

## PRESS RELEASE

**Italfarmaco partners with Iktos on artificial intelligence to speed drug discovery breakthroughs for patients**

*Combines AI to increase the potential of novel histone deacetylase (HDAC) inhibitors in the non-oncological field*

Cinisello Balsamo, 18<sup>th</sup> June 2024 – Italfarmaco SpA (ITF), a private global pharmaceutical company, and Iktos, a company specializing in Artificial Intelligence (AI) for new drug design, today announced a collaboration to develop next generation HDAC inhibitors for a variety of non-oncological diseases, including diseases affecting the central nervous system.

Iktos's innovative generative modelling technology platform, Makya™, will apply a ligand- and structure-based approach in designing novel molecules that align with ITF's candidate drug target profile (CDTP); Iktos's approach enables the exploration of chemical space and produces innovative molecule designs, with optimal interactions within the target's binding site, and synthetic tractability thanks to integration with Iktos's retrosynthesis AI technology platform Spaya™.

"Drug discovery is a complex, long, iterative and high-risk process," said Christian Steinkühler, Group Chief Scientific Officer, Italfarmaco. "With millions of people waiting for the approval of new medicines, AI will help us identify new HDAC drug candidates that can enter clinical trials in less time and employ fewer resources. ITF will leverage its previous experience in epigenetics and HDAC inhibitors, together with Iktos's expertise in AI, with the goal of identifying promising candidates."

"We are thrilled to announce our collaboration with ITF", stated Dr. Quentin Perron, Co-founder and CSO of Iktos. "Our commitment at Iktos lies in advancing innovative technologies that augment the likelihood of success in small molecule discovery. Our ultimate goal is to accelerate drug discovery through the application of AI, thanks to our robust algorithmic technology and our wealth of expertise gained through numerous successful collaborations."





## About HDAC inhibitors

Histone deacetylases (HDACs) are a family of epigenetic enzymes that play a crucial role in regulating various biological processes, including gene expression, cell cycle progression, and apoptosis. Inhibitors of HDACs have been developed and approved, primarily for the treatment of cancer, demonstrating significant therapeutic potential in oncology.

Italfarmaco has developed Givinostat, an HDAC inhibitor, for a non-oncological indication, specifically for the treatment of Duchenne muscular dystrophy (DMD). Givinostat modulates the deregulated activity of HDACs in the dystrophic muscle, which is a major consequence of the lack of dystrophin associated with DMD. Givinostat received full FDA approval for DMD, and the Marketing Authorization Application (MAA) for Givinostat has been submitted to the European Medicine Agency (EMA).

## ABOUT ITALFARMACO

Italfarmaco is a private multinational group headquartered in Milan, Italy. Established in 1938, its mission has been to improve patient lives and overall well-being through pioneering research & development, high-quality production and global marketing of branded prescription and non-prescription products.

Operating in the pharmaceutical and API development, Italfarmaco Group has a presence in over 90 countries, employs 3,800 individuals, including 300 professionals across its four Research & Development Hubs, and generates a turnover exceeding 1 billion Euros.

The group is known for its products in the key therapeutic areas such as Women's Health, Neurology and Psychiatry, Cardiovascular and Metabolic, and Rare Disease.

Italfarmaco Group manufactures medicinal specialties adhering to the highest quality standards, including sterile injectables, solid, semi solid, and liquid oral forms, across six state-of-the-art production facilities located in Milan, Frosinone, Madrid, Barcelona, Salvador de Bahia and Santiago del Chile.





## ABOUT IKTOS

Incorporated in October 2016, Iktos is a French start-up company specializing in the development of artificial intelligence solutions applied to chemical research, more specifically medicinal chemistry and new drug design. Iktos is developing a proprietary and innovative solution based on deep generative models, which enables, using existing data, to design molecules that are optimized in silico to meet all the success criteria of a small molecule discovery project. The use of Iktos technology enables major productivity gains in upstream pharmaceutical R&D. Iktos offers its technology through the SaaS software platforms Makya™ for generative drug design and Spaya™ for retrosynthesis, and through strategic collaborations with pharma companies where Iktos mobilizes its unique platform and leading-edge capabilities to expedite small molecule drug discovery for the benefit of its partners. Iktos is also developing Iktos Robotics, a unique AI-driven synthesis automation platform that dramatically accelerates the Design-Make-Test-Analyze cycle in drug discovery.

More information on: <http://www.iktos.ai/>

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