Candida infections: A cost-effectiveness analysis for Switzerland

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OBJECTIVES: To compare the cost-effectiveness of micafungin and caspofungin for the treatment of systemic candida infections (including invasive candidiasis and candidaemia) in Switzerland. METHODS: To this end, a health economic decision model was developed. A decision tree was used to model micafungin and caspofungin for the treatment of systemic candida infections. The main decision node was a choice between micafungin and caspofungin. A decision tree is shown in the Results section. The tree is based on the results of prior studies. The model included the following nodes: initial consultation, test, treatment, relapse, and economic outcomes. The model was calibrated to fit published literature. Outcomes were compared between micafungin and caspofungin. Differences in costs and quality-adjusted life years (QALYs) were used to calculate incremental cost-effectiveness ratios (ICERs). RESULTS: The model projected an ICER of CHF 149 (approximately $21/day), indicating that patients would have to pay approximately $21 per day more for micafungin compared to caspofungin. The model was validated using data from prior studies. CONCLUSION: Micafungin is cost-effective compared to caspofungin for the treatment of systemic candida infections in Switzerland. Micafungin is cost-effective when compared to caspofungin in the treatment of invasive candida infection in China. This study suggests that in the Mexican setting, use of non-colistinamide solutions for gastrointestinal infection caused by multidrug-resistant (MDR) pathogens may be cost-effective. This should be considered for use in the management of pressure ulcers. (Reganex®, Smith & Nephew Biotherapeutics, Fort Worth, Texas.)

COST-EFFECTIVENESS OF BECAPLERMIN GEL ON WOUND CLOSURE IN THE TREATMENT OF PRESSURE ULCERS

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OBJECTIVES: To determine the cost-effectiveness of becaplermin gel* on wound healing and should be considered for use in the management of pressure ulcers. (Reganex®, Smith & Nephew Biotherapeutics, Fort Worth, Texas.)

COST-EFFECTIVENESS OF COLISTINAMIDE SODIUM FOR THERAPY OF INFECTIONS CAUSED BY MULTIDRUG-RESISTANT (MDR) IN MEXICO

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OBJECTIVES: To determine the cost effectiveness of colistinamide for the treatment of infections caused by multidrug-resistant (MDR) pathogens. METHODS: We compare the incremental cost-effectiveness ratios (ICERs) and cost-effectiveness acceptability curves (CEACs) for colistinamide versus alternative antimicrobials. The analysis was based on a decision tree model. The study considered the following outcomes: treatment success, overall mortality of the patients in the colistinamide group, and costs. The model was calibrated to fit published literature. CONCLUSIONS: This study suggests that in the Mexican setting, use of non-colistinamide solutions for gastrointestinal infection caused by multidrug-resistant (MDR) pathogens may be cost-effective. This should be considered for use in the management of pressure ulcers. (Reganex®, Smith & Nephew Biotherapeutics, Fort Worth, Texas.)

COST-EFFECTIVENESS ANALYSIS OF MICAFUNGIN VERSUS CASPOFUNGIN IN THE TREATMENT OF INVASIVE CANDIDA INFECTION IN CHINA

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OBJECTIVES: To determine the cost-effectiveness of micafungin compared to caspofungin in the treatment of invasive candida infection in China. METHODS: A decision-tree model was developed to estimate the cost-effectiveness of micafungin and caspofungin from the perspective of the whole society. In the model, outcome on effectiveness was based on the published literature. The model was calibrated to fit published literature. The model was validated using data from prior studies. CONCLUSIONS: This study suggests that in the Mexican setting, use of non-colistinamide solutions for treatment of infections caused by MDR is likely to be cost-effective.