**BACKGROUND**

- EGFR is frequently overexpressed on the cell surface in solid tumors, making it an ideal target for therapeutic antibodies that trigger antibody-dependent cellular cytotoxicity (ADCC) and cellular phagocytosis (ADCP).
- EGFR inhibitor responses are often diminished by existing or developing immune resistance.
- Engaging innate immune cells can potentially overcome these limitations and therapies acting independently of EGFR signaling are needed.

**AMF24**

- AMF24 is a bispecific Innate Cell Engager (ICE) derived from the Redirected Optimized Cell Killing (ROCK) antibody platform.
- AMF24 is a tetrafunctional Fc-D16A-specific IgG1-sFc fusion antibody (scFv-Fc) with a silenced IgG1 Fc.

**AFM24 MONOTHERAPY**

**PHASE 1 DOSE ESCALATION STUDY DESIGN**

- Initiated in 2020, this first-in-human Phase 1a open-label, non-randomized, multi-center study (NCT04259450) was designed to establish the MTD and/or the RP2D of AMF24.
- All advanced metastatic solid malignancies known to express EGFR were eligible.
- Disease progression after anti-cancer therapy, with documented progression during or following treatment.
- Majority of the cohort had CRC (37%) or NSCLC (23%).

**Primary endpoint**: Dose-limiting toxicities.

**Secondary endpoints**: Safety, preliminary efficacy, duration of response, pharmacokinetics, and immunogenicity.

**RESULTS**

- As of August 2022, a well-managed safety profile was observed in 36 patients treated with AMF24.
- The median (range) number of prior lines was 4 (2–11) and the number of AMF24 doses administered was 8 (1–37).
- The most frequent grade 3–4 toxicities were fatigue (23%) and neutropenia (22%).
- Tumor responses were observed in 11 of 36 patients (31%).
- Five patients (14%) had stable disease (SD) and one patient (3%) had a partial response (PR).
- Of the 11 patients with SD, 7 had EGFR mutations (1304insC, L858R, 19del, G719X/S, 719X/Q).
- All patients with SD had stable or increasing levels of circulating AFM24.

**CONCLUSIONS**

- Though AMF24 does not directly bind to adaptive immune cells, an increase in Ki67 staining in tumor cells was observed.
- Circulating levels of cytokines such as TNF-α and IL-6 were upregulated, indicating activation of immune cells.
- The adaptive immune response is thought to contribute to the antitumor activity of AMF24.

**REFERENCES & ACKNOWLEDGEMENTS**

- Data from clinical studies conducted by Affimed GmbH and additional assessment was provided byanderor MedCrunch Ltd.
- For further information, please contact Dr Hintzen (G.Hintzen@affimed.com).