SanBio Announces Publication Comparing Outcome Measures for Persons with Chronic Traumatic Brain Injury in *Expert Review of Neurotherapeutics*

Tokyo, Japan and Mountain View, Calif. – November 1, 2021 - The SanBio Group (SanBio Co., Ltd. of Tokyo, Japan , SanBio, Inc. of Mountain View, California, US, and SanBio Asia Pte. Ltd. of Singapore) (TOKYO:4592), hereby announce that data comparing outcome measures for persons with traumatic brain injury (TBI) living with chronic motor deficits was published in *Expert Review of Neurotherapeutics*.

“Success in clinical trials in chronic TBI is challenging to define and measure; therefore, this publication is an important advancement for the field of research as it relates to the assessment of persons with motor deficits resulting from a TBI,” said Michael A. McCrea, Co-Director, Center For Neurotrauma Research; Professor, Department Of Neurosurgery, Medical College Of Wisconsin, Milwaukee, USA; and lead author for the publication. “This study supports the use of Disability Rating Scale (DRS) and Fugl-Meyer Motor Scale (FMMS) in the evaluation of long-term functional outcomes and motor impairment in future clinical trials of persons with chronic motor deficits secondary to TBI.”

While acute TBI is widely assessed using Extended Glasgow Outcome Scale (GOS-E), this scale is less well-defined for persons who have chronic, or long-term, motor deficits as a result of their injury. The publication, entitled, “Determining minimally clinically important differences (MCIDs) for outcome measures in patients with chronic motor deficits secondary to traumatic brain injury”, determined MCIDs for DRS and FMMS. MCID is defined as the smallest change on a measure that is reliably associated with a meaningful change in a patient's clinical status, function, or quality of life.

Establishing MCIDs for the DRS and FMMS in chronic TBI provides improved precision for assessing long-term functional outcomes and motor impairment, respectively, as compared to the widely used GOS-E Scale, which is most appropriate for use in acute TBI. The findings of this study support the use of DRS and Fugl-Meyer Scales in the evaluation of clinical outcomes, and define the amplitude of clinically meaningful improvement for future chronic TBI clinical trials.

“At SanBio, we are passionate about improving the lives of persons living with long-term motor deficits as a result of a TBI or stroke. This publication will help to overcome one of the most challenging areas of clinical research: determining the minimal improvement that would be clinically meaningful in patients with chronic motor deficit. We would like to extend our gratitude to the physicians and rehabilitation specialists who supported this

important work," added, Bijan Nejadnik, M.D., Corporate Officer, Chief Medical Officer and Head of Research.

This retrospective analysis is from SanBio's 1-year, double-blind, randomized, surgical sham-controlled, Phase 2 'STEM cell therapy for TRAumatic brain injury' (STEMTRA) trial (NCT02416492), in which persons with chronic motor deficits secondary to TBI (n=61) underwent intracerebral stereotactic implantation of SB623 or sham surgery. MCIDs for DRS and FMMS were triangulated with anchor-based, distribution-based, and Delphi panel estimates. The published Delphi panel results are available here. The MCIDs for DRS and FMMS were: 1) −1.5 points for the Disability Rating Scale; 2) 6.2 points for the Fugl-Meyer Upper Extremity Subscale; 3) 3.2 points for the Fugl-Meyer Lower Extremity Subscale; and 4) 8.4 points for the Fugl-Meyer Motor Scale in persons with chronic motor deficits secondary to TBI.

The full publication can be accessed here.

About the STEM cell therapy for TRAumatic brain injury (STEMTRA) Trial

STEMTRA was a 12-month, Phase 2, randomized, double-blind, surgical sham-controlled, global trial evaluating the efficacy and safety of SB623 compared to sham surgery in patients with stable chronic neurological motor deficits secondary to TBI (https://clinicaltrials.gov identifier: NCT02416492). In this study, SB623 cells were implanted directly around the site of brain injury. The primary endpoint was mean change from baseline in FMMS score at six months to measure changes in motor impairment.

To be eligible for this trial, patients (ages 18-75) must have been at least 12 months post-TBI and had a Glasgow Outcome Scale extended (GOS-E) score of 3-6 (e.g., moderate or severe disability). The STEMTRA trial treated 61 patients from 27 sites in the U.S., Japan and Ukraine.

In this study, SB623 met its primary endpoint, with patients treated with SB623 achieving an average 8.3-point improvement from baseline in the FMMS, versus 2.3-points in the control group, at 6 months (p=0.040). No new safety signals were identified, and the most commonly reported adverse event was headaches. The Group, based on the study results, aims to apply for manufacture and marketing approval for SB623 as a regenerative medicine product by utilizing Japan's conditional and time-limited approval system for regenerative medicine products.

About Traumatic Brain Injury

Traumatic brain injury (TBI) is one of the leading causes of death and disability worldwide. The estimated global incidence of acute TBI during 2016 was 27 million cases, and the estimated global prevalence of chronic impairment secondary to TBI was 55.5 million cases. Overall, TBI and long-term motor deficits secondary to TBI significantly impair person's self-care, employability, and quality of life, and are major burdens on healthcare systems worldwide. In the United States, approximately 43% of surviving hospitalized

persons with TBI experience long-term motor deficits, with 5.3 million people estimated to live with long-term motor deficits secondary to TBI.

About SB623

SB623 is a proprietary, cell-based investigational product made from allogeneic modified and cultured adult bone marrow-derived mesenchymal stem cells (MSCs) that undergo temporary genetic modification. Implantation of SB623 cells into injured nerve tissue in the brain is expected to trigger the brain's natural regenerative ability to recover lost motor functions. SanBio is preparing to file a Biologics License Application with the Pharmaceuticals and Medical Devices Agency in Japan for SB623 for the treatment of chronic motor deficits resulting from TBI with STEMTRA results.

About SanBio Group (SanBio Co., Ltd., SanBio, Inc. and SanBio Asia Pte. Ltd.)

SanBio Group is engaged in the regenerative cell medicine business, spanning research, development, manufacture, and sales of regenerative cell medicines. The Company's propriety regenerative cell medicine product, SB623, is currently being investigated for the treatment of several conditions including chronic neurological motor deficit resulting from traumatic brain injury and stroke. The Company is headquartered in Tokyo, Japan, Mountain View, California, US, and SanBio Asia Pte. Ltd. of Singapore), and additional information about SanBio Group is available at https://sanbio.com/en/

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