Prevalence of and Factors Associated with Clostridium difficile Co-infection Among Patients with Candidemia, United States, 2014–2016

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1779. Prevalence of and Factors Associated with *Clostridium difficile* Co-infection Among Patients with Candidemia, United States, 2014–2016

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**Methods.** Population-based surveillance for candidemia was conducted through CDC's Emerging Infectious Diseases Program during 2014–2016. A case of candidemia was defined as a blood culture positive for Candida species collected from a surveillance area resident. Demographic and medical information, including occurrence of CDI, was collected. We defined co-infection as CDI within 90 days of candidemia and performed bivariable analysis to assess factors associated with co-infection.

**Results.** Among 2129 cases of candidemia, 190 (9%) had CDI co-infection; 116 (5%) had CDI in the 90 days before candidemia (median 10 days) and 60 (3%) had CDI following candidemia (median 8 days). The median age of those with CDI-candidemia co-infection was 61 years and 100 (53%) were male. Compared with candidemia alone, the odds of CDI-candidemia co-infection were 1.57 (1.19–2.06) for prior hospitalization, 1.8 (1.37–2.46) for ICU stay, and 1.9 (1.37–2.46) for CVC placement.

**Conclusion.** Nearly one in ten patients with candidemia also had CDI co-infection. Black race, certain underlying conditions, hemodialysis, previous hospitalization, ICU stay, and the presence of a CVC were associated with co-infection. Clinicians should be vigilant for coinfection of CDI and candidemia, particularly in situations with associated risk factors.

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1781. Galidesivir, a Direct-Acting Antiviral Drug, Abrogates Viremia in Rhesus Macaques Challenged with ZIKV Virus

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**Methods.** We have conducted four pre-clinical studies in rhesus macaques to test antiviral efficacy and dosing strategies of galidesivir against ZIKV infection. Collectively, we have evaluated 70 rhesus macaques by using subcutaneous 1x105 TCID50 of a Puerto Rican ZIKV isolate. We have evaluated galidesivir therapy administered via IM injection as early as 90 minutes and up to 72 hours after subcutaneous (SC) ZIKV challenge, and as late as 5 days after intravaginal (IVAG) challenge. In these studies, we evaluated the efficacy of a range of loading and maintenance doses of galidesivir. The highest dose evaluated has been a loading dose of 100mg/kg BID followed by a maintenance dose of 25mg/kg BID for nine days. We followed multiple endpoints, including ZIKV RNA levels in plasma, urine, saliva, and cerebrospinal fluid. Immune activation, complete blood counts, chemistries and galidesivir pharmacokinetics were also monitored.

**Results.** Galidesivir was well-tolerated in all studies. All untreated controls developed high-level plasma viremia, and had readily detectable ZIKV RNA in CSF, saliva, and urine. Animals treated in the first 24 hours after SC ZIKV challenge did not develop plasma viremia and were either negative or had significantly reduced ZIKV RNA in bodily fluids. Animals treated with galidesivir later (up to 72 hours) were partially protected; they had detectable ZIKV RNA plasma, but the onset was delayed and the magnitude significantly reduced compared with controls. Animals infected with ZIKV were protected by galidesivir treatment up until day 5 after infection, with no blood viremia and significant reductions in ZIKV RNA in the CSF as compared with controls.

**Conclusion.** Galidesivir dosing in rhesus macaques was well-tolerated and offered significant protection against ZIKV infection. These results warrant continued study and clinical evaluation.