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Bugworks Research initiates Ph 1 trial of critical bacterial infection drug

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BWC0977 is critical for the treatment of serious multidrug-resistant (MDR) Gram-negative infections

Bengaluru-based Bugworks Research has announced that the first human dose was administered in Phase 1 clinical trial evaluating BWC0977: a next-generation broad-spectrum, novel bacterial topoisomerase inhibitor (NBTI), supported by Combating Antibiotic-Resistant Bacteria Biopharmaceutical Accelerator (CARB-X).

BWC0977 is a highly potent, intravenous broad-spectrum antibiotic with the potential for oral administration, for the treatment of serious multidrug-resistant (MDR) Gram-negative infections. BWC0977 can address many serious hospital and community infections and combat a broad spectrum of biothreat pathogens.

BWC0977, which emerged within less than a hundred compounds synthesised, is active against clinical isolates that are resistant to antibiotics currently in clinical use including fluoroquinolones, carbapenems, cephalosporins, colistin etc., and is efficacious in murine thigh, lung, and urinary tract infection models with adequate safety margins in pre-clinical species.

The Phase 1 clinical trial is being conducted in Adelaide, Australia, after a positive pre-IND meeting with the US FDA and with approval from Human Research Ethics (HREC) in Australia. This trial is a randomised, double-blind, placebo-controlled study of the safety, tolerability, and pharmacokinetics of single and multiple ascending doses of BWC0977 in healthy adult subjects. Results are expected by early 2022.