Obsidian Therapeutics Announces Multiple Presentations at the American Association for Cancer Research Annual Meeting

April 25, 2025

CAMBRIDGE, Mass., April 25, 2025 – Obsidian Therapeutics, Inc., a clinical-stage biotechnology company pioneering engineered cell and gene therapies, today announced the publication of 3 abstracts for poster presentations at the American Association for Cancer Research (AACR) Annual Meeting 2025. In addition to a trial-in-progress study design update on the ongoing multicenter study Agni-01 (NCT06060613), Obsidian will share preclinical data from our cytoDRiVE® platform demonstrating spatiotemporal regulation of membrane-bound IL12 in syngeneic solid tumor models and preclinical data on OBX-115 TIL phenotype starting from NSCLC tumor tissue.

Obsidian is presenting new preclinical data from its cytoDRiVE regulation platform, further demonstrating the ability to unlock the therapeutic window of potent cytokines and broaden the reach of armored cell therapies. The poster for abstract LB025 demonstrates the application of Obsidian's regulatable cytoDRiVE platform to enhance antigen-responsive ("spatial") promoter-induced activation by adding a critical pharmacologically regulatable ("temporal") signal to exert tight "spatiotemporal" control over IL12 expression[1], resulting in a positive impact on safety and tumor control in syngeneic solid tumor models.

Obsidian will also present preclinical data from a multimodal phenotyping analysis comparing OBX-115 TIL generated with its proprietary manufacturing process to conventional, non-engineered TIL using NSCLC tumor samples. The poster for abstract LB359 provides evidence that, as observed with melanoma[2], the OBX-115 process generates a minimally exhausted, CD8+ enriched and memory "stem-like" T-cell phenotype. Additionally, the tumor reactive gene signature analysis showed that the drug product is enriched for putative tumor-reactive T-cell clonotypes.

Obsidian Posters at AACR 2025:

- Spatiotemporally regulated expression of membrane-bound interleukin 12 (mbIL12) for armored adoptive cell therapy (ACT) shows strong antitumor activity in syngeneic solid tumor models without overt toxicity (Abstract LB025)
    - Presenting Author: Ross T, Obsidian Therapeutics
    - Poster: Sunday, April 27, 2:00-5:00pm CT
- OBX -115 TIL from non-small cell lung cancer (NSCLC) are enriched for putative tumor-reactive, stem-like T cells with enhanced tumor cytotoxicity: Results from multimodal phenotyping analysis (Abstract LB359)
    - Presenting Authors: Schoenfeld AJ, Memorial Sloan Kettering Cancer Center
    - Poster: Tuesday, April 29, 2:00-5:00pm CT
- Trial in progress: Phase 1/2 study of OBX-115 engineered tumor-infiltrating lymphocyte (TIL) cell therapy in patients with advanced solid tumors (Abstract CT244)
    - Presenting Author: Shoushtari AN, Memorial Sloan Kettering Cancer Center
    - Poster: Tuesday, April 29, 2:00-5:00pm CT

[1] Smith et al., SITC 2024 (Abstract 463).

[2] Bernatchez et al., ISCT 2024 (Abstract 909).

About OBX-115

Obsidian's lead investigational cytoTIL15™ program, OBX-115, is a novel engineered tumor-derived autologous T cell immunotherapy (tumor-infiltrating lymphocyte [TIL] cell therapy) armored with pharmacologically regulatable membrane-bound IL15 (mbIL15). OBX-115 has the potential to become a meaningful therapeutic option for patients with advanced or metastatic melanoma and other solid tumors by leveraging the expected benefits of mbIL15 and Obsidian's proprietary, differentiated manufacturing process to enhance persistence, antitumor activity, and clinical safety of TIL cell therapy. Obsidian is investigating OBX-115 in the phase 1/2 Agni-01 multicenter trial in patients with advanced solid tumors (NCT06060613).

About Obsidian Therapeutics

Obsidian Therapeutics, Inc. is a clinical-stage biotechnology company pioneering engineered cell and gene therapies to deliver transformative outcomes for patients with intractable diseases. Obsidian's proprietary cytoDRiVE® technology is designed to precisely regulate the timing and level of protein function by using FDA-approved small-molecule drugs. Obsidian is headquartered in Cambridge, MA. For more information, please visit www.obsidiantx.com and follow us on LinkedIn.

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