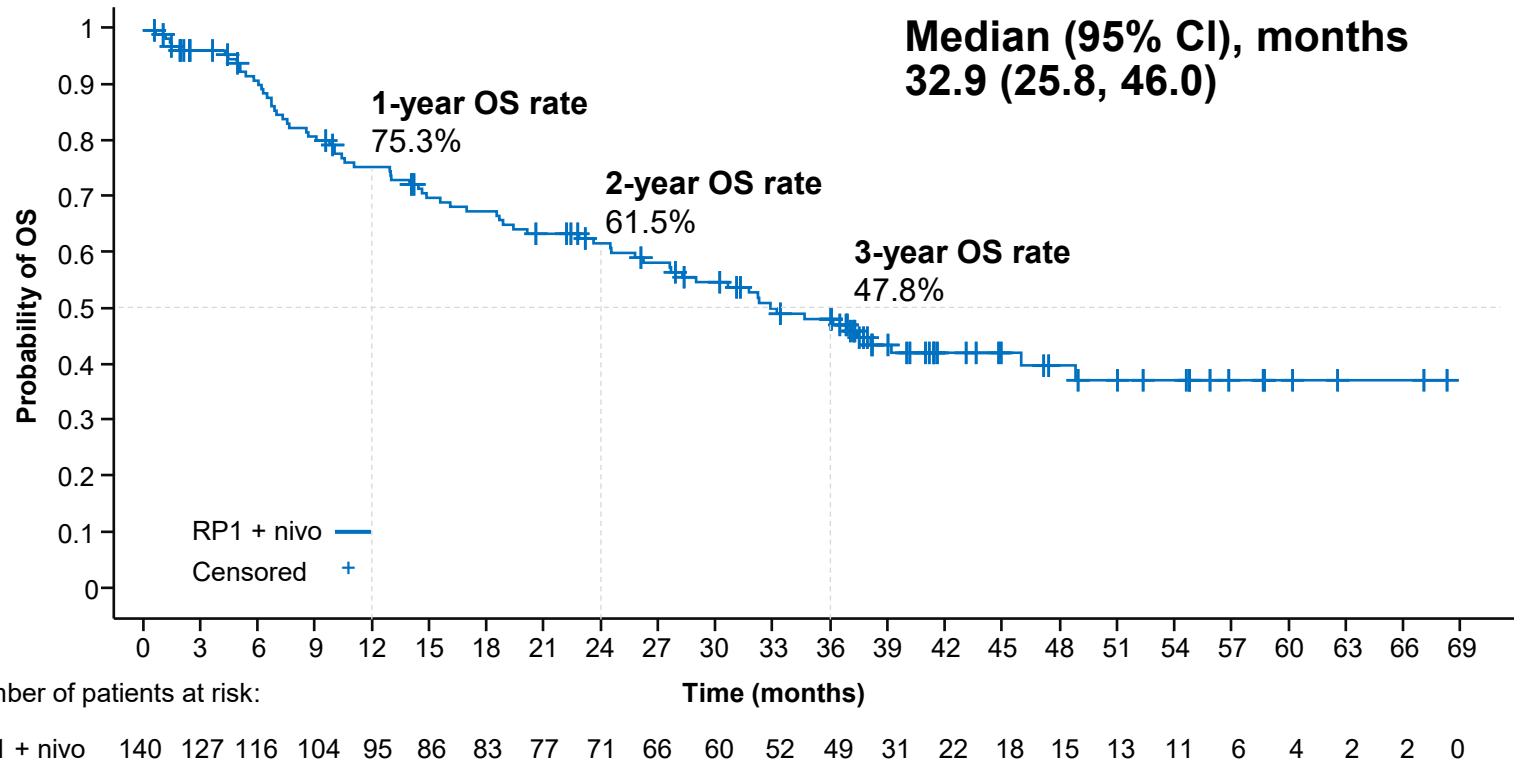


- **ORR (95% CI) was 33.6% (25.8%, 42.0%), and the median DOR (95% CI) was 24.8 months (14.8, NR)**
- **The overall median PFS (95% CI) was 3.6 months (2.0, 5.0); 34.9 months (22.0, NR) for responders**

Data cutoff: March 8, 2026.

BICR, blinded independent central review; CI, confidence interval; DOR, duration of response; nivo, nivolumab; NR, not reached; ORR, objective response rate; PFS, progression-free survival; RECIST 1.1, Response Evaluation Criteria in Solid Tumors version 1.1.

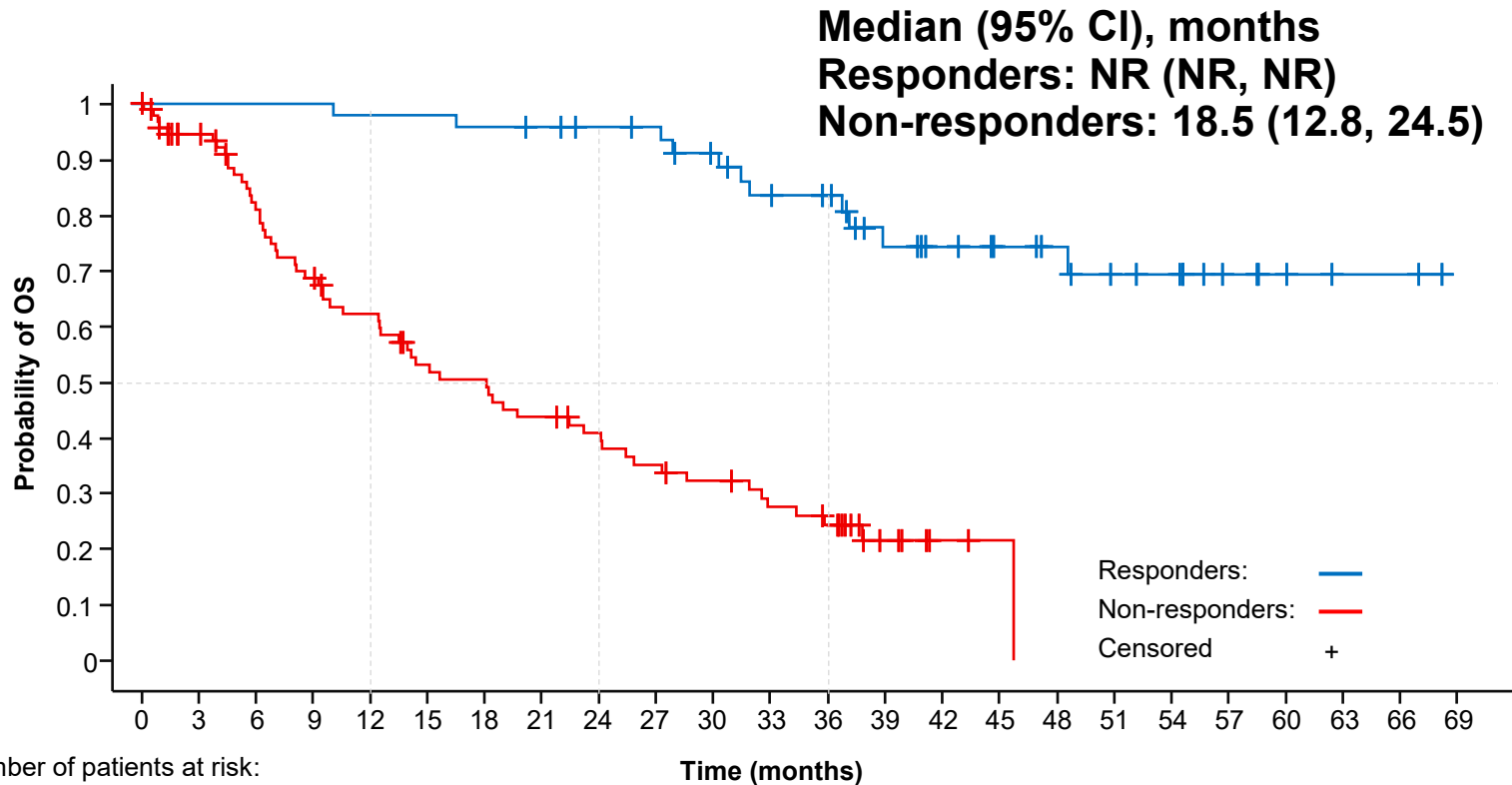
Efficacy: Overall Survival Among All Patients



	OS rates, % (95% CI)
1-year	75.3 (66.9, 81.9)
2-year	61.5 (52.4, 69.4)
3-year	47.8 (38.6, 56.5)

Data cutoff: March 8, 2026.
CI, confidence interval; nivo, nivolumab; OS, overall survival.

Efficacy: Overall Survival Among Responders vs Non-Responders



	OS rates, % (95% CI)	
	Responder	Non-responder
1-year	97.9 (85.8, 99.7)	62.4 (51.0, 71.9)
2-year	95.7 (84.0, 98.9)	41.2 (30.2, 51.8)
3-year	83.5 (68.5, 91.8)	26.4 (16.9, 36.9)

Data cutoff: March 8, 2026.
 CI, confidence interval; NR, not reached; OS, overall survival.

Efficacy: Benefit in Overall Survival Across Subgroups

	Overall (N = 140)	Stage		PD-L1 Status		Anti-CTLA-4		Resistance	
		IIIB/IIIC/IVM1a (n = 71)	IVM1b/c/d (n = 69)	PD-L1 positive (n = 45)	PD-L1 negative (n = 78)	No prior anti-CTLA-4 (n = 75)	Prior anti- CTLA-4 (n = 65)	Primary (n = 91)	Secondary (n = 49)
Median OS, months (95% CI)	32.9 (25.8, 46.0)	39.2 (27.6, NR)	27.6 (12.9, 37.4)	NR (32.2, NR)	25.8 (18.6, 36.1)	46.0 (28.9, NR)	18.6 (12.9, 37.1)	32.9 (22.8, 48.9)	34.7 (20.1, NR)

Data cutoff: March 8, 2026.

CI, confidence interval; CTLA-4, cytotoxic T-lymphocyte antigen 4; NR, not reached; OS, overall survival; PD-L1, programmed death-ligand 1.

Safety Profile: No New Safety Signals

TRAEs in ≥5% of patients (related to either RP1 or nivolumab)

Preferred term, n (%)	Patients (N = 141)	
	All grades	Grade 3–4
≥1 TRAE	125 (88.7)	18 (12.8)
Chills	45 (31.9)	0 (0.0)
Fatigue	45 (31.9)	1 (0.7)
Pyrexia	43 (30.5)	0 (0.0)
Nausea	32 (22.7)	0 (0.0)
Influenza-like illness	25 (17.7)	0 (0.0)
Injection-site pain	21 (14.9)	0 (0.0)
Diarrhea	20 (14.2)	1 (0.7)
Pruritus	19 (13.5)	0 (0.0)
Vomiting	19 (13.5)	0 (0.0)
Headache	18 (12.8)	0 (0.0)
Asthenia	14 (9.9)	1 (0.7)
Arthralgia	10 (7.1)	1 (0.7)
Myalgia	9 (6.4)	0 (0.0)
Cough	8 (5.7)	0 (0.0)
Decreased appetite	8 (5.7)	1 (0.7)
Rash	8 (5.7)	0 (0.0)
Hypothyroidism	7 (5.0)	0 (0.0)
Injection-site reaction	7 (5.0)	0 (0.0)
Vitiligo	7 (5.0)	0 (0.0)

RP1 combined with nivolumab continued to be **well tolerated over long-term follow-up**

- Predominantly grade 1 and 2 constitutional-type side effects
- Low incidence of grade 3 events (none occurring in >5% of patients); five grade 4 events in total
- No grade 5 events

Additional grade 3/4 TRAEs (grade 4 TRAEs are italicized):

- **Two events each (1.4%):** Hypophysitis and rash maculopapular
- **One event each (0.7%):** Abdominal pain, acute left ventricular failure, amylase increased, cancer pain, *cytokine release syndrome*, eczema, enterocolitis, extranodal marginal zone B-cell lymphoma (MALT type), *hepatic cytolysis*, hyponatremia, immune-mediated enterocolitis, infusion-related reaction, left ventricular dysfunction, *lipase increased*, memory impairment, meningitis aseptic, muscular weakness, *myocarditis*, palmar-plantar erythrodysesthesia syndrome, paresthesia, peripheral sensory neuropathy, radiculitis brachial, sinus arrhythmia, *splenic rupture*, tricuspid valve incompetence, tumor pain, and type 1 diabetes mellitus

Data cutoff: March 8, 2026.

AE, adverse event; MALT, mucosa-associated lymphoid tissue; TRAE, treatment-related AE.

Conclusions

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Acknowledgments

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Additional information can be obtained by visiting ClinicalTrials.gov (NCT03767348)