



Quantum BioPharma Announces Joint Clinical Study With Massachusetts General Hospital Scientists to Validate a Novel Positron Emission Tomography (PET) Imaging Technique to Monitor Demyelination In Multiple Sclerosis

TORONTO, April 01, 2025 -- Quantum BioPharma Ltd. (NASDAQ: QNTM) (CSE: QNTM) (FRA: 0K91) “**Quantum BioPharma**” or the “**Company**”), a biopharmaceutical company dedicated to building a portfolio of innovative assets and biotech solutions, announces that on March 31, 2025 it has entered into a joint clinical study with Massachusetts General Hospital (MGH) scientists to validate a novel positron emission tomography (PET) imaging technique to monitor myelin integrity and demyelination in people with multiple sclerosis (MS).

Dr. Pedro Brugarolas, investigator in the department of Radiology at MGH and Assistant Professor of Radiology at Harvard Medical School, is the principal investigator of the clinical study entitled “Preliminary Evaluation of [¹⁸F]3F4AP PET as a potential tool to monitor non-immunomodulatory drugs in multiple sclerosis.” Dr. Eric Klawiter, director of the Multiple Sclerosis and Neuromyelitis Optica Unit at MGH and Associate Professor of Neurology at Harvard Medical School, will serve as co-investigator. In the clinical study, serial [¹⁸F]3F4AP PET scans will be performed along with magnetic resonance imaging (MRI) scans in people with both progressive and relapsing-remitting forms of MS. In previous studies in rodents and monkeys, [¹⁸F]3F4AP was highly sensitive to demyelinated lesions, suggesting that it holds promise as a biomarker to monitor changes in demyelination in response to remyelinating or neuroprotective drugs in MS. PET imaging with [¹⁸F]3F4AP may thus complement MRI imaging by providing an ultra-sensitive and quantitative assessment of demyelination.

“We are very excited about the potential of this novel PET biomarker to directly visualize and measure demyelination in the central nervous system”, said Dr. Andrzej Chruscinski, Vice-President, Scientific and Clinical Affairs at Quantum BioPharma. “We expect that this biomarker will be an important diagnostic tool in future MS trials investigating therapies that can prevent demyelination and promote remyelination. This is very relevant to our Lucid-MS clinical development program as Lucid-MS has been shown to protect the myelin sheath and prevent demyelination in animal models of MS.”

Zeeshan Saeed, CEO of Quantum BioPharma, added, “We are glad to be part of this study and working with this team of scientists and physicians at Mass General in developing this PET tracer as a biomarker in MS.”

Dr. Brugarolas added, “[¹⁸F]3F4AP is a radiolabeled form of the drug dalfampridine which binds to K⁺ channels in demyelinated axons. As such we are interested to study its potential as a biomarker to identify and monitor responders to remyelinating and neuroprotective treatments for MS and we are excited to undertake this important work with Quantum BioPharma”.

About Quantum BioPharma Ltd.

Quantum BioPharma is a biopharmaceutical company dedicated to building a portfolio of innovative assets and biotech solutions for the treatment of challenging neurodegenerative and metabolic disorders and alcohol misuse disorders with drug candidates in different stages of development. Through its wholly owned subsidiary, Lucid Psycheceuticals Inc. (“**Lucid**”), Quantum BioPharma is focused on the research and development of its lead compound, Lucid-MS. Lucid-MS is a patented new chemical entity shown to prevent and reverse myelin degradation, the underlying mechanism of multiple sclerosis, in preclinical models. Quantum BioPharma invented UNBUZZD™ and spun out its OTC version to a company, Celly Nutrition Corp. (“**Celly Nutrition**”), led by industry veterans. Quantum BioPharma retains ownership of 25.71% (as of June 30, 2024) of Celly Nutrition at www.unbuzzd.com. The agreement with Celly Nutrition also includes royalty payments of 7% of sales from unbuzzd™ until payments to Quantum BioPharma total \$250 million. Once \$250 million is reached, the royalty drops to 3% in perpetuity. Quantum BioPharma retains 100% of the rights to develop similar products or alternative formulations specifically for pharmaceutical and medical uses. Quantum BioPharma maintains a portfolio of strategic investments through its wholly owned subsidiary, FSD Strategic Investments Inc., which represents loans secured by residential or commercial property.

Forward-Looking Information

Certain information in this news release constitutes forward-looking statements under applicable securities laws. Any statements that are contained in this news release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as “may”, “should”, “anticipate”, “expect”, “potential”, “believe”, “intend” or the negative of these terms and similar expressions. Forward-looking statements in this news release include statements related to such.

Forward-looking information in this press release are based on certain assumptions and expected future events.

These statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements to differ materially from those expressed or implied by such statements, including but not limited to additional information relating to Quantum BioPharma, including its annual information form, can be located on the SEDAR+ website at www.sedarplus.ca and on the EDGAR section of the United States Securities and Exchange Commission’s website at www.sec.gov for a more complete discussion of such risk factors and their potential effects.

Readers are cautioned that the foregoing list is not exhaustive. Readers are further cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated.

Forward-looking statements contained in this press release are expressly qualified by this cautionary statement and reflect the Company's expectations as of the date hereof and are subject to change thereafter. The Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, estimates or opinions, future events or results or otherwise or to explain any material difference between subsequent actual events and such forward-looking information, except as required by applicable law.

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