Digital Biomarkers & Digital Pathology: New tools to enhance therapy

Michèle Bentata

ABSTRACT TEMPLATE

Company: Owkin
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CEO: Thomas Clozel
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CATEGORY:

1. Biotech/Pharma
2. Medical Devices

SESSIONS

1) **Digital Biomarkers & Digital Pathology: New tools to enhance therapy**
2) **Has AI revolutionized drug discovery and clinical development?**

Executive Summary

- Owkin is a TechBio that helps understand complex biology through AI, identifying new treatments, de-risking and accelerating clinical trials, and developing AI diagnostics. Owkin leverages its network of leading academic partners and medical experts to access world-class patient data through privacy-enhancing technologies. We merge wet lab experiments with advanced AI to create a powerful feedback loop for accelerated discovery and innovation in oncology, cardiovascular, immunity and inflammation.

Core Technology

- **Target discovery engine:** We identify novel candidate targets with associated subgroups by applying interpretable AI models to multimodal patient data and aggregating causal evidence from prior knowledge, preclinical data and real-world data.
- **Diagnostic development engine:** We build and deploy impactful digital pathology solutions to support the diagnosis of key biomarkers and predict patient outcomes.

Product Profile/Pipeline

- MSIntuit® CRC: CE-marked AI diagnostic that optimizes MSI testing for colorectal cancer and provides a prescreen approach with digital pathology.
- RlapsRisk® BC: an AI diagnostic that assesses the risk of breast cancer relapse and helps pathologists and oncologists determine the right treatment pathway for early breast cancer patients.
- Owkin collaborates with MSD to develop and commercialize AI-powered digital pathology MSI-H diagnostics for four types of cancer
- IMS integration: Sectra, Tribun Health

Business Strategy

- We apply AI to multimodal, KOL-curated data to subtype patients and identify novel biomarkers. We strategically partner with pharma companies to augment their pipeline with AI, offering solutions to inform drug discovery, de-risk clinical trials and develop and deploy diagnostics in clinical practice.

What's Next?

- In June 2023, we launched an initiative to create the world largest spatial omics dataset in cancer, with a vision to include data from 7,000 patients with seven difficult-to-treat cancers. The project, known as MOSAIC (Multi-Omics Spatial Atlas in Cancer), won't stop at the data generation, but will mine the data to learn disease biology and identify new molecular targets against which to design new drugs.