

New investigational drug holds promise for combatting deadly mucormycosis infections

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With very few treatment options available to fight deadly mucormycosis infections, a new Los Angeles Biomedical Research Institute (LA BioMed) study holds hope for adding to the arsenal of therapies physicians have to combat an increasingly common infection afflicting people with weakened immune systems.

An LA BioMed research team reported in an online, ahead-of-print study in the *Antimicrobial Agents and Chemotherapy* journal that the investigational drug isavuconazole was as effective in reducing mucormycosis infections in disease models as the most widely used treatment currently on the market, high-dose liposomal amphotericin B. Isavuconazole is an investigational once-daily intravenous and oral broadspectrum antifungal for the potential treatment of severe invasive and life-threatening <u>fungal infections</u>. It is currently in phase 3 of clinical development.

"Expanding the options for fighting these <u>deadly infections</u> is especially important for patients who can't tolerate current treatments or whose infections may not respond to the antifungals on the market today," said Ashraf S. Ibrahim, PhD, an LA BioMed lead researcher and the corresponding author for the study. "With such a limited number of treatments available, developing new therapies is critical to increasing the number of people who survive these extremely lethal infections. "

Patients with <u>weakened immune systems</u>, hyperglycemia, acidosis (diabetic ketoacidosis or other forms of acidosis), malnutrition, or



trauma patients are at increased risk of mucormycosis infection. Despite the current treatments and surgeries available to treat mucormycosis, more than half of patients with the infections die.

"Clearly, new strategies for preventing and treating mucormycosis are urgently needed," the researchers concluded.

They examined the most common form of this deadly infection, mucormycosis due to Rhizopus delemar, and concluded that their results support the further development of isavuconazole.

Provided by Los Angeles Biomedical Research Institute at Harbor

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