

RATULS Research Study of Robot-Assisted Training Achieves 50% Target Enrollment: Landmark Study Marks the Largest Trial Conducted to Date in Robotic Rehabilitation

- *The Robot Assisted Training for the Upper Limb after Stroke (RATULS) study achieves 50% enrollment into a multicenter, randomized controlled research trial to evaluate the clinical and cost effectiveness of robot-assisted training in post-stroke care*
- *Study funded by the NIHR Health Technology Assessment (HTA) Programme conducted throughout the United Kingdom and employs the Bionik Laboratories InMotion Upper Extremity Robotic Gym*
- *Completion of enrollment of the 720 stroke patients expected before the end of 2018 with results to be published in 2019*

TORONTO and BOSTON, June 14, 2016 (GLOBE NEWSWIRE) -- [Bionik Laboratories, Inc.](#) (OTCQX:BNKL) ("Bionik" or the "Company"), a global pioneering robotics company focused on providing rehabilitation solutions to individuals with neurological disorders, announced today that the study led by Newcastle University under the auspices of the National Institute for Health Research (NIHR) HTA Programme has achieved 50 percent enrollment for its multicenter, randomized controlled [RATULS](#) trial. The National Institute of Health Research (NIHR) is the research arm of the NHS in the UK which specifically commissioned this study having identified that robotic rehabilitation was necessary to further research. The investigating team expects to complete the study in 2018 and publish the results in 2019.

[Newcastle University Professor of Stroke Care, Helen Rodgers](#), Principal Investigator of the study stated, "This landmark study is very important as it gives us the opportunity to evaluate the clinical and cost effectiveness of robotic rehabilitation in a clinical setting with a typical patient group. Importantly, the results of this study will inform the provision of robotic-assisted rehabilitation in clinical practice. It is critical that new health technologies are rigorously and independently evaluated as this will enable us to determine the effectiveness of robotic-assisted rehabilitation which has the potential to revolutionize rehabilitation treatment programs for stroke patients."

RATULS is a multicenter, randomized controlled trial to determine the clinical effectiveness of robot-assisted training upon upper limb function after stroke and is expected to enroll 720 participants. The stroke patients with reduced arm function who enroll in the study are randomly assigned to one of the three groups: robot-assisted training, enhanced upper limb therapy, or usual NHS rehabilitation. Robot-assisted training will be compared to an enhanced upper limb therapy program consisting of repeated practice of everyday activities using the arm and usual NHS rehabilitation.

The study consists of three therapy sessions per week lasting approximately one hour using the InMotion robotic gym system, involving training of the arm, wrist and hand. Effectiveness of robot-assisted training will be evaluated by comparing the upper limb function of patients in each randomization group at 3 and 6 months. The primary outcome of the study is the evaluation of improvement for upper limb function at 3 months after randomization as measured by the Action Research Arm Test (ARAT). Secondary outcomes of the study include a number of improvements of upper limb function, as measured by evaluations including the Fugl-Meyer Test, Barthel ADL Index and the Stroke Impact Scale, as well as health economics, and qualitative patient and clinician satisfaction.

[Hermano Krebs, Ph.D., M.S., Chief Science Officer](#) of Bionik added, “We are thrilled to be a part of this landmark study, the largest of its kind to date. The RATULS research of robot-assisted therapy is important in the clinical development of the Bionik product pipeline as we aim to offer the best rehabilitation therapies for those affected by neurological disorders. For patients who suffer from a stroke, it is reported that 85% of those patients experience some loss in the ability to use the arm and hand. We believe that the InMotion systems offer people an effective opportunity for therapy to address the decrease in function they experience.”

The study is being funded and conducted under the leadership of Newcastle University and is being funded by the NIHR Health Technology Assessment Programme. Enrollment for this study was initiated in April 2014. The investigating team plans to present the results at a scientific congress in 2019 and publish the data from this study in a scientific journal.

For more information about the study, please visit <http://research.ncl.ac.uk/ratuls/forpatients/>.

About InMotion Robot-Assisted Training

InMotion robot-assisted training consists of a series of visually-guided, visually-evoked computer games designed to track and challenge patients to complete movement exercises for the arm, wrist and hand. The InMotion systems are designed to gently assist patients with the movements that they are unable to complete alone and are used in an adaptive progressive fashion to challenge the patient to do his/her best. If patients are able to perform a movement then the robot reduces the level of assistance. Otherwise robot-assisted training enables weak or paralyzed patients to move their arm, wrist and hand to complete the task assisting the patients in their recovery.

About the National Institute for Health Research Health Technology Assessment Programme

This project is funded by the National Institute for Health Research (NIHR) Health Technology Assessment (HTA) programme (project number 11/26/05). This article presents independent research funded by the National Institute for Health Research (NIHR). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

1. The National Institute for Health Research Health Technology Assessment (NIHR HTA) Programme funds research about the effectiveness, costs and broader impact of health technologies for those who use, manage and provide care in the NHS. It is the largest NIHR programme and publishes the results of its research in the Health Technology Assessment journal, with over 700 issues published to date. The journal's 2014 Impact Factor (5.027) ranked it two out of 85 publications in the Health Care Sciences and Services category. All

issues are available for download, free of charge, from the website. The HTA Programme is funded by the NIHR, with contributions from the CSO in Scotland, NISCHR in Wales, and the HSC R&D Division, Public Health Agency in Northern Ireland. www.nets.nihr.ac.uk/programmes/hta

2. The National Institute for Health Research (NIHR) is funded by the Department of Health to improve the health and wealth of the nation through research. Since its establishment in April 2006, the NIHR has transformed research in the NHS. It has increased the volume of applied health research for the benefit of patients and the public, driven faster translation of basic science discoveries into tangible benefits for patients and the economy, and developed and supported the people who conduct and contribute to applied health research. The NIHR plays a key role in the Government's strategy for economic growth, attracting investment by the life-sciences industries through its world-class infrastructure for health research. Together, the NIHR people, programmes, centres of excellence and systems represent the most integrated health research system in the world. For further information, visit the NIHR website (www.nihr.ac.uk).

About Bionik Laboratories

Bionik Laboratories (OTCQX:BNKL), is a global, pioneering robotics company focused on providing rehabilitation solutions to individuals with neurological disorders. Through the acquisition of Interactive Motion Technologies, Bionik has added a portfolio of products focused on upper and lower extremity rehabilitation of stroke patients. The Company now has three products on the market and two products in varying stages of development that it is currently pursuing. The InMotion Systems - the InMotion ARM™, InMotion WRIST™, InMotion ARM/Hand™ and InMotion ANKLE™, are designed to provide intelligent, patient-adaptive therapy in a manner that has been clinically verified to maximize neuro-recovery. Bionik is also developing a lower-body exoskeleton, ARKE™, designed to allow paraplegics as well as other wheelchair users the ability to rehabilitate through walking. Each of Bionik's products are or are expected to be designed to continually adapt to a patient's ability and provide real time feedback to the physiotherapist through the use of Bionik's proprietary data collection and analytics cloud network through its partnership with IBM.

For more information, please visit www.bioniklabs.com and connect with us on [Twitter](#), [LinkedIn](#) and [Facebook](#).

Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements. Forward-looking statements may include, without limitation, statements regarding (i) the plans and objectives of management for future operations, including plans or objectives relating to the design, development and commercialization of human exoskeletons and other rehabilitation products, (ii) a projection of income (including income/loss), earnings (including earnings/loss) per share, capital expenditures, dividends, capital structure or other financial items, (iii) the Company's future financial performance, (iv) the successful integration of IMT with Bionik and (v) the assumptions underlying or relating to any statement described in points (i), (ii), (iii) or (iv) above. Such forward-looking statements are not meant to predict or guarantee actual results, performance, events or circumstances and may not be realized because they are based upon the Company's current projections, plans, objectives, beliefs, expectations, estimates and assumptions and are subject to a number of risks and uncertainties and other

influences, many of which the Company has no control over. Actual results and the timing of certain events and circumstances may differ materially from those described by the forward-looking statements as a result of these risks and uncertainties. Factors that may influence or contribute to the inaccuracy of the forward-looking statements or cause actual results to differ materially from expected or desired results may include, without limitation, the Company's inability to obtain additional financing, the significant length of time and resources associated with the development of our products and related insufficient cash flows and resulting illiquidity, the Company's inability to expand the Company's business, significant government regulation of medical devices and the healthcare industry, lack of product diversification, volatility in the price of the Company's raw materials, and the Company's failure to implement the Company's business plans or strategies. These and other factors are identified and described in more detail in the Company's filings with the SEC. The Company does not undertake to update these forward-looking statements.

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