

Becton, Dickinson and Company

Antimicrobial Resistance Rapid, Point-of-Need Diagnostic Test Challenge

Becton, Dickinson and Company (BD) seeks to reduce the unnecessary use of antibiotics by guiding healthcare practitioners in differentiating between bacterial and viral infections within the time constraints of a single outpatient visit. Building on the public-health utility and broad commercial success of the BD Veritor™ platform, we are developing a novel digital immunoassay (DIA) that will measure a panel of circulating host immune biomarkers from a single blood-based sample. The test is intended to be an aid in the management of patients with symptoms of infection – such as upper respiratory infection – for which antibiotic misuse is a widespread problem. By providing objective diagnostic evidence that the patient’s immune system is fighting either a bacterial or a viral infection, the test will return an informative result without requiring a sample from the site of infection, and without the time or expense of diagnostic confirmation of numerous possible candidate pathogens. By employing the sample-in/result-out, one-button simplicity of the CLIA-waived BD Veritor system, the test can be deployed broadly at point-of-care settings without the need for trained personnel. And by returning a result rapidly (target of ten minutes) at the point of care, the test outcome will enable an actionable decision before the patient leaves the site.