Obsidian Therapeutics to Present Preclinical Data Supporting Novel Application of cytoDRiVE® Platform at the American Society of Gene and Cell Therapy Annual Meeting

April 28, 2025

CAMBRIDGE, Mass., April 28, 2025 – Obsidian Therapeutics, Inc., a clinical-stage biotechnology company pioneering engineered cell and gene therapies, today announced the publication of an abstract with preclinical data from their cytoDRiVE® platform for poster presentation at the American Society of Gene and Cell Therapy (ASGCT) Annual Meeting 2025.

Obsidian will present novel applications of its cytoDRiVE platform, demonstrating the breadth and versatility of their regulation technology. To date, cytoDRiVE technology has been used to successfully regulate the timing and level of several different classes of therapeutic protein via fusion to drug-responsive domains (DRDs).[1] In OBX-115, Obsidian's lead clinical TIL program which has demonstrated promising activity in patients with ICI-resistant advanced melanoma[2], this technology enables regulation of membrane-bound IL15 using the small-molecule drug acetazolamide.

The poster for abstract AMA30 expands beyond the direct DRD-fusion approach leveraged to-date, providing proof-of-concept for a novel approach whereby regulation of an artificial transcription factor is used to enable gene-ON and gene-OFF states with ligand binding. This approach unlocks numerous additional applications for cytoDRiVE, including the ability to regulate secreted proteins and expression of mRNA or siRNA. These capabilities become important in the context of gene and cell therapies where precise and variable genetic control is needed to manage disease, and where repeat dosing of other complex biologics is challenging.

Details of the poster presentation are as follows:

- Title: Drug-responsive domains coupled with cognate small-molecule ligands drive synthetic gene-ON or -OFF circuits to regulate expression of therapeutic proteins (Abstract AMA30)
- Presenting Author: Michael Gallo (Obsidian Therapeutics)
- Poster: Tuesday, May 13, 6:00-7:30pm CT
- Abstract: AMA30

[1] Inniss et. al. Commun Biol 2025

[2] Chesney, ASCO 2025

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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