



## AdvanDx News

### **Orlando Regional Medical Center (ORMC) Implements PNA FISH® Tests to Help Provide Better Care for Patients with Bloodstream Infections**

*Hospital uses new, cutting edge molecular technology to fight serious infections and improve patient care and outcomes.*

Woburn, MA, U.S.A. and Durham, NC, U.S.A - July 21, 2009 - AdvanDx and bioMérieux, Inc. today announced Orlando Regional Medical Center (ORMC), which is part of Orlando Health, has implemented the PNA FISH® tests from AdvanDx to identify bloodstream pathogens 1 to 2 days earlier to help their physicians, pharmacists and nurses improve care and outcomes for patients with bloodstream infections.

Every year, 350,000 patients contract bloodstream infections in the United States causing over 90,000 deaths and significant costs to the healthcare system. Rapid and accurate identification of the causative pathogen is crucial to ensuring appropriate antibiotic therapy and improving patient outcomes in this critical situation. Conventional diagnostic methods can take 48 hours or longer forcing physicians to treat patients empirically with broad-spectrum antibiotics that may prove to be ineffective or unnecessary and can lead to long-term resistance and mortality.

AdvanDx's PNA FISH tests employ unique technology that detects bacteria's genetic material to provide identification results in just over 2 hours. "The fast tests have enabled the microbiology lab to provide results 1 to 2 days sooner for such serious pathogens as *Staphylococcus aureus*, other staphylococci, *Candida albicans* and *Candida glabrata*," said Valerie Hoover, Microbiology Supervisor at ORMC.

Clinical trials conducted at hospitals in the United States have shown that implementing PNA FISH and delivering fast results to clinicians directed earlier, effective antibiotic therapy, reduced mortality rates and improved hospital operational efficiency by reducing hospital length of stay, bed utilization, and pharmacy and lab costs related to unnecessary antibiotic use. (1,2,3)

"We are excited about this latest diagnostic tool and we are already seeing improvements in how physicians treat patients based on this critical information being available sooner," said Mark Wallace, M.D., infectious disease physician at ORMC, who along with Andrew DeRyke, Pharm.D., Clinical Infectious Diseases Pharmacist, are championing the clinical implementation of using rapid microbiology results to guide therapy. "When the test tells us we are dealing with a skin contaminant that is not causing infection, physicians are taking patients off unnecessary antibiotic. In addition, the faster identification for yeast pathogens is helping physicians prescribe the most effective antifungal drugs earlier for patients with Candidemia," Dr. Wallace added.

#### **About Orlando Regional Medical Center**

Orlando Health's flagship medical center, ORMC, is a tertiary care center with 808 acute care beds and is recognized as having one of Florida's largest cardiac programs.

ORMC is home to Central Florida's only Level One Trauma Center, which is one of only six in the state. It is Florida's first Level One Trauma Center to have an accredited Chest Pain Center and is supported by Central Florida's only hospital-based emergency air rescue transport service.

One of the state's six major teaching hospitals, ORMC offers graduate medical education in several specialties, including emergency medicine, OB/GYN, orthopedics, pediatrics and general surgery. Fellowship programs include colon rectal surgery, critical care surgery, pediatric orthopedics and hematology/oncology.

Additionally, ORMC provides sophisticated diagnostic and laboratory testing, medical and surgical services, intensive and progressive care, and wound management. ORMC also operates one of the state's regional burn and

tissue rehabilitation centers.

For more information, visit [www.myormc.com](http://www.myormc.com)

#### **About PNA FISH®**

PNA FISH is an easy-to-use and highly sensitive and specific fluorescence in situ hybridization (FISH) assay that uses PNA (peptide nucleic acid) probes to target species specific ribosomal RNA (rRNA) in live bacteria and yeast. PNA FISH tests enable microbiology labs to provide rapid and accurate identification of bloodstream pathogens, including *S. aureus*, *Enterococcus* species, *P. aeruginosa* and *Candida* species, directly from positive blood cultures in hours instead of days. Clinical studies show that rapid identification of bloodstream pathogens using PNA FISH tests leads to more appropriate patient therapy that saves lives and reduces unnecessary antibiotic use, patient length of stay and hospital costs.

For more information, visit [www.PNA-FISH.com](http://www.PNA-FISH.com)

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#### References:

1. Forrest et al. Antimicrob Agents Chemother. 2008 Oct;52(10):3558-63.
2. Shoham et al. Ther Clin Risk Manag. 2008 Jun;4(3):637-40.
3. Forrest et al. J Antimicrob Chemother. 2006 Jul;58(1):154-8.

PN1637A