

Cost-Effectiveness of Tirzepatide for the Management of Heart Failure with Preserved Ejection Fraction and Obesity

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PURPOSE

- Over 80% of patients with heart failure with preserved ejection fraction (HFpEF) are overweight or obese. However, cost-effective treatments that target both conditions remain limited.
- To evaluate the cost-effectiveness of tirzepatide (TZP) compared to standard care (SoC) alone for the management of HFpEF in patients with obesity.

METHODS

- A Markov state-transition model was developed to project clinical and economic outcomes over a 20-year time horizon.
- The model included three health states: HFpEF, worsened heart failure (wHF), and death.
- The primary outcomes were the incremental cost-effectiveness ratio (ICER), total lifetime costs and QALYs.

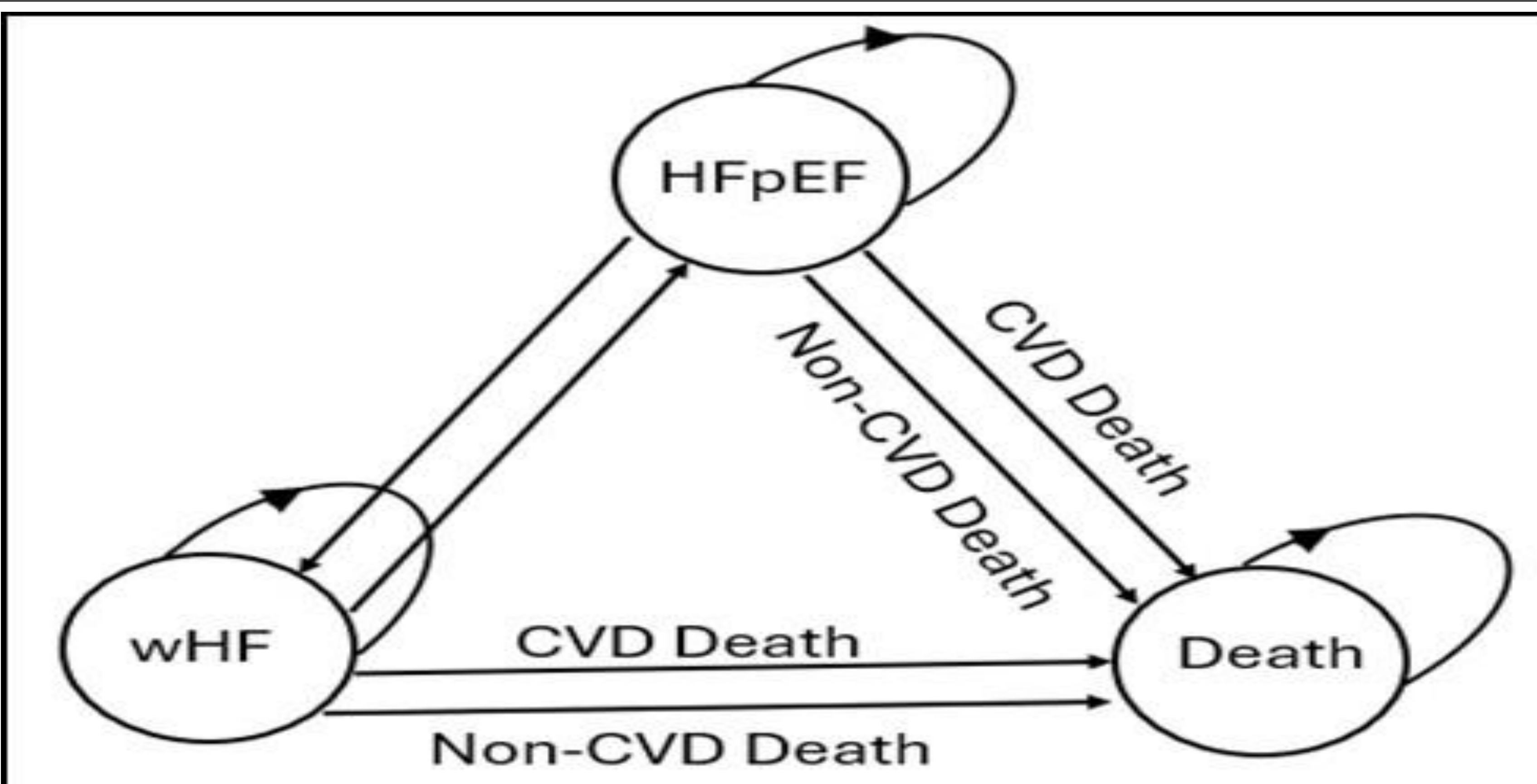


Figure 1. Markov Model for HFpEF and Obesity

RESULTS

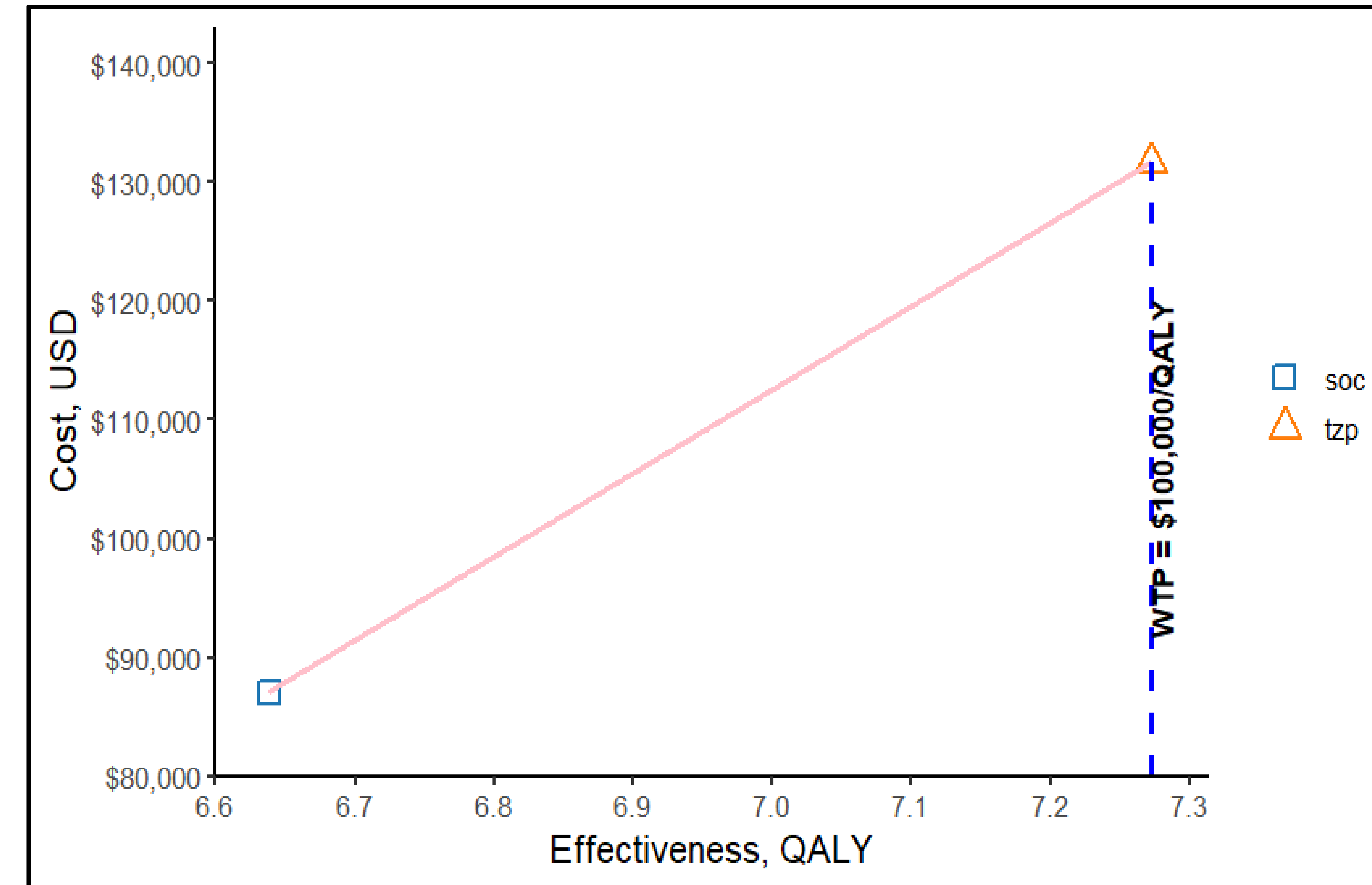


Figure 2. Cost-Effectiveness of Tirzepatide versus SoC for the Management of HFpEF and Obesity

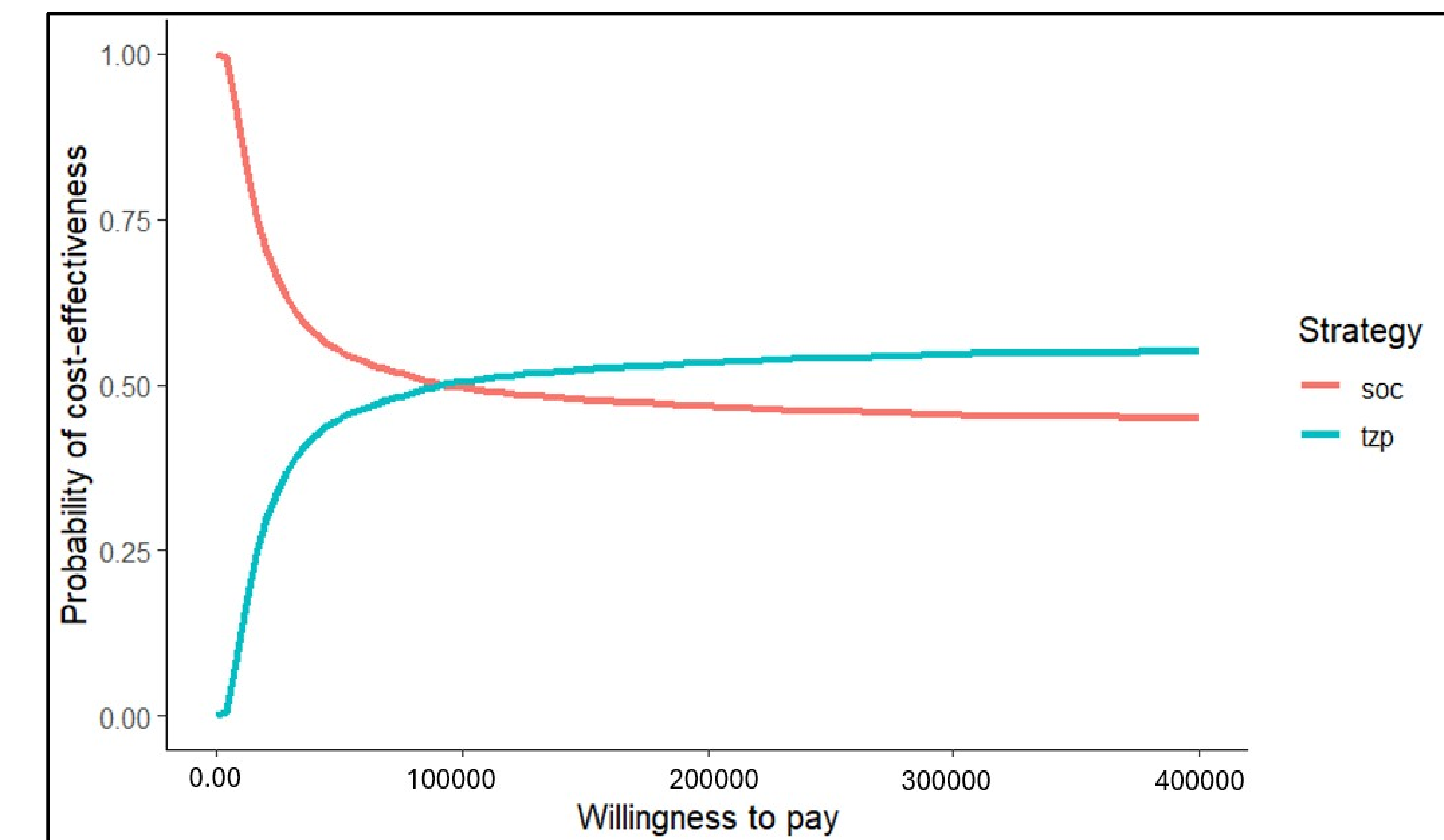


Figure 4. Cost-Effectiveness Acceptability Curve for Tirzepatide versus Standard of Care

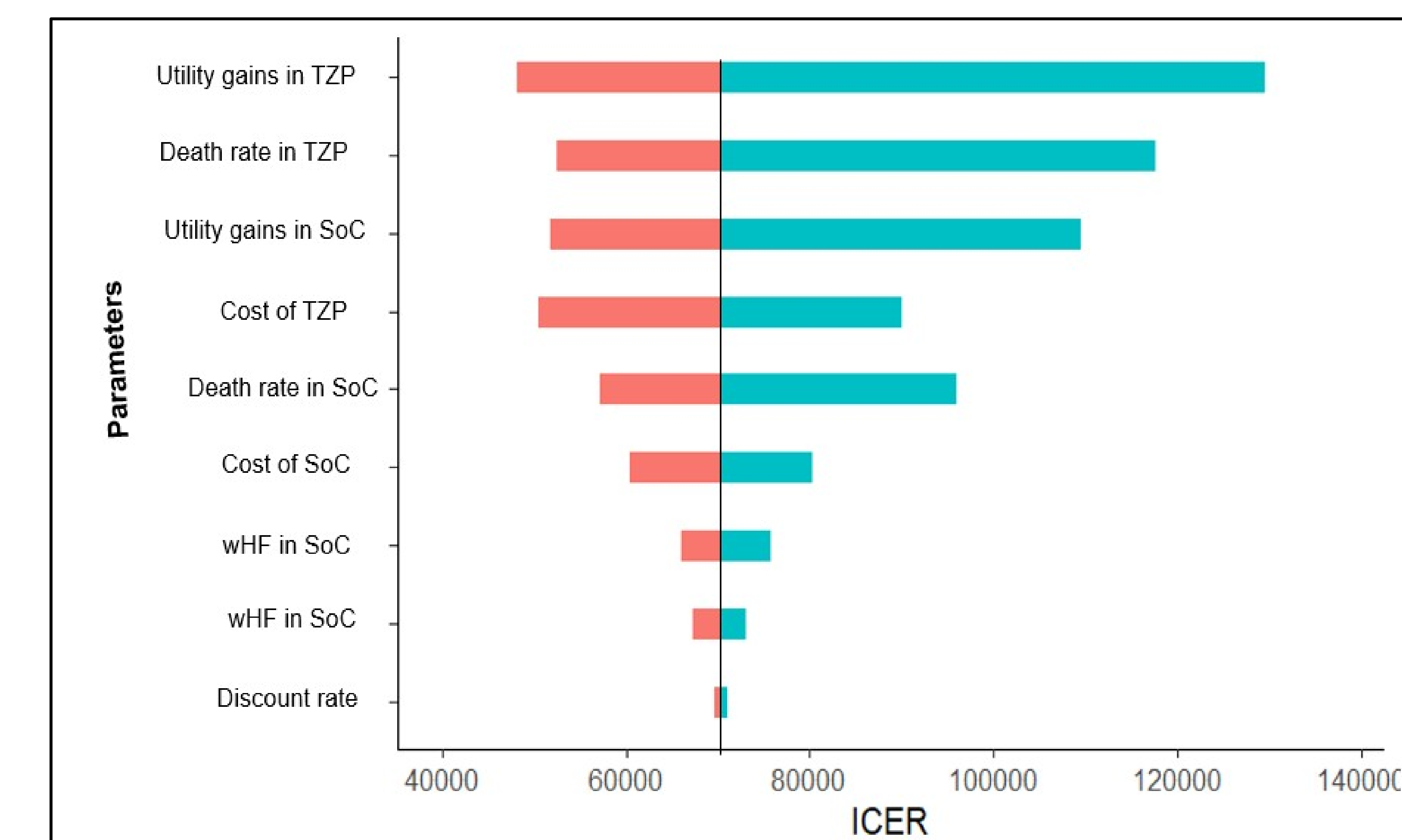


Figure 3. Key Drivers of Cost-Effectiveness from Deterministic Sensitivity Analysis

DISCUSSION & CONCLUSION

- This cost-effectiveness analysis suggests that TZP is a potentially cost-effective treatment option for patients with HFpEF and obesity in the United States
- TZP provided meaningful gains in QALYs and reduced wHF events, resulting in an ICER of \$70,297 per QALY, below the commonly accepted U.S. WTP of \$100,000 per QALY

REFERENCES

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- Jastreboff AM, Aronne LJ, Ahmad NN, Wharton S, Connery L, Alves B, et al. Tirzepatide once weekly for the treatment of obesity. *New England Journal of Medicine*. 2022;387(3):205-16.