



FLX BIO TO HIGHLIGHT NEW PRECLINICAL DATA FROM CCR4 AND USP7 PROGRAMS AT THE AMERICAN ACADEMY FOR CANCER RESEARCH ANNUAL MEETING

SOUTH SAN FRANCISCO, Calif. – April 12, 2018 – FLX Bio, Inc., a biopharmaceutical company focused on the discovery and development of oral small-molecule drugs to activate the immune system, today announced that preclinical data supporting two of the company’s oncology programs will be presented at the American Association for Cancer Research (AACR) Annual Meeting to be held April 14 through April 18, 2018 in Chicago, IL.

“The data that will be presented at AACR provides important validation for the clinical development strategy of FLX475, our novel CCR4 antagonist, as well as support for further development of our USP7 inhibitors. We now have preclinical data validating that tumors positive for the Epstein-Barr Virus (EBV⁺) may be an ideal target for FLX475. We believe that pairing a biomarker-based patient selection protocol with both single agent and combination studies of FLX475 supports our precision medicine strategy for clinical development,” said Dirk G. Brockstedt, Ph.D., Senior Vice President of Biology for FLX Bio. “In addition, the data presented on our USP7 inhibitors validate the robust mechanisms of action for an anti-cancer response and support further preclinical and clinical development.”

Presentation Title (Abstract #4752): [EBV-Associated Tumors Increase Regulatory T Cell Recruitment via CCR4 Ligand Expression and are a Promising Indication for Treatment with Small Molecule CCR4 Inhibitors](#)

On Tuesday, April 17, Gene Cutler, Ph.D. and Oezcan Talay, Ph.D., both of FLX Bio will present data demonstrating that tumors that test positive for Epstein-Barr Virus (EBV⁺) show increased expression of CCL22 and CCL17, the two ligands of the CCR4 receptor on regulatory T cells. EBV⁺ tumors produce high levels of CCL22 and CCL17, which recruit regulatory T cells to the site of the tumor, thereby suppressing the immune response to allow the tumor to grow unchecked. EBV⁺ tumors include nasopharyngeal carcinoma, a proportion of classical Hodgkin’s Lymphoma and gastric carcinoma. The data show that expression of the EBV gene LMP1 in human EBV⁺ B cells drives expression of CCL22. This expression drives the recruitment of regulatory T cells, a reaction that was blocked with a small-molecule CCR4 antagonist, potentially providing a new therapeutic treatment for patients with EBV⁺ cancers. The data demonstrate that patients with EBV⁺ tumors may be particularly responsive to treatment with FLX475, FLX Bio’s lead CCR4 antagonist.

Presentation Title (Abstract #2915): [Discovery and Optimization of Potent and Selective Inhibitors of USP7 to Enhance Anti-Tumor Immunity and Target Tumor Growth](#)

On Monday, April 16, Yamini Ohol, Ph.D., of FLX Bio will present data demonstrating *in vitro* and *in vivo* data for a series of potent, highly-selective bioavailable small molecule inhibitors of

USP7. USP7 is a deubiquitinase that regulates the levels of multiple proteins involved in cancer progression and the immune response. The preclinical results demonstrate that FLX Bio's USP7 inhibitors activate p53 in cell-based assays, kill tumor cells and activate the immune system, indicating that these small molecule compounds may provide benefit as anti-cancer therapeutics via multiple mechanisms of action.

About FLX475

FLX475 is a best-in-class oral, small molecule antagonist of CCR4. In preclinical studies, FLX475 inhibited tumor growth and increased tumor regression as a single agent. In addition, FLX475 enhanced the antitumor effects of various checkpoint inhibitors including anti-PD-L1 and anti-CTLA4 antibodies as well as immune agonists such as anti-4-1BB. FLX475 also has the potential to enhance cell-based immunotherapies such as CAR-T and cancer vaccines. Unlike antibodies to CCR4, FLX475 selectively blocks the recruitment of regulatory T cells to the tumor site and does not deplete cells beneficial to an anti-tumor response or regulatory T cells in healthy tissue such as blood, spleen and skin cells. In addition to the study ongoing in healthy volunteers, FLX Bio intends to initiate a clinical trial of FLX475 alone and in combination with a checkpoint inhibitor in patients with cancer, including patients with EBV⁺ tumors, in 2018.

About USP7

Ubiquitin specific protease 7 (USP7) impacts several important cancer pathways, changing the levels of oncogenes and tumor suppressors including p53 and modulating the immune system through targets such as Tip60 and FoxP3. USP7 is an enzyme that removes a tag called ubiquitin from proteins and stabilizes the levels of those proteins in the cell. For example, through the stabilization of MDM2, USP7 causes p53 levels to go down, thus allowing cancer cells to proliferate. FLX Bio has also shown that key aspects of inflammatory responses are modulated by its small-molecule USP7 inhibitors – an effect that may be beneficial to targeting cancers. FLX Bio expects to select a preclinical USP7 inhibitor this year.

About FLX Bio

FLX Bio, Inc. is an immuno-oncology company focused on the discovery and development of orally-available, small molecule drugs to activate the immune system and eradicate cancer. Using its integrated immuno-oncology drug discovery platform, FLX Bio's small molecule compounds specifically target proteins and pathways important for regulatory T cells or myeloid cells within the tumor microenvironment. Its lead candidate FLX475, a best-in-class CCR4 inhibitor, is currently in Phase 1 development and has the potential to be used alone or in combination with checkpoint inhibitors to treat a variety of cancers. The company employs a precision medicine strategy for prospective patient selection in clinical studies, applying its robust computational and translational biology capabilities to identify key biomarkers that should maximize clinical response and increase the probability of clinical success. In addition,

FLX is developing small molecule inhibitors of GCN2, a stress response kinase that detects amino acid starvation in the tumor microenvironment, and USP7, a therapeutic target involved in multiple cancer pathways.

Located in South San Francisco, Calif., and funded by leading investors, including The Column Group (TCG), Kleiner Perkins (KP), Topspin Partners, GV (formerly Google Ventures) and Celgene Corporation, FLX Bio has assembled a leadership team and advisory group with a proven track record of success and team of scientists with substantial knowledge and expertise in drug discovery and translational areas essential to execute on this approach. For more information, please visit www.flxbio.com.

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