

# **Applications: Imaging microscopy for biomicrofluidic platform**

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Lab-on-a-chip (LoC) devices are extremely promising to bring clinical diagnostic functions at the point-of-care. At this scope, an important goal is to design imaging schemes integrated with microfluidic platforms. In fact, imaging in microscopy modality is one of most powerful tool for clinic diagnostic. An ideal microscopy system for LoC systems should satisfy three main requirements, i.e. high-throughput data collection, label-free imaging, and quantitative measurements. Recent advancements in the field will be reviewed and illustrated. In particular latest evolutions of imaging systems based on Quantitative Phase Imaging (QPI) developed by leading research groups worldwide for in-flow cytometry and will be considered.