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Patient-reported outcomes (PROs) from DESTINY-Breast05: Health-related quality of life (HRQoL) with trastuzumab Deruxtecan (T-DXd) versus trastuzumab emtansine (T-DM1) in patients (Pts) with high-risk HER2-positive early breast cancer (eBC)

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Background

In DESTINY-Breast05, T-DXd showed statistically significant and clinically meaningful improvements in invasive disease-free survival (92.4%) and disease-free survival (92.3%) compared with T-DM1 (83.7% and 83.5%, respectively) in pts with high-risk HER2-positive eBC and residual invasive disease following neoadjuvant therapy. This exploratory analysis evaluated HRQoL between treatments.

Methods

PROs were assessed using time to definitive deterioration (TDD) at scheduled visits (baseline, day 1 of cycle 2 (C2D1), C6D1, C10D1, C14D1, and follow-up visits [at 40 days, 6 months, and 12 months]) using the European Organisation for Research and Treatment of Cancer Quality-of-Life Questionnaire Core 30 (EORTC QLQ-C30), the EORTC QLQ-Breast Cancer module 23 (BR23), and the EuroQoL 5-Dimension 5-Level Visual Analog Scale (EQ-5D-5L VAS).

Results

At data cutoff (July 2, 2025), overall HRQoL was preserved with T-DXd across global health status [GHS]/quality of life [QoL], breast symptoms, physical functioning, and emotional functioning domains based on change from baseline analysis. T-DXd was associated with a lower risk in developing pain and arm symptoms definitive deterioration vs T-DM1, while T-DM1 was associated with a lower risk in social function definitive deterioration (Table). Across other functional domains, no differences were observed vs T-DM1 (Table). EQ-5D-5L VAS results were consistent with the GHS/QoL. Completion rates were comparable across arms and across PROs during treatment (T-DXd, n = 818; 58.4%-93.3%; T-DM1, n = 817; 61.2%-92.7%).Table: 539R0

Scale	TDD, median (95% CI), months T-DXd (n = 818)	T-DXd vs T-DM1 Hazard Ratio ^a (95% CI)	T-DM1 (n = 817)
EORTC QLQ-C30			
GHS	24.02 (22.64-NE)	23.66 (22.64-25.26)	1.15 (0.98-1.34)
Pain	24.11 (23.75-31.70)	22.74 (18.07-24.48)	0.77 (0.65-0.90)
Functioning domains:			
Social	24.15 (23.66-NE)	NE (26.58-NE)	1.29 (1.08-1.54)
Physical	30.09 (30.09-NE)	33.91 (NE-NE)	1.17 (0.95-1.43)

Scale	TDD, median (95% CI), months T-DXd (n = 818)	T-DXd vs T-DM1 Hazard Ratio ^a (95% CI)	T-DM1 (n = 817)
Emotional	26.25 (24.02-NE)	27.93 (27.93-NE)	1.02 (0.85-1.22)
EORTC QLQ-BR23			
Arm symptoms	23.13 (18.04-24.15)	17.54 (12.22-21.98)	0.82 (0.70-0.95)
Breast Symptoms	NE (26.48-NE)	NE (27.20-NE)	0.83 (0.66-1.03)
EQ-5D-5L-VAS	24.15 (23.36-29.80)	23.85 (23.36-26.58)	1.05 (0.89-1.24)

NE, not estimable.^aValues <1 favor T-DXd.

Conclusions

Overall HRQoL was similar with T-DXd and T-DM1. These findings suggest preservation of HRQoL with post-neoadjuvant T-DXd in eBC, supporting T-DXd as standard-of-care, with maintenance of GHS and functional domains, alongside previously demonstrated efficacy.

Clinical trial identification

NCT04622319.

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Disclosure

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