

NDM-producing and 4 of 4 (100%) OXA-23-producing ACB. By combining FDC with both DPA and avibactam, the MIC was reduced to susceptible (91%) for all but 1 KPC-producing and 1 NDM-producing Enterobacteriaceae isolate. **Conclusions:** Cefiderocol (FDC) demonstrated potent activity against a diverse collection of multidrug-resistant, gram-negative isolates, including producers of Ambler class A, B, and D carbapenemases. Among the 26 FDC nonsusceptible isolates, 65% were NDM positive. Our data indicate that FDC combined with β -lactamase inhibitors may restore susceptibility in FDC nonsusceptible isolates. Additional studies are needed to understand the underlying mechanism(s) of FDC resistance and to further explore the use of β -lactamase inhibitors in combination with FDC.

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Poster Presentation

Inactivation of *Candida auris* and *Candida albicans* by Ultraviolet-C

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Background: *Candida auris* is an emerging fungal pathogen that is often resistant to major classes of antifungal drugs. It is considered a serious global health threat because it has caused severe infections with frequent mortality in over a dozen countries. *C. auris* can survive on healthcare environmental surfaces for at least 7 days, and it causes outbreaks in healthcare facilities. *C. auris* has an environmental route of transmission. Thus, infection prevention strategies, such as surface disinfection and room decontamination technologies (eg, ultraviolet [UV-C] light), will be essential to controlling transmission. Unfortunately, data are limited regarding the activity of UV-C to inactivate this pathogen. In this study, a UV-C device was evaluated for its antimicrobial activity against *C. auris* and *C. albicans*. **Methods:** We tested the antifungal activity of a single UV-C device using the vegetative bacteria cycle, which delivers a reflected dose of 12,000 μ W/cm². This testing was performed using Formica sheets (7.6 \times 7.6 cm; 3 \times 3 inches). The carriers were inoculated with *C. auris* or *C.*

Figure. Inactivation of *Candida auris* and *Candida albicans* by UV-C |

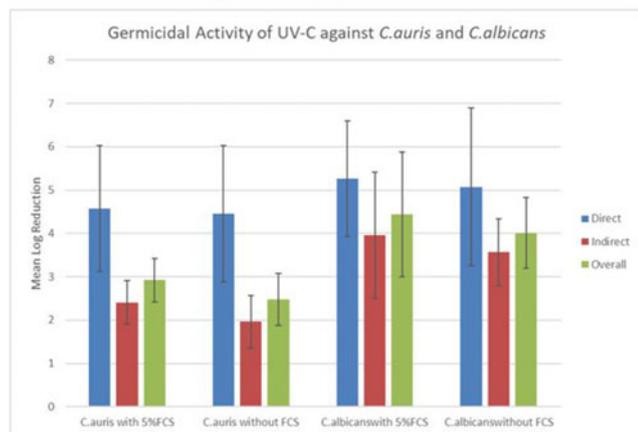


Fig. 1.

Table. Mean log₁₀ reductions of surfaces contaminated with *Candida auris* and *Candida albicans* with variations in test methods

Site (line-of-site; orientation; distance)	<i>C. auris</i> w/fetal calf serum (FCS)	<i>C. auris</i> w/out FCS	<i>C. albicans</i> w/FCS	<i>C. albicans</i> w/out FCS
Toilet seat (D, H, 7'8")	4.99	4.75	5.69	4.84
Bathroom wall (I, H, 3'7")	2.84	2.42	4.23	3.88
Cart (D, H, 5'2")	4.60	3.93	5.36	5.04
Bedside Table (I, H, 3'7")	2.46	1.96	4.04	3.69
Bed Mattress (D, H, 4'0")	4.71	4.63	5.47	5.00
Headboard (D, V, 5'11")	5.10	5.05	5.69	5.68
Bedside Table (D, H, 8'2")	3.72	3.39	5.29	4.35
Chair (D, V, 7'11")	4.61	4.47	5.36	5.17
Overbed Table (I, H, 7'10")	2.18	1.75	3.76	3.32
Chair (D, H, 5'6")	4.58	4.58	4.95	4.52
Direct	4.57	4.45	5.26	5.07
Indirect	2.41	1.96	3.96	3.56
Horizontal	2.87	2.42	4.39	3.96
Vertical	4.92	4.78	5.65	5.48
Overall	2.93	2.48	4.44	4.01

albicans and placed horizontal on the surface or vertical (ie, perpendicular) to the vertical UV-C lamp and at a distance from 1.2 m (~4 ft) to 2.4 m (~8 ft). **Results:** Direct UV-C, with or without FCS (log₁₀ reduction 4.57 and 4.45, respectively), exhibited a higher log₁₀ reduction than indirect UV-C for *C. auris* (log₁₀ reduction 2.41 and 1.96, respectively), which was statistically significant (Fig. 1 and Table 1). For *C. albicans*, although direct UV-C had a higher log₁₀ reduction (log₁₀ reduction with and without FCS, 5.26 and 5.07, respectively) compared to indirect exposure (log₁₀ reduction with and without FCS, 3.96 and 3.56, respectively), this difference was not statistically significant. The vertical UV had statistically higher log₁₀ reductions than horizontal UV against *C. auris* and *C. albicans* with FCS and without FCS. For example, for *C. auris* with FCS the log₁₀ reduction for vertical surfaces was 4.92 (95% CI 3.79, 6.04) and for horizontal surfaces the log₁₀ reduction was 2.87 (95% CI, 2.36–3.38). **Conclusions:** *C. auris* can be inactivated on environmental surfaces by UV-C as long as factors that affect inactivation are optimized (eg, exposure time). These data and other published UV-C data should be used in developing cycle parameters that prevent contaminated surfaces from being a source of acquisition by staff or patients of this globally emerging pathogen.

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Inappropriate Azithromycin Use in Nine Primary-Care Clinics Before and After Implementation of Provider Guidance in the EMR

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Background: According to the CDC Core Elements of Outpatient Stewardship, the first step in optimizing outpatient antibiotic use the identification of high-priority conditions in which antibiotics