For Immediate Release

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New GBM Study PRESERVE Receives $250,000 Grant from NICO Corporation

Study designed to gain a unique scientific understanding of GBM tumor heterogeneity

BOSTON (March 14, 2023) – NICO Corporation has awarded a $250,000 Investigator Initiated Study (IIS) grant to Manmeet Ahluwalia, MD, MBA, FASCO, deputy director, chief scientific officer and chief of solid tumor medical oncology at Miami Cancer Institute, to improve the understanding of glioblastoma (GBM) heterogeneity through immediate intraoperative biological preservation of brain tissue using the NICO Myriad® and Automated Preservation System® (APS). NICO is participating in the 4th Annual Glioblastoma Drug Development Summit in Boston beginning today where they will showcase its Myriad and APS technologies.

PRESERVE GBM is a two-year, multi-center study with the primary objective of assessing important scientific differences in the heterogeneity of GBM tumors from 120 patients. The study uses NICO's novel automated technology to immediately and biologically preserve each GBM sample in the operating room, while separating each zone of the tumor to gain a better understanding of the regional differences in tumor heterogeneity. Three tumor regions will subsequently be compared and assessed for diagnostic differences using RNA-sequencing, small RNA-sequencing, and DNA methylation results.

Ahluwalia stated in his study protocol that the ability to obtain quality tumor tissue to further understand the genetic profile of brain tumors – especially GBM, the deadliest type of brain cancer with complex tumor heterogeneity – has wide-raging implications for understanding treatment resistance and therapeutic failures and for developing new drugs to deliver more effective precision medicine therapies.

"The goal of PRESERVE is to contribute new and important data supporting recent changes in World Health Organization guidelines to include molecular diagnostics in disease classification and treatment," said Ahluwalia. "It will augment the GLASS Consortium findings on the importance of molecular profiling and clinical annotation of tumors."

The PRESERVE GBM study – Improving Understanding of Glioblastoma Through Preservation of Biologically Active Brain Tissue – will build on earlier study data recently submitted for publication and led by Ahluwalia during his tenure at the Cleveland Clinic. His earlier work assessed the viability, volume and integrity of tumor tissue after collection in 20 patients with glioblastoma using the NICO Myriad and APS.

"NICO technologies allow us to standardize and limit variables in the tissue collection and preservation process, which may allow for more accurate genomic, transcriptomic, and proteomic analysis in the lab and ultimately more tailored therapies for each patient," said Michael McDermott, MD, neurosurgeon and chief medical executive of Baptist Health Miami Neuroscience Institute.

"New experiments are giving researchers interesting data into mutations that occur in an individual brain tumor cell compared to a normal cell," Ahluwalia said. "We still need more data but obtaining multiple

samples of the tumor from various regions during surgery will allow researchers to better understand these differential changes and hopefully lead to new discoveries in the diagnosis and treatment of GBM and other brain tumors."

The NICO IIS grant program is dedicated to supporting novel pre-clinical and clinical research efforts related to improved patient and economic outcomes using NICO technologies. The program supports physicians and researchers across a wide range of neuro-specialties committed to building clinical and scientific data to achieve better outcomes for patients and healthcare providers, as well as expanding the body of evidence for vascular, tumor and oncology clinical practices. Learn more about the IIS program, clinical study areas of interest and how to apply for a grant.

NICO has been a leader in supporting development of scientific evidence for safe and novel approaches to brain disorders and expanding clinical research efforts in pursuit of improved patient outcomes using minimally invasive brain surgery techniques. All projects supported by this program are conducted by the applicant(s) and their respective affiliate institution(s); NICO is neither involved in collecting information, conducting research, or in the publication of any study project findings.

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