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766P

Prognostic effect of systemic immune-inflammation index (SII) in 987 patients with advanced/metastatic urinary tract carcinoma (mUTC) treated with atezolizumab in the real-world global SAUL study

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Background

SII has shown prognostic value in several tumour types. Low SII was associated with better outcomes in patients receiving immune checkpoint inhibitor therapy for lung cancer, but evidence in mUTC or atezolizumab-treated patients is lacking. We explored the prognostic role of SII in 997 atezolizumab-treated patients with mUTC in the single-arm SAUL study (NCT02928406).

Methods

Patients with mUTC, including populations typically excluded from clinical trials, received atezolizumab 1200 mg IV q3w until loss of clinical benefit or unacceptable toxicity. The primary endpoint was safety. SII was defined as platelet count x neutrophil/lymphocyte ratio. Outcomes were analysed using median and quartile cut-offs for SII. Specificity and sensitivity of SII were assessed via a receiver operating characteristic (ROC) curve.

Results

Median SII was 909; ROC suggested an optimal cut-off of 910. Patients with low (≤909) SII had better ECOG performance status than patients with high (>909) SII but there were no major imbalances between subgroups for age, prior treatment lines, smoking history, sex or PD-L1 status. Clinical outcomes were better in patients with low vs high SII (median overall survival [OS] 13.8 vs 4.8 mo, 1-year OS rate 54% vs 28%, objective response rate [ORR] 17% vs 10%). SII analysis by quartile showed a consistent pattern (Table). Patients with low vs high SII had longer median treatment duration (4.2 vs 1.5 mo), more grade 1/2 treatment-related adverse events (AEs; 47% vs 34%) but a similar incidence of grade ≥3 AEs (13% vs 12%). 12%).Table: 766P

Endpoint	SII[a]			
	≤Q1 (n=248)	>Q1–≤Q2 (n=245)	>Q2–≤Q3 (n=248)	>Q3 (n=246)
OS				
Median, mo (95% CI)	NE (NE–NE)	11.9 (9.5–NE)	7.8 (6.3–10.3)	3.3 (2.9–3.9)
6-mo, % (95% CI)	79 (74–84)	71 (65–76)	58 (51–64)	32 (26–38)
1-year, % (95% CI)	59 (52–65)	49 (42–56)	39 (32–46)	16 (11–21)
Median progression-free survival, mo (95% CI)	4.2 (3.9–5.9)	2.5 (2.2–4.0)	2.1 (2.1–2.3)	2.0 (1.9–2.1)
ORR, n (%) [95% CI]	48 (19) [15–25]	34 (14) [10–19]	37 (15) [11–20]	14 (6) [3–9]
Complete response, n (%) [95% CI]	12 (5) [3–8]	9 (4) [2–7]	7 (3) [1–6]	1 (<1) [0–2]
Disease control rate, n (%) [95% CI]	139 (56) [50–62]	113 (46) [40–53]	85 (34) [28–41]	57 (23) [18–29]

CI = confidence interval; NE = not estimable; Q = quartile. [a]Q1 = 559; Q2 = 909; Q3 = 1650.

Conclusions

Compared with high SII, low SII patients had better clinical outcomes and longer treatment duration, likely contributing to slightly increased low-grade AEs. The prognostic role of SII seen in atezolizumab-treated patients with mUTC is consistent with other tumour types.

Clinical trial identification

NCT02928406.

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