

AI in Breast Cancer Diagnosis: from Machine Learning to LIVE Worldwide Clinical Use

Manuela Vecsler

o Executive Summary

Ibex transforms cancer diagnosis with AI. We empower physicians to provide every patient with an accurate, timely and personalized cancer diagnosis by developing clinical-grade AI algorithms and digital workflows that help detect and grade cancer in biopsies. Based on Ibex's open API, Galen is inter-operable and offers deep integration capabilities with industry leading scanning systems, image management and lab information solutions.

o Core Technology

Our platform uses AI algorithms to automatically analyze digitized glass slides originating from biopsies. The AI algorithms, which were trained using advanced machine learning technologies on rich datasets extracted from over 10 million pathology slides from different clinical institutes worldwide, automatically detect and grade cancer and >100 other morphologies. The platform supports pathologists as they diagnose different biopsies through AI-based tools.

o Product Profile/Pipeline

We are the market leaders in AI-powered cancer diagnostics in pathology. Our Galen™ platform is the first and most widely deployed AI-technology in pathology and is used as part of everyday routine, supporting pathologists and providers worldwide in improving the quality and accuracy of diagnosis, for prostate, breast and gastric pathology, and HER2 scoring in breast cancer.

o Business Strategy

We have deployed Galen™ platform for prostate, breast and gastric cancer worldwide. We are working on expanding tissue coverage and depth and deploying in additional institutes globally, alone and in collaboration with our channel partners, such as Roche, Philips, Sectra, etc.

o What's Next?

We are working on programs that demonstrate the financial impact of our technology. The experience gained so far suggests potential impact via lower misdiagnosis rates, better patient outcomes and efficiency gains e.g. more rapid diagnosis, improved productivity and lower spending on ancillary tests. Our platform demonstrated excellent outcomes in a series of clinical studies, is CE marked and working on getting first FDA clearance.

