

# Micro and Nano Technologies for Point-of-Care Testing

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## Abstracts

### Introduction

Micro and nanotechnologies are set to transform point-of-care diagnostics. Miniaturization of testing methods, advances in lab-on-a-chip microfluidic methodologies, improvements in detection technologies and novel biosensors are leading the way.

### Features and benefits

Identify micro and nanotechnologies driving the development of next-generation point-of-care diagnostics to benefit from opportunities being created.

Discover which analytes/diseases are currently being targeted by profiled companies to formulate your own diagnostic product development strategies.

Assess the evolving POC testing market with the aid of market forecasts for individual market segments to prepare for future growth in this area.

Forecast key point-of-care testing market segments to 2016.

### Highlights

Various proprietary technologies identified in this report underpin POC testing products in development. These technologies represent valid alternative approaches to challenges such as multiplexing, liquid transport in miniaturized systems, integration of

assay procedures, and limitations associated with the use of traditional fluorescent labels.

The microfluidic lab-on-a-chip (LoC) is now firmly established as an attractive miniaturized platform for POC testing. Maturing of LoC technologies is stimulating efforts to incorporate miniaturized biosensors into portable LoC systems to accelerate the development of portable and handheld testing systems

Most of the products discussed in this report are being developed for healthcare professional-based testing. Four professional-based POCT market sectors - infectious disease; cardiac marker; coagulation (including pharmacogenomics); and cancer screening/pharmacogenomics - are forecast to grow at CAGRs of 14%, 22%, 19% and 30% respectively.

### **Your key questions answered**

Which micro and nano technologies in development offer the attributes of miniaturized testing?

What drivers and restraints operate in the nascent market for POC testing products based on micro and nanotechnologies?

Who is developing new POC testing products based on micro and nanotechnologies and which clinical applications are they targeting?

How will POC testing products based on micro and nanotechnologies impact areas inadequately served by current products and areas of unmet need?

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- Proprietary micro/nanotechnologies

- POCT products

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Managing analyst

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