HelixBind

A Point-of-Care Platform for Rapid Identification of Bacterial and Fungal Infections

HelixBind will develop a point-of-care (POC) diagnostic platform for the rapid identification of bacterial and fungal infections in a variety of specimen types. Our initial product offering will provide unequivocal identification of bloodstream infections (BSIs) directly from whole blood in two hours, without culture. The intended use will be for the detection and identification of multiple bacterial and fungal pathogens and relevant resistance genes in EDTA whole-blood specimens with symptoms of, or medical conditions predisposing the patient to, bloodstream infections. Currently no method is capable of accurately detecting bacterial infections in blood, relegating diagnosis to cultures, which take days to provide results. Initial care is empiric, with multiple broad spectrum antibiotics, for the 15 million US patients annually suspected of sepsis; driving antibiotic overuse while concurrently being ineffectual, resulting in high mortalities. The proposed test will both improve patient care and antibiotic stewardship, enabling physicians to quickly transition to evidence-based treatment. Follow-on, specimen specific tests, will be developed for use with the same POC platform.