



## Biogen and TheraPanacea Announce New Collaboration with the Potential to Advance Digital Health for Personalized Medicine in Neuroscience

December 14, 2021

- Collaboration aims to develop innovative machine learning and artificial intelligence solutions for personalized and earlier treatment in neurology
- Biogen to gain exclusive rights to TheraPanacea technology in neuroscience

CAMBRIDGE, Mass. and PARIS, Dec. 14, 2021 (GLOBE NEWSWIRE) -- [Biogen Inc.](#) (Nasdaq: BIIB) and [TheraPanacea](#) today announced that they have entered into a collaboration focused on multiple therapeutic areas in neuroscience, to further build on the companies' existing relationship. The aim is to leverage machine learning (ML) and artificial intelligence (AI) analysis to develop digital health solutions that may improve patient care, accelerate drug development, and further the understanding of the underlying pathologies of neurological diseases.

"We believe that neuroscience is at an inflection point for innovation and breakthrough. Advancements in technology may increase our ability to understand disease, target treatments, and manage risk," said Martin Dubuc, Head of Biogen Digital Health. "Based on the outcome of our prior work with TheraPanacea and their success with AI in oncology, we are excited to further this collaboration. We believe digital health solutions will enable us to pioneer a new era of personalized medicine built upon a foundation of accessibility and precision."

By harnessing ML and AI to draw meaning from medical imaging and other clinically relevant data sources, there is potential to improve disease understanding and enable more personalized clinical trial design. This could result in shortening drug development cycles, lowering associated costs, and increasing probability of success. At the same time, these digital health solutions have the potential to support more informed clinical decisions and could lead to improved health outcomes for patients.

"We are excited to collaborate with Biogen and combine our ML and AI solutions with their world-class clinical expertise and unique datasets in neuroscience," said Professor Nikos Paragios, Chief Executive Officer of TheraPanacea and distinguished professor of mathematics at CentraleSupélec, University of Paris-Saclay. "Through this collaboration, we aim to scale our artificial intelligence multi-omics biomarker discovery platform and deploy clinical solutions that have the potential to deliver better treatment decisions for patients living with neurological diseases."

Under the terms of the agreement, Biogen will invest up to \$15 million in exchange for TheraPanacea convertible debt. The agreement also provides for up to approximately \$41 million (based on current exchange rates) in milestone payments contingent upon the achievement of certain research and development milestones. In addition, Biogen gains exclusive rights to TheraPanacea's technology in neuroscience. To meet the goals of this collaboration, TheraPanacea will invest in expanding its existing operations and workforce in Europe.

### About Biogen

As pioneers in neuroscience, Biogen discovers, develops, and delivers worldwide innovative therapies for people living with serious neurological diseases as well as related therapeutic adjacencies. One of the world's first global biotechnology companies, Biogen was founded in 1978 by Charles Weissmann, Heinz Schaller, Sir Kenneth Murray, and Nobel Prize winners Walter Gilbert and Phillip Sharp. Today, Biogen has the leading portfolio of medicines to treat multiple sclerosis, has introduced the first approved treatment for spinal muscular atrophy, and is providing the first and only approved treatment to address a defining pathology of Alzheimer's disease. Biogen is also commercializing biosimilars and focusing on advancing the industry's most diversified pipeline in neuroscience that will transform the standard of care for patients in several areas of high unmet need.

In 2020, Biogen launched a bold 20-year, \$250 million initiative to address the deeply interrelated issues of climate, health, and equity. Healthy Climate, Healthy Lives™ aims to eliminate fossil fuels across the company's operations, build collaborations with renowned institutions to advance the science to improve human health outcomes, and support underserved communities.

We routinely post information that may be important to investors on our website at [www.biogen.com](http://www.biogen.com). Follow us on social media – [Twitter](#), [LinkedIn](#), [Facebook](#), [YouTube](#).

### Biogen Safe Harbor

This news release contains forward-looking statements, including statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, about the potential impact of machine learning/artificial intelligence with respect to clinical and health outcomes; the potential benefits from early identification of disease; the potential benefits and results that may be achieved through our collaboration with TheraPanacea; the potential of our commercial business and pipeline programs; and our strategy and plans. These statements may be identified by words such as "aim," "anticipate," "believe," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "plan," "possible," "potential," "will," "would" and other words and terms of similar meaning. You should not place undue reliance on these statements, or the scientific data presented.

These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements, including without limitation, the risks of unexpected costs or delays; the risk of other unexpected hurdles; failure to protect and enforce our data, intellectual property and other proprietary rights and uncertainties relating to intellectual property claims and challenges; regulatory authorities may require additional information or further studies; third party collaboration risks; and the direct and indirect impacts of the ongoing COVID-19 pandemic on our business, results of operations and financial condition. The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from our expectations in any forward-looking statement. Investors should consider this cautionary statement as well as the risk factors identified in our most recent annual or quarterly report and in other reports we have filed with the U.S. Securities and Exchange Commission. These statements are based on our current beliefs and expectations and speak only as of the date of this news release. We do not undertake any obligation to publicly update any forward-looking statements, whether as a result of new information, future developments or otherwise.

### About TheraPanacea

TheraPanacea is a highly innovative information technology company devoted to unlocking the unlimited power of AI-based solutions to drive innovation in healthcare.

Spinoff of University of Paris-Saclay, TheraPanacea works in close cooperation with the most prominent healthcare facilities to combine the power of

its proprietary platforms with clinical domain-knowledge. Our technology is a unique combination of decisional, domain-constrained, and data-driven artificial intelligence software equipping clinicians and healthcare professionals with the most innovative tools to improve treatment selection, planning, delivery, and outcomes, including biomarker discovery and patient stratification.

Using TheraPanacea's AI-powered clinical solutions (ART-Plan™), healthcare providers experience significant gain in productivity, higher standardization of care, improvement of clinical workflow and better treatment outcomes for cancer patients. TheraPanacea's AI-powered biomarker discovery platform (ART-Omics™) offers upstream/downstream innovation to pharmaceutical companies through shorter development cycles, decreased costs and higher efficacy.

TheraPanacea's development benefited from the ecosystems of University of Paris Saclay and Paris Biotech Santé while being backed by Therinvest, (Innothra's independent growth digital health fund) and competitive fundings from the SATT Paris-Saclay, the French Ministry of Higher Education and Research, French Public investment Banque (BPI), the European Research Council (ERC) and the EIC Accelerator from the European Innovation Council.

**MEDIA CONTACTS:**

**Biogen**

Ashleigh Koss

+ 1 908 205 2572

[public.affairs@biogen.com](mailto:public.affairs@biogen.com)

**TheraPanacea**

Catherine Martineau-Huynh

COO

[mail@therapanacea.eu](mailto:mail@therapanacea.eu)

+33 9 62 52 78 19

**INVESTOR CONTACTS:**

**Biogen**

Mike Hencke

+1 781 464 2442

[IR@biogen.com](mailto:IR@biogen.com)

**TheraPanacea**

Catherine Martineau-Huynh

COO

[mail@therapanacea.eu](mailto:mail@therapanacea.eu)

+33 9 62 52 78 19