



Scopus BioPharma's Subsidiary — Duet BioTherapeutics — Presents Compelling New Data for a Novel Treatment for Malignant Glioma at 38th Annual Meeting of the Society for Immunotherapy of Cancer

DUET-102 in Combination with PD-1 Blockade Demonstrates Significant Anti-Tumor Activity in Models of Malignant Glioma

Data Suggests Benefits of Combinations of DUET-102 with Other T-Cell Based Immunotherapies, such as CAR-Ts

New York, New York, November 7, 2023 – [Scopus BioPharma Inc.](#) (OTCQB: “SCPS”) and its majority-owned subsidiary, Duet BioTherapeutics Inc., presented compelling new data that DUET-102 in combination with PD-1 blockade demonstrates significant anti-tumor activity in models of malignant glioma.

The new data was presented on November 4, 2023 at the 38th Annual Meeting of the Society for Immunotherapy of Cancer (“SITC”) by Marcin Kortylewski, Ph.D. Dr. Kortylewski, Professor of Immuno-Oncology at City of Hope, is the Co-Founder and Senior Scientific Advisor of Duet. Duet is developing novel immunotherapies to overcome treatment-resistant cancers.

DUET-102 is a double-stranded antisense oligonucleotide (“ASO”) STAT3 inhibitor linked to a TLR9 immune activator being developed for the treatment of glioma.

Glioma is a common type of tumor originating in the glial cells of the brain. Approximately 20,000 patients are diagnosed in the United States annually, with such patients having a 5-year survival rate of less than 7%, reflecting the need for new therapies to combat this disease.

Dr. Kortylewski presented the data in a poster titled “*Reprogramming of Tumor-associated Myeloid Cells by TLR9-targeted STAT3 Antisense Oligonucleotides Sensitizes Malignant Glioma to PD1-specific Immunotherapy*”.

The featured data shows:

- Intracranially injected DUET-102 sensitizes malignant glioma to systemic PD-1 blockade, triggering complete rejection of both orthotopic GL261 and PD-1 refractory QPP8 tumors in the majority of treated mice.
- DUET-102 creates ideal conditions for PD-1 blockade to recruit cancer-killing effector CD8 positive T cells into the tumor by activating intratumoral dendritic cells, M1 macrophages, and microglia, while concurrently reducing immunosuppressive tumor-associated M2 macrophages, resting microglia, and regulatory T cells.

- DUET-102, as a monotherapy, inhibited tumor growth and extended survival of mice in U251, GL261, and QPP8 models of glioma.
- DUET-102 was well tolerated and demonstrated unique suitability for intracranial injection, with optimized activity and tolerability in the brain compared to single-stranded ASO designs.

Dr. Kortylewski stated, “DUET-102’s unique ability to release immunosuppression around a tumor, creating an environment in which PD-1 blockade can more effectively recruit cancer-killing CD8 positive T cells into glioma without lymphocyte exhaustion, is critical to killing glioma tumor cells. These new data suggest there is compelling potential for significant anti-tumor activity in gliomas utilizing a combination of DUET-102 with PD-1 inhibitors, such as Keytruda (Merck), Opdivo (Bristol-Myers Squibb) and Libtayo (Regeneron). Furthermore, the effectiveness of DUET-102 in releasing immunosuppression may enhance the efficacy of other T-cell based immunotherapies in the context of glioma, including potential combinations of DUET-102 with adoptive cell transfer therapies, such as CAR T-cell therapies.”

Alan Horsager, Ph.D., President and Chief Executive Officer of Duet, stated, “These new data clearly show the synergistic potential of combining DUET-102 and PD-1 blockade for the treatment of glioma. There is an acute need for new treatment options for glioma, which have seen no significant advances in the past decade. Our new data demonstrate potent anti-tumor activity in malignant glioma. We are extremely excited about the significant potential of DUET-102 to be a game-changing and much-needed new treatment option for glioma patients.”

Dr. Kortylewski added, “DUET-102 is a novel CNS-specific modification of Duet’s lead drug candidate, DUET-101, which is a single-stranded, ASO-based STAT3 inhibitor linked to a TLR9 immune activator being developed for the treatment of advanced solid tumors.”

Dr. Horsager further stated, “These new data for DUET-102, taken together with the existing data for DUET-101, further validate the scientific underpinnings and extensive range of opportunities for our proprietary bifunctional oligonucleotide therapeutics. DUET-101 has demonstrated significant activity in a broad array of difficult to treat and genetically distinct cancer models, including metastatic prostate cancer, renal cancer, bladder cancer, and head and neck cancers. We are enthusiastic about the compelling potential of our immuno-oncology pipeline.”

About Scopus BioPharma

Scopus BioPharma Inc. is a biotechnology company developing transformational therapeutics for serious diseases with significant unmet medical need. Scopus currently conducts substantially all of its development efforts through Duet BioTherapeutics, its majority owned and controlled subsidiary. The Company may also seek to identify additional compelling technologies for potential acquisition, in-licensing and/or other similar transactions.

About Duet BioTherapeutics

Duet BioTherapeutics Inc. is a biotechnology company developing novel immunotherapies to overcome treatment-resistant cancers. Duet's therapeutic candidates selectively and simultaneously activate TLR9, which stimulates the body's immune system, and inhibit STAT3, which counteracts critical tumor defense mechanisms. Duet is currently pursuing therapeutic candidates for the treatment of solid tumors and hematological malignancies using a distinct set of oligonucleotide inhibitors. These inhibitors include antisense, or ASO; small-interfering RNA, or siRNA; and decoy technologies. DUET-101, Duet's IND-ready lead candidate, combines CpG with a STAT3-inhibiting ASO and is being developed for the treatment of advanced solid tumors.

Forward-Looking Statements

This press release may include forward-looking statements that involve risks and uncertainties. Forward-looking statements are statements that are not historical facts. Such forward-looking statements are subject to risks (including those set forth in the Company's Form 10-K for the fiscal year ended December 31, 2022, as amended, filed with the U.S. Securities and Exchange Commission) and uncertainties which could cause actual results to differ from the forward-looking statements. The Company expressly disclaims any obligations or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with respect thereto or any change in events, conditions or circumstances on which any statement is based. Investors should realize that if our underlying assumptions for the projections contained herein prove inaccurate or that known or unknown risks or uncertainties materialize, actual results could vary materially from our expectations and projections. Further, there can be no assurance that the Company will identify and/or consummate any transaction relating to any additional technologies. The Company's capital resources are extremely limited and the Company has an immediate need for additional financing. Failure to obtain sufficient financing in the immediate future will have a material adverse effect on the Company, including possibly requiring the Company to substantially curtail or cease its operations.

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