Budget Impact and Cost Consequences of Rezafungin Adoption Versus Daily Echinocandins for Invasive Candidiasis in Saudi Arabia

Alharbi IH[1] , Almohaizeie A[2,3], Al Qahtani H[4], Alanizy L[5], Almasoudi IA[6], Almuhisen S[5], Alshahrani A[7], Alsaagi IA[6], Bajhmom W[8], Al Saeed A[9], Nugali A[10].

[1]Ministry of Defense Health Services, Jeddah, Saudi Arabia; [2]King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia; [3] Alfaisal University, Riyadh, Saudi Arabia; [4]Department of Pharmaceutical Care, Ministry of National Guard Health Affairs, Riyadh, Saudi Arabia; [5]King Fahad Medical City, Riyadh, Saudi Arabia; [6]King Saud Medical City, Riyadh, Saudi Arabia; [7]Pharmaceutical Care Department, Armed Forces Hospitals Southern Region, Khamis Mushait, Saudi Arabia; [8]King Fahad Hospital, Jeddah, Saudi Arabia; [9]Dammam Medical Complex, Dammam, Saudi Arabia; [10]HEPA Solutions, Jeddah, Saudi Arabia.

Abstract #ID: EE490

To download the poster, please scan the QR code.

Copies of this poster obtained through the Quick Response (QR) code are for personal use only and may not be reproduced without permission from the author of this poster.
For further information, please send your question(s) to: HEPA team Info@digitalhepa.com

KEY LEARNINGS

Once-weekly rezafungin is a cost-saving option for invasive candidiasis in KSA, driven by reduced length of hospital stay.

BACKGROUND

- Invasive candidiasis (IC) is a serious, life-threatening fungal infection associated with high ICU mortality and a substantial economic burden, driven largely by prolonged hospital and ICU stays. (1)
- International clinical guidelines recommend daily intravenous (IV) echinocandins (e.g., caspofungin, anidulafungin, and micafungin) as first-line therapy. (2-5)
- Rezafungin, a novel once-weekly echinocandin, demonstrated safety, tolerability, and efficacy versus once-daily caspofungin in the phase II STRIVE trial, and non-inferior efficacy in the phase III ReSTORE trial. (6,7)
- The once-weekly dosing regimen of rezafungin may facilitate earlier hospital discharge and transition to outpatient parenteral care, potentially reducing inpatient and administration-related costs. (8)

OBJECTIVE

- To evaluate the economic impact of adopting rezafungin from the Saudi public payer perspective. A systematic literature review was conducted to validate model input parameters and to collect data on the patient journey, including epidemiology, diagnosis, treatment, follow-up, and costs.

CONCLUSIONS

- This analysis shows that the adoption of rezafungin over daily echinocandins for the treatment of invasive candidiasis is expected to reduce budget spending for Saudi public payers across ICU and OPAT settings, driven by an estimated 4.1-day reduction in length of stay. With the same budget spending on daily echinocandins, listing rezafungin could potentially free up hospital capacity and enable more patients to access antifungal treatment.

References

1. Candidemia and Invasive Candidiasis: A Systematic Review. Value Health Reg Issues. 2020;21:53-8.
2. Pappas PG, Kauffman CA, Andes DR, Clancy CJ, Marr KA, Ostrosky-Zeichner L, et al. Clinical Practice Guideline for the Management of Candidiasis: 2016 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2016;62(4):e1-50.
3. Martin-Loeches I, Antonelli M, Cuenca-Estrella M, Dimopoulos G, Einav S, De Waele JJ, et al. ESICM/ESCMID task force on practical management of invasive candidiasis in critically ill patients. Intensive Care Med. 2019;45(6):789-805.
4. Cornely OA, Bassetti M, Calandra T, Garbino J, Kullberg BJ, Lortholary O, et al. ESCMID* guideline for the diagnosis and management of Candida diseases 2012: non-neutropenic adult patients. Clin Microbiol Infect. 2012;18 Suppl 7:19-37.
5. Demir KK, Butler-Laporte G, Del Corpo O, Ekmekjian T, Sheppard DC, Lee TC, et al. Comparative effectiveness of amphotericin B, azoles and echinocandins in the treatment of candidemia and invasive candidiasis: A systematic review and network meta-analysis. Mycoses. 2021;64(9):1098-110.
6. Thompson GR, Soriano A, Skoutelis A, Vazquez JA, Honore PM, Horcajada JP, et al. Rezafungin Versus Caspofungin in a Phase 2, Randomized, Double-blind Study for the Treatment of Candidemia and Invasive Candidiasis: The STRIVE Trial. Clin Infect Dis. 2021;73(11):e3647-e55.
7. Thompson GR, Soriano A, Cornely OA, Kullberg BJ, Kollef M, Vazquez J, et al. Rezafungin versus caspofungin for treatment of candidaemia and invasive candidiasis (ReSTORE): a multicentre, double-blind, double-dummy, randomised phase 3 trial. Lancet. 2023;401(10370):49-59.
8. Hoenigl M, Salmanton-García J, Egger M, Gangneux J-P, Bicanic T, Arikan-Akdagli S, et al. Guideline adherence and survival of patients with candidaemia in Europe: results from the ECMM Candida III multinational European observational cohort study. Lancet Infect Dis. 2023.

METHODS

- A cost-calculator budget impact model was developed to assess the financial impact of introducing rezafungin for invasive candidiasis (IC) from a Saudi public payer perspective, over a 1- to 5-year time horizon.
- The model's data were sourced from local experts, public hospital business centers, national statistics, published literature, and the National Tender Drug List (2025).
- Input parameters included drug acquisition costs, healthcare resource utilization costs, and length-of-stay (LOS) differentials across ICU, outpatient parenteral antimicrobial therapy (OPAT) home, and OPAT center settings.
- The IC-eligible population was estimated from GASTAT (General Authority for Statistics) national statistics and published Saudi IC incidence data.
- The model compared market-share scenarios: a current scenario without rezafungin and a scenario including rezafungin, in which rezafungin replaced caspofungin. Rezafungin's share rose from 20% to 40% over five years in the ICU and was 100% in OPAT settings.

RESULTS

1. An estimated 2,499 adult patients with IC are eligible annually for ICU echinocandin therapy in Saudi Arabia, with a further 412 eligible for OPAT in home or center settings.
2. In the ICU setting, the total per-patient cost was $22,510 for rezafungin, compared with $24,543 for caspofungin, $24,639 for anidulafungin, and $26,423 for micafungin (Figure 2).
3. The introduction of rezafungin would potentially lead to net savings of $1.0M in Year 1 and $7.6M over 5 years (Figure 3).
4. Despite higher drug acquisition costs for rezafungin compared with caspofungin ($6,379 vs. $1,368), savings were mainly driven by a 4.1-day reduction in length of stay (17.3 vs. 21.4 days; Figure 4).
5. Among 412 OPAT-eligible patients, rezafungin reduced per-patient costs versus caspofungin by $2,440 in the OPAT home setting and $424 in the OPAT center setting (Figure 5).
6. The tornado analysis identified length of stay as the main driver of per-patient cost sensitivity (Figure 6).

Figure 1. | Model structure

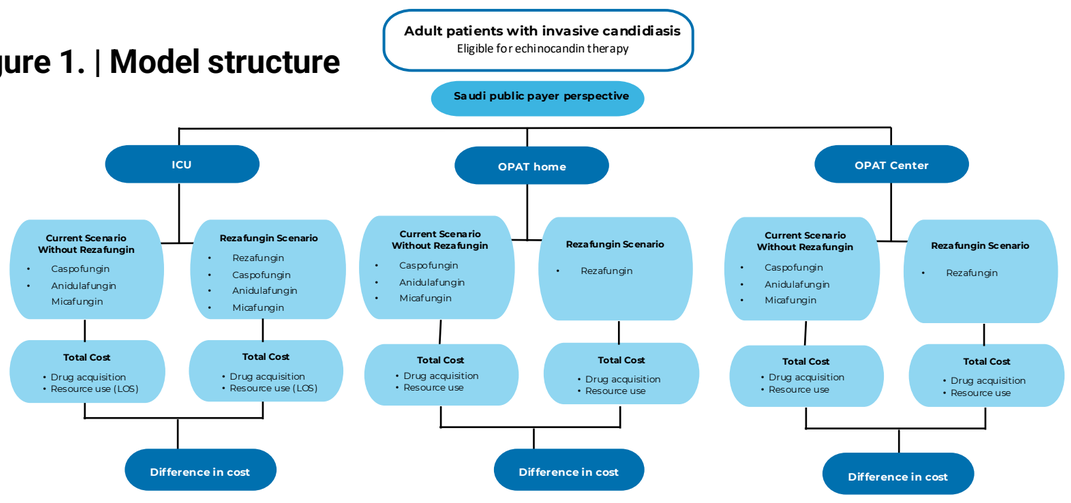


Figure 2. | Annualized per patient cost

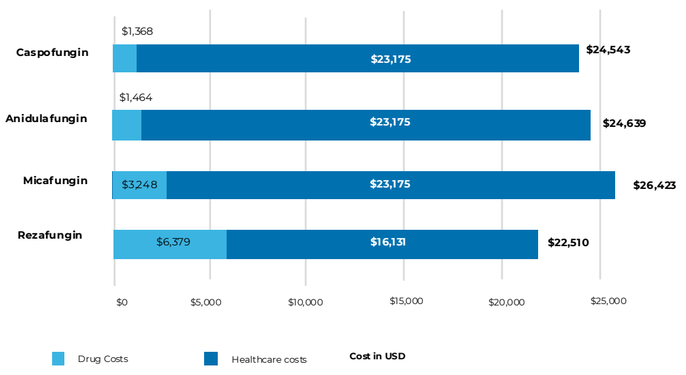


Figure 3. | Budget impact over 5 years in the ICU setting

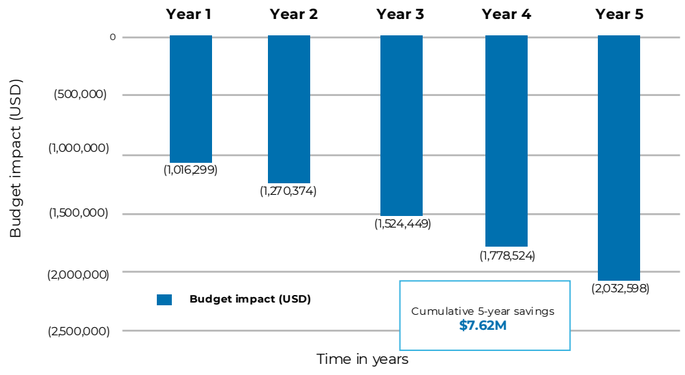


Figure 4. | Length of stay in the ICU setting (days)

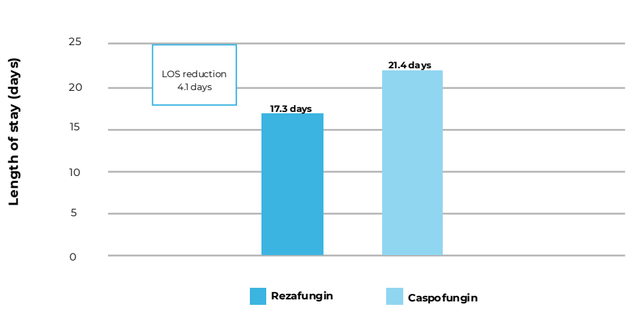


Figure 5. | Per-patient cost in OPAT settings (USD)

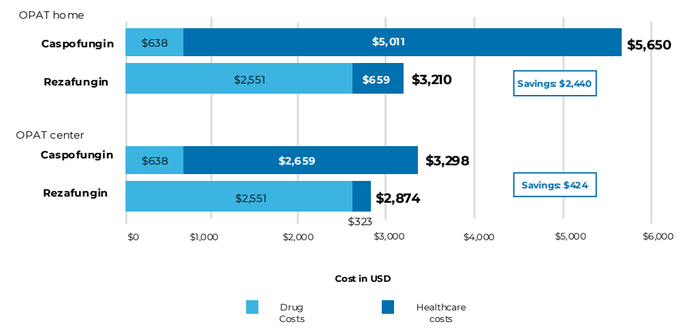
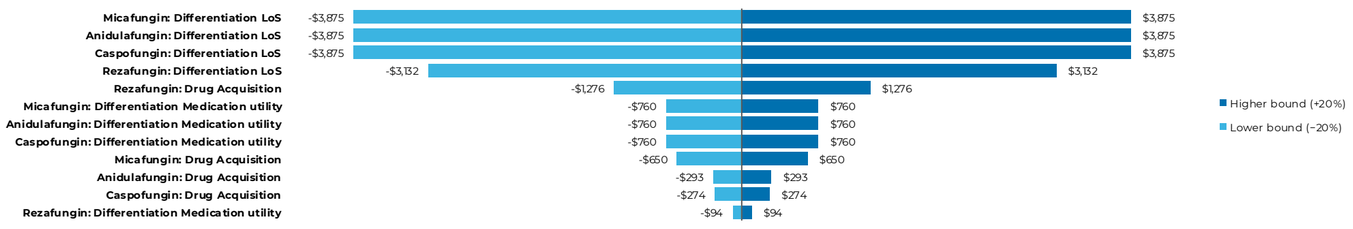


Figure 6. | One-way sensitivity analysis of per-patient cost (±20%, USD)



Author contributions All authors provided substantial contributions to study conception/design, or acquisition/analysis of data; drafting of the publication or reviewing it critically for important intellectual content; and gave their final approval of the publication.
Acknowledgments The authors thank all investigators and research staff in participating institutions.
Disclosures AN Employee of HEPA solutions.

Presented at ISPOR EUROPE | Austria, Vienna | 10 November 2026

This study was sponsored by ALNAGHI COMPANY