Owkin and Nantes University Hospital (CHU Nantes) to Advance Cancer Research with Artificial Intelligence.

October 15, 2020 New York and Nantes, France -- Owkin, a startup that deploys AI and Federated Learning technologies to augment medical research and enable scientific discoveries, announces a collaboration with Nantes University Hospital (CHU de Nantes). This engagement leverages CHU de Nantes' high-quality datasets and world-class medical research, as well as Owkin's pioneering technologies and research platform. Collaborations such as these have potential to advance clinical research and drug development.

Among researchers at the CHU de Nantes, Pr Brigitte Dréno head of the dermatology medical department, she will team up with Owkin to develop and validate machine learning models on the RIC-Mel database in order to better understand and predict the evolution of nevi into diagnosed melanomas.
This first project on melanomas is a starter, indeed AI technology and collaboration with OWKIN will be extended to other medical fields as oncology, hematology and chronic diseases.

Philippe EL SAIR, CHU de Nantes'general director : "CHU de Nantes intends to be an hospital at the forefront in this field and is proud of this partenership with Owkin which is a pioneer firm in artificial intelligence."

This represents the second collaboration between Owkin and CHU de Nantes. The two previously partnered in 2019 as part Healthchain, an AI consortium aimed at launching an open source AI research platform. Through these partnerships, CHU de Nantes is part of the Owkin Loop, a federated network of US and European academic medical centers that collaborate with Owkin to generate new insights from high-quality, curated, research-grade, multimodal patient data captured in clinical trials or research cohorts. Loop generated insights can inform pharmaceutical drug development strategy, from biomarker discovery to clinical trial design, and product differentiation. Owkin seeks to create a movement in medicine by establishing federated learning at the core of future research.

Federated learning technologies enable researchers in different institutions and different geographies to collaborate and train multicentric AI models on heterogeneous datasets, resulting in better predictive performance and higher generalizability. Data does not move, only the algorithms travel, thus protecting an institution's data governance and privacy. Furthermore, Owkin's data use is compliant with local ethical body consent processes and data compliance regulations such as HIPAA and GDPR.

Meriem Sefta, Head of Partnerships at Owkin, says: “We are so excited to work with the CHU Nantes, a prestigious institution with a lot of expertise in AI and data management. The integration of our products and technology with their existing expertise and infrastructure will bring a very reactive strike force to tackle pressing challenges in melanoma.”

About Owkin:

Owkin, a French-American startup, which was co-founded in 2016 by Dr. Thomas Clozel a clinical research doctor and former assistant professor in clinical hematology) and Gilles Wainrib, Ph.D.a pioneer in the field of artificial intelligence in biology) has raised $70 million in venture capital.

Owkin connects several of the largest medical research centers and pharmaceutical companies in Europe and the U.S. within a federated research ecosystem. Owkin has developed four key components to build this ecosystem: Owkin Loop (the network), Owkin Connect (the technology infrastructure), Owkin Studio (the AI software tool), and Owkin Lab (the expertise).

Owkin Connect is a privacy-preserving, traceable, secure technology which allows the company to connect with research centers in the Owkin Loop network. Using Owkin Connect’s federated learning approach, the data do not move, only algorithms travel. This enables insights from the data to be collectively shared while guaranteeing privacy for patients and compliance with data ownership.

In October 2019, Owkin published its breakthrough analysis of tumor biology, using an interpretable deep-learning model called MesoNet in Nature Medicine . In February 2020, Hepatology published Owkin’s novel deep learning models to predict survival after hepatocellular carcinoma resection from histology slides. Most recently, in May 2020, following a winning entry to the data challenge organized last October by the Société Française de Radiologie et d'imagerie médicale (SFR), Owkin published its methodology to automatically measure muscular area from CT scans to assess sarcopenia in Diagnostic and Interventional Imaging. In August 2020, Owkin published its novel genomic analysis tool (HE2RNA) in Nature Communications.

For more information, please visit www.owkin.com, follow @OWKINscience on Twitter, contact Anna Huyghues-Despointes: anna.hd@owkin.com

About CHU de Nantes:

Nantes University Hospital (CHU Nantes), the 6th largest French university hospital, provides high-quality comprehensive health services. Among the top research institutions in France, CHU de Nantes focuses on excellence and innovation. Nantes University Hospital participates each year in about 2,000 clinical trials, involving approximately 13,000 patients, leading to over 1,200 publications in peer-reviewed journals.

Over the years, CHU de Nantes has developed numerous research partnerships with SMEs and major actors of the biotech and medtech industry. We believe opening up to our ecosystem is a real game-changer for the development of innovations for the benefit of patients and health professionals.