Background

Comparative therapy with agents that target the molecular and cellular mechanisms of resistance to checkpoint inhibitor therapy (CIT) is a rational approach to restoring the efficacy of CIT in patients with immunoresistant resistant non-small cell lung cancer (NSCLC).

Streptozocin is a glucokinase-competitive inhibitor (THI) that targets the membrane protein Glut 1, and induces apoptosis in Tumors and increases T cell uptake of glucose in patients with advanced NSCLC. The current study reports the findings of a phase Ib study in patients with advanced NSCLC who experienced progression of disease on or after treatment with CIT.

Methods

Patients received oral streptozocin with cetuximab and panitumumab. The study cohort included patients with advanced NSCLC who had progressed on any prior CIT (post-CIT) and had a measurable target lesion. The primary endpoint of the study was to assess objective response rate (ORR) by RECIST v1.1 with a CI of 12 weeks, whereas the secondary endpoints included duration of response (DR), time to treatment failure (TTF), and progression-free survival (PFS).

Results

As of 26 June 2017, among the 10 patients with available safety data, 9 patients (90%) had experienced at least one treatment-related adverse event (AE). The most frequent (≥20%) treatment related AEs of any grade are reported in Table 1. As of 26 June 2017, patient data were entered into the clinical trial database.