C. difficile admissions 10.6 to 4.1($P = 0.0001$); *C. difficile* acquisitions 11.1 to 3.3 ($p = 0.0005$). Reductions predominantly occurred between 2007 and 2011 with MRSA but not *C. difficile*. In contrast VRE admissions and ICU-acquisitions increased from 1.9 to 5.8 ($P = 0.002$) and 1.5 to 5.6 ($P = 0.005$), respectively. There were 13,147 UABSI episodes in 11,075 (1.8%) of 621,859 patients staying >48 hours. The UABSI rate fell from 6.6 (95% CI 6.33–6.97) to 1.7 (95% CI 1.5–1.7)/1000 bed days ($P < 0.0001$), with the reduction taking place between 2007 and 2011 and no significant reduction since. A fixed effect model identified lower age, male sex, severity of illness, larger ICU-size, immunosuppressive therapy (but not immunosuppressive illness) as significant risk factors for UABSI. MSSA, *E. coli*, Enterococci, Yeast, *Klebsiella sp* and *P. aeruginosa* accounted for 73% of all recorded first UABSIs. Greatest reduction was seen for MRSA (97%), *Pseudomonas aeruginosa*(80%), *S. aureus* (77%) and Yeast (71%), with lower reductions for *E. coli* (54%) and *Klebsiella*(42%).

Conclusion. Large decreases in ICU-acquired bloodstream infections occurred across UK ICUs at the same time as reductions in MRSA and C. difficile, but rates have been static since 2011. Reductions were seen for all organisms. The observation that no material reductions in UABSIs were observed during the last 5 years of the study, despite continued focus on improving infection control practice throughout, implies that benefits from the current intervention framework have been achieved.

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1774. Detecting Infections Rapidly and Easily for Candidemia Trial (DIRECT1): A Prospective, Multicenter Study of the T2Candida Panel

Cornelius J. Clancy, MD[1]; Peter Pappas, MD[2]; Jose Vazquez, MD, FACP, FIDSA[3]; Marc A. Judson, MD[4]; Ellis Tobin, MD, FIDSA[5]; Dimitrios P. Kontoyiannis, MD, ScD, PhD (Hon), FACP, FIDSA, FECMM, FAAM[6]; George R. Thompson, MD[7]; Annette Reboli, MD[8]; Kevin W. Garey, PharmD, M.S.[9]; Richard N. Greenberg, MD, FIDSA[10]; Luis Ostrosky-Zeichner, MD, FIDSA, FSHEA[11]; Alan Wu, MD[12]; G. Marshall Lyon III, MD[13]; Senu Apewokin, MD[14]; M. Hong Nguyen, MD[15]; Angela Caliendo, MD, PhD, FIDSA[16]; [1]University of Pittsburgh, School of Medicine, Pittsburgh, Pennsylvania; [2]Division of Infectious Disease, University of Alabama at Birmingham, Birmingham, Alabama; [3]Georgia Regents University, Augusta, Georgia; [4]Albany Medical College, Albany, New York; [5]Albany Medical Center, Albany, New York; [6]The University of Texas MD Anderson Cancer Center, Houston, Texas; [7]Medical Microbiology and Immunology, University of California, Davis, Davis, California; [8]UMDNJ/Robert Wood Johnson Medical School, Camden, New Jersey; [9]University of Houston College of Pharmacy, Houston, Texas; [10]Department of Medicine, University of Kentucky School of Medicine, Lexington, Kentucky; [11]Division of Infectious Diseases, Department of Internal Medicine, McGovern Medical School, Houston, Texas; [12]University of California at San Francisco, San Francisco, California; [13]Emory University School of Medicine, Atlanta, Georgia; [14]University of Cincinnati, Cincinnati, Ohio; [15]Infectious Disease, University of Pittsburgh, Pittsburgh, Pennsylvania; [16]Medicine, Alpert Medical School of Brown University, Providence, Rhode Island

Session: 216. The Fungus Among-us - Clinical Advances
Saturday, October 7, 2017: 8:30 AM

Background. Blood cultures (BC) are the diagnostic gold standard for candidemia, but sensitivity is <50%. T2 Candida (T2) is a novel, FDA-approved nanodiagnostic panel, which utilizes T2 magnetic resonance and a dedicated instrument to detect Candida within whole blood samples.

Methods. Candidemic adults were identified at 14 centers by diagnostic BC (dBC). Follow-up blood samples were collected from all patients (pts) for testing by T2 and companion BC (cBC). T2 was run-in batch at a central lab; results are reported qualitatively for three groups of spp. (*Candida albicans/C. tropicalis* (CA/CT), *C. glabrata/C. krusei* (CG/CK), or *C. parapsilosis* (CP)). T2 and cBC were defined as positive (+) if they detected a sp. identified in dBC.

Results. 152 patients were enrolled (median age: 54 yrs (18–93); 54% (82) men). Candidemia risk factors included indwelling catheters (82%, 125), abdominal surgery (24%, 36), transplant (22%, 33), cancer (22%, 33), hemodialysis (17%, 26), neutropenia (10%, 15). Mean times to Candida detection/spp. identification by dBC were 47/133 hours (2/5.5 d). dBC revealed CA (30%, 46), CG (29%, 45), CP (28%, 43), CT (11%, 17) and CK (3%, 4). Mean time to collection of T2/cBC was 62 hours (2.6 d). 74% (112) of patients received antifungal (AF) therapy prior to T2/cBC (mean: 55 hours (2.3 d)). Overall, T2 results were more likely than cBC to be + ($P < 0.0001$; Table), a result driven by performance in AF-treated patients ($P < 0.0001$). T2 was more likely to be + among patients originally infected with CA (61% (28) *vs.* 20% (9); $P = 0.001$); there were trends toward higher positivity in patients infected with CT (59% (17) vs. 23% (4; $P = 0.08$) and CP (42% (18) *vs.* 28% (12); $P = 0.26$). T2 was + in 89% (32/36) of patients with + cBC.

Conclusion. T2 was sensitive for diagnosing candidemia at the time of + cBC, and it was significantly more like to be + than cBC among AF-treated patients. T2 is an important advance in the diagnosis of candidemia, which is likely to be particularly useful in patients receiving prophylactic, pre-emptive or empiric AF therapy.

	Test results, *n* (%)							
Pt group (n)	T2+	T2-	cBC+	cBC-	T2+/ cBC+	T2+/ cBC-	T2-/ cBC+	T2-/cBC-
All (152)	69 (45%)	83 (55%)	36 (24%)	116 (76%)	32 (21%)	37 (24%)	4 (3%)	79 (52%)
Prior AF (112)	55 (49%)	57 (51%)	23 (20%)	89 (80%)	20 (18%)	35 (31%)	3 (3%)	54 (48%)
No AF (40)	14 (35%)	26 (65%)	13 (32%)	27 (68%)	12 (30%)	2 (5%)	1 (2%)	25 (62%)

Disclosure. **D. P. Kontoyiannis**, Pfizer: Research Contractor, Research support and Speaker honorarium; Astellas: Research Contractor, Research support and Speaker honorarium; Merck: Honorarium, Speaker honorarium; Cidara: Honorarium, Speaker honorarium; Amplyx: Honorarium, Speaker honorarium; F2G: Honorarium, Speaker honorarium; **L. Ostrosky-Zeichner**, Astellas: Consultant and Grant Investigator, Consulting fee and Research grant; Merck: Scientific Advisor and Speaker's Bureau, Consulting fee and Speaker honorarium; Pfizer: Grant Investigator and Speaker's Bureau, Grant recipient and Speaker honorarium; Scynexis: Grant Investigator and Scientific Advisor, Consulting fee and Grant recipient; Cidara: Grant Investigator and Scientific Advisor, Consulting fee and Research grant; **S. Apewokin**, T2 biosystems: Investigator, Research support; Astellas: Scientific Advisor, Consulting fee

1775. Impact of Infectious Diseases Consultation on Mortality in Patients with Candidemia

Carlos Mejia, MD[1], Ryan Kronen, BA[2]; Charlotte Lin, BA[3]; Kevin Hsueh, MD[4]; William Powderly, MD[5]; Andrej Spec, MD[6]; [1]Infectious Disease, Washington University, Saint Louis, Missouri; [2]Washington University School of Medicine in St. Louis, St. Louis, Missouri; [3]Infectious Disease, Washington University School of Medicine, St. Louis, Missouri; [4]Infectious Disease, Washington University in St louis, St Louis, Missouri; [5]Division of Infectious Disease, Washington University in St. Louis, St. Louis, Missouri; [6]Infectious Disease, Washington University, St Louis, Missouri

Session: 216. The Fungus Among-us - Clinical Advances
Saturday, October 7, 2017: 8:30 AM

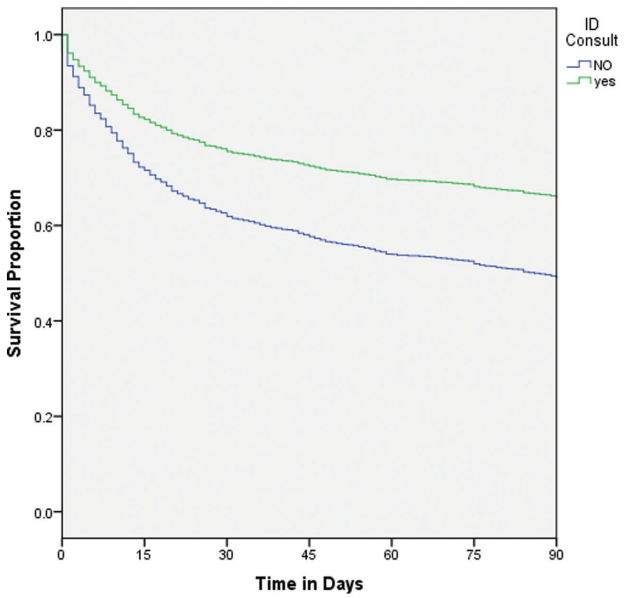
Background. An infectious diseases (ID) consultation is often, but not always, obtained to help guide treatment of patients with candidemia. We examined if ID consultation affected patient outcome in patients with culture positive candidemia.

Methods. We assembled a retrospective cohort of 1,873 cases of candidemia in patients hospitalized in our academic tertiary care hospital from 2002 to 2015. We collected data on comorbidities, predisposing factors; antifungal therapy, survival and ID consult. Patients who died within 24 hours of diagnosis were excluded, under the presumption that they did not have an opportunity to receive an ID consult. Survival analysis was performed via univariate and multivariate Cox Regression with censoring at 90 days, as subsequent mortality was less likely to be related to candidemia.

Results. 913 (49%) of the candidemic patients received an ID consult; 960 (51%) did not. Underlying comorbidities were evenly distributed between patients with and without an ID consult, except that patients with an ID consult more frequently had a central line (39% vs. 26%, $p < 0.001$), were on mechanical ventilation (4% vs. 2%, $P = 0.003$) or were receiving extracorporeal membrane oxygenation (2.2% vs. 0.5%, $p = 0.002$). The ID consult group had lower 90-day mortality compared with patients without an ID consult (34% vs. 49%, $P < 0.001$), with an adjusted hazard ratio of mortality for those patients receiving an ID consult of 0.55 (95% CI: 0.48, 0.64, $P < 0.001$) (Fig 1). Patient management differed significantly: the ID consult group was more likely to receive an echinocandin (29% vs. 21%, $P < 0.001$) or amphotericin B (AmB) (3.4% vs. 1.4%, $P = 0.006$).

Conclusion. Candidemic patients who received an ID consult were significantly less likely to die, and were more likely to receive therapy with amphotericin or an echinocandin. These data suggest that an ID consult should be an integral part of clinical care of patients with candidemia.

Figure 1. Survival curve of 1,873 patients with candidemia by receipt of ID consult adjusted for age above 50, receipt of chemotherapy, the presence of central line, previous use of corticosteroids, receipt of ECMO and recent `pleural procedure.



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