MoMic

Point-of-care diagnostics with low-cost, digital microscopy and artificial intelligence

We have constructed a prototype of a portable, inexpensive, digital microscopy scanner, capable of digitizing biological samples at the point-of-care. Samples are uploaded to a cloud server for remote access or automatic analysis by artificial intelligence-based algorithms. The software can be used e.g. for automatic detection of disease related targets, such as cancer cells or parasites in the digital samples. This technology could potentially be used to significantly improve access to diagnosis in areas lacking medical personnel and laboratory infrastructure. Our proof-of-concept studies demonstrate the feasibility of this technology for diagnosis of common infectious diseases and breast cancer histopathology. Furthermore, we are currently studying the application of this technology in screening for cervical cancer, analysis of tissue samples in real-time during cancer surgery and diagnosis of malaria with clinical field studies starting in 2018.

SPARK VALUE: We are currently evaluating commercialization strategies. This include market analysis to determine optimal market entry strategies, initial areas of focus for spin-off companies or alternative approaches for licensing or partnership.

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