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Durvalumab (D) in combination with Bacillus Calmette-Guérin (BCG) for BCG-naïve, high-risk non-muscle-invasive bladder cancer (NMIBC): Final analysis of the phase III, open-label, randomised POTOMAC trial

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Background

Standard treatment for high-risk NMIBC is transurethral resection of bladder tumour (TURBT) followed by BCG induction + maintenance therapy, but early recurrence/progression are common (~40% of patients [pts] within 2 years). POTOMAC (NCT03528694) evaluated whether 1 year of D (anti-PD-L1 antibody) plus BCG induction + maintenance therapy (D+BCG [I+M]) improved outcomes vs BCG (I+M) alone in pts with BCG-naïve, high-risk NMIBC.

Methods

Eligible adult pts with BCG-naïve, local histologically confirmed high-risk NMIBC who had TURBT (complete resection; including pts with residual carcinoma in situ [CIS]) were randomised 1:1:1 to receive D+BCG (I+M), D+BCG induction only (D+BCG [I]), or BCG (I+M). D was administered intravenously (1500 mg Q4W for 13 cycles). Intravesical BCG was given weekly × 6 weeks (I) and as 3 weekly doses at 3, 6, 12, 18, and 24 months (M). Pts were stratified by higher risk papillary disease and CIS. Primary endpoint was investigator-assessed disease-free survival (DFS) with D+BCG (I+M) vs BCG (I+M).

Results

1018 pts were randomised: 339 to D+BCG (I+M), 339 to D+BCG (I), and 340 to BCG (I+M). Median follow-up was 60.7 months. Primary endpoint of DFS was met with a 32% reduction in risk of recurrence of high-risk disease or death by any cause for D+BCG (I+M) vs BCG (I+M) (HR 0.68; 95% CI 0.50–0.93; log-rank P=0.0154); 24-month DFS rates (95% CI) were 86.5% (82.2–89.8) for D+BCG (I+M) and 81.6% (76.9–85.3) for BCG (I+M). Secondary endpoint of DFS with D+BCG (I) vs BCG (I+M) was not statistically significant (HR 1.14; 95% CI 0.86–1.50). No evidence of overall survival detriment was seen with D+BCG (I+M) vs BCG (I+M) (descriptive analysis: HR 0.80; 95% CI 0.53–1.20). Grade 3/4 treatment-related adverse events (TRAEs) occurred in 21% of pts with D+BCG (I+M), in 15% with D+BCG (I), and in 4% with BCG (I+M). No TRAEs led to death.

Conclusions

D plus BCG (I+M) demonstrated a statistically significant and clinically meaningful improvement in DFS vs BCG (I+M), with a safety profile consistent with that of each therapy. POTOMAC supports 1 year of D in combination with BCG (I+M) as a new treatment option for pts with BCG-naïve, high-risk NMIBC.

Clinical trial identification

NCT03528694; EudraCT: 2017-002979-26.

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Legal entity responsible for the study

AstraZeneca.

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Disclosure

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