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Primary analysis of phase II results for cemiplimab in patients (pts) with locally advanced basal cell carcinoma (laBCC) who progress on or are intolerant to hedgehog inhibitors (HHIs)

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Background

There is no approved therapeutic option post-HHI for pts with laBCC. Cemiplimab, an antibody to PD-1, is an established therapy approved for treatment of advanced cutaneous squamous cell carcinoma (CSCC) in pts who are not candidates for curative surgery or curative radiation. Both BCC and CSCC are keratinocytic tumours with high mutational burden due to ultraviolet mutagenesis and are potentially amenable to immunotherapy. We present the primary analysis of the laBCC cohort from the pivotal phase II study of cemiplimab in the second-line (or greater) setting.

Methods

Pts with laBCC received cemiplimab 350 mg Q3W IV (for up to 93 weeks or until progression). The primary endpoint was objective response rate (ORR) by Independent Central Review (ICR). Secondary objectives included assessment of safety and tolerability, estimation of duration of response (DOR), progression-free survival (PFS) and overall survival (OS). ORR included two responses confirmed after the data cut-off date of 17 February 2020.

Results

84 pts were enrolled; 66.7% male; median age was 70 years (range: 42–89). Median follow-up was 15 months (range: 0.5–25). ORR per ICR was 31% (95% CI: 21–42), including five complete responses and 21 partial responses. Median DOR has not been reached; an estimated 85% of responses were ongoing at 12 months, per the Kaplan–Meier method. Median PFS and OS had not been reached. Estimated PFS for all patients was 19 months. The most common adverse events (AEs) were fatigue (30%), diarrhoea (24%) and pruritus (21%); 17% of patients discontinued treatment due to AEs. Median baseline tumour mutational burden (TMB) was 58.2 and 23.5 mutations/Mb among responding (n=18) and non-responding (n=38) pts, respectively, but responses occurred at all TMB levels. Exploratory biomarker analysis identified downregulation of major histocompatibility complex-I expression as a potential immune evasion mechanism in non-responding BCCs with high TMB.

Conclusions

Cemiplimab is the first agent to establish clinical benefit for pts with laBCC who progress on or are intolerant to HHI therapy, regardless of biomarker status.

Clinical trial identification

NCT03132636.

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