UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of April 2024

Commission File Number: 001-35165

BRAINSWAY LTD.

(Translation of registrant's name into English)

19 Hartum Street
Bynet Building, 3rd Floor
Har HaHotzvim
Jerusalem, 9777518, Israel
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-F [X] Form 40-F []

This Form 6-K is incorporated by reference into the Company's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on April 22, 2019 (Registration No. 333-230979) and the Company's Registration Statement on Form F-3 filed with the Securities and Exchange Commission on September 17, 2021 (Registration No. 333-259610).

EXHIBIT INDEX

Exhibit Title

99.1 BrainsWay Announces Published Review Results Highlighting Potential of Deep TMSTM to Treat Parkinson's Disease

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BRAINSWAY LTD.
(Registrant)

Date: April 4, 2024

/s/ Hadar Levy Hadar Levy Chief Executive Officer

BrainsWay Announces Published Review Results Highlighting Potential of Deep TMSTM to Treat Parkinson's Disease

Clinical Data from Multiple Trials Showed Improvements in Both Motor and Non-Motor Symptoms

JERUSALEM and BURLINGTON, Mass., April 04, 2024 (GLOBE NEWSWIRE) -- BrainsWay Ltd. (NASDAQ & TASE: BWAY) ("BrainsWay" or the "Company"), a global leader in advanced noninvasive neurostimulation treatments for mental health disorders, announced results published in a review article exploring the potential efficacy of Deep Transcranial Magnetic Stimulation (Deep TMSTM) as a novel therapeutic approach for Parkinson's Disease (PD). The paper was published in *Frontiers* of Human Neuroscience, a leading peer-reviewed journal focused on advancing the understanding of brain mechanisms in both healthy and diseased states.

The review summarizes data from six different studies involving an aggregate total of 220 patients, including a substantial number of patients who were administered a two-stage Deep TMS protocol addressing prefrontal and motor targets. Clinically meaningful improvements in motor symptoms were generally observed, and in those studies which assessed non-motor symptoms, improvements in daily living and mood symptoms were reported. Four of the studies also noted that severe patients benefited most from the treatment. Deep TMS was generally well-tolerated across all of the studies.

"This clinical review marks an important step forward in our understanding of the potential benefits of Deep TMS for those suffering from Parkinson's Disease," said Colleen Hanlon, Ph.D., Vice President of Medical and Clinical Affairs at BrainsWay. "The two-stage H-Coil protocol is an innovative approach to address multiple symptoms of the disease. While further research is needed in this area, possible benefits of Deep TMS for PD patients may include improved cognitive function, reduced side effect burden relative to drugs, and enhanced quality of life."

BrainsWay Deep TMS is not cleared by the FDA as a safe and/or effective treatment for Parkinson's Disease.

About Parkinson's Disease

PD is a prevalent neurodegenerative disorder, second only to Alzheimer's Disease. There are more than 10 million people worldwide living with PD, and there are nearly 90,000 new diagnoses each year in the U.S. alone. PD is characterized by motor symptoms such as bradykinesia, rigidity, postural instability, and tremors. In addition to motor symptoms, individuals with PD often experience non-motor symptoms, including cognitive and mood disturbances, significantly impacting their quality of life. Traditionally, clinical management of PD has relied on pharmacotherapy, which can be associated with debilitating side effects, and, in severe cases, patients may be eligible for deep brain stimulation (DBS), a highly invasive neurosurgical procedure.

About BrainsWay

BrainsWay is a global leader in advanced noninvasive neurostimulation treatments for mental health disorders. The Company is boldly advancing neuroscience with its proprietary Deep Transcranial Magnetic Stimulation (Deep TMSTM) platform technology to improve health and transform lives. BrainsWay is the first and only TMS company to obtain three FDA-cleared indications backed by pivotal clinical studies demonstrating clinically proven efficacy. Current indications include major depressive disorder (including reduction of anxiety symptoms, commonly referred to as anxious depression), obsessive-compulsive disorder, and smoking addiction. The Company is dedicated to leading through superior science and building on its unparalleled body of clinical evidence. Additional clinical trials of Deep TMS in various psychiatric, neurological, and addiction disorders are underway. Founded in 2003, with offices in Burlington, MA and Jerusalem, Israel, BrainsWay is committed to increasing global awareness of and broad access to Deep TMS. For the latest news and information about BrainsWay, please visit www.brainsway.com.

Forward Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements may be preceded by the words "intends," "may," "will," "plans," "expects," "anticipates," "projects," "predicts," "estimates," "aims," "believes," "hopes," "potential" or similar words. These forward-looking statements and their implications are based on the current expectations of the management of the Company only and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. In addition, historical results or conclusions from scientific research and clinical studies do not guarantee that future results would suggest similar conclusions or that historical results referred to herein would be interpreted similarly in light of additional research or otherwise. The following factors, among others, could cause actual results to differ materially from those described in the forward-looking statements; inadequacy of financial resources to meet future capital requirements; changes in technology and market requirements; delays or obstacles in launching and/or successfully completing planned studies and clinical trials; failure to obtain approvals by regulatory agencies on the Company's anticipated timeframe, or at all; inability to retain or attract key employees whose knowledge is essential to the development of Deep TMS products; unforeseen difficulties with Deep TMS products and processes, and/or inability to develop necessary enhancements; unexpected costs related to Deep TMS products; failure to obtain and maintain adequate protection of the Company's intellectual property, including intellectual property licensed to the Company; the potential for product liability; changes in legislation and applicable rules and regulations; unfavorable market perception and acceptance of Deep TMS technology; inadequate or delays in reimbursement from third-party payers, including insurance companies and Medicare; inability to commercialize Deep TMS, including internationally, by the Company or through third-party distributors; product development by competitors; inability to timely develop and introduce new

technologies, products and applications, which could cause the actual results or performance of the Company to differ materially from those contemplated in such forward-looking statements.

Any forward-looking statement in this press release speaks only as of the date of this press release. The Company undertakes no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by any applicable securities laws. More detailed information about the risks and uncertainties affecting the Company is contained under the heading "Risk Factors" in the Company's filings with the U.S. Securities and Exchange Commission.

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