

# COST-UTILITY ANALYSIS OF EMPAGLIFLOZIN ON CHRONIC KIDNEY DISEASE PROGRESSION IN THAILAND

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## INTRODUCTION AND OBJECTIVES

- Empagliflozin is an effective treatment to slow chronic kidney disease (CKD) progression.
- It could prevent end-stage kidney disease or death from cardiovascular causes by 28% compared to placebo and also slow the disease progression from CKD stage G2 to G4.
- Understanding the economic implications of adding empagliflozin to the standard of care (SoC) for CKD could provide valuable insights for healthcare decision makers.
- This study aimed to assess cost-utility of empagliflozin as an add-on treatment to SoC for slowing CKD progression in Thailand.

## METHODS

**Population:** CKD patients with an average age of 45 years old

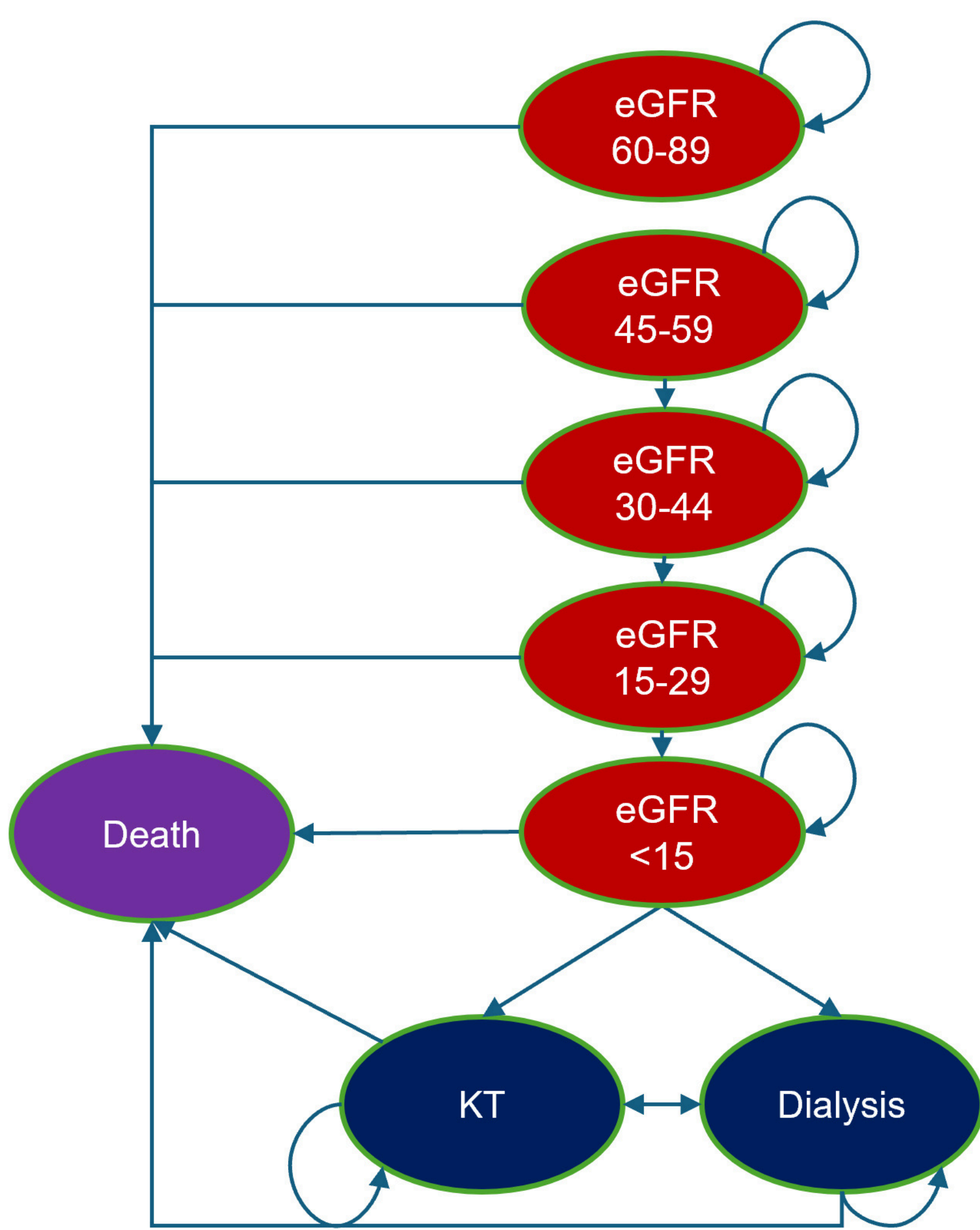
**Intervention:** Empagliflozin 10 mg once daily as add-on treatment to SoC

**Comparator:** SoC alone

**Outcomes:** Quality-adjusted life year (QALY)

**Perspective:** Societal

**Time horizon:** Lifetime



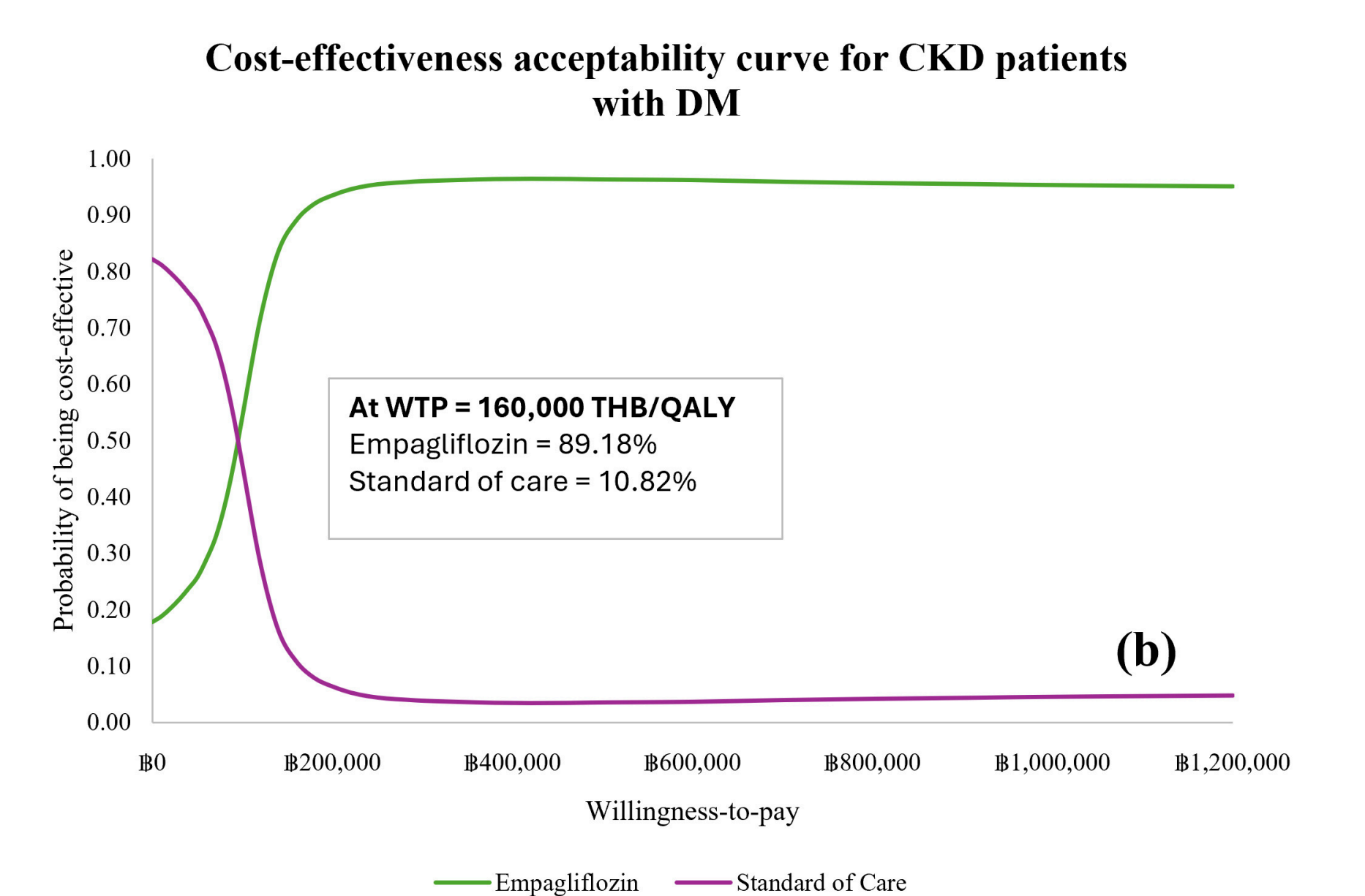
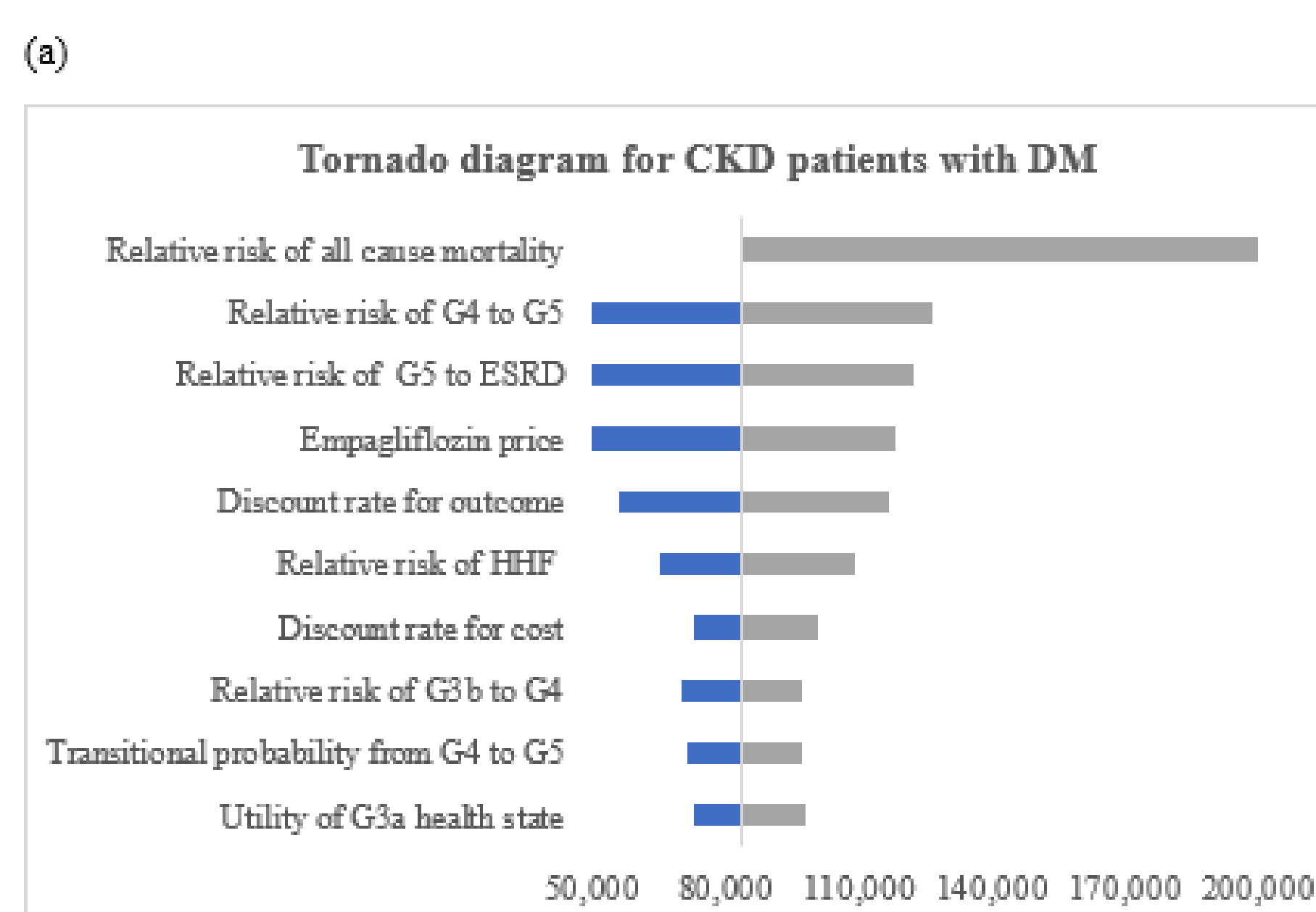
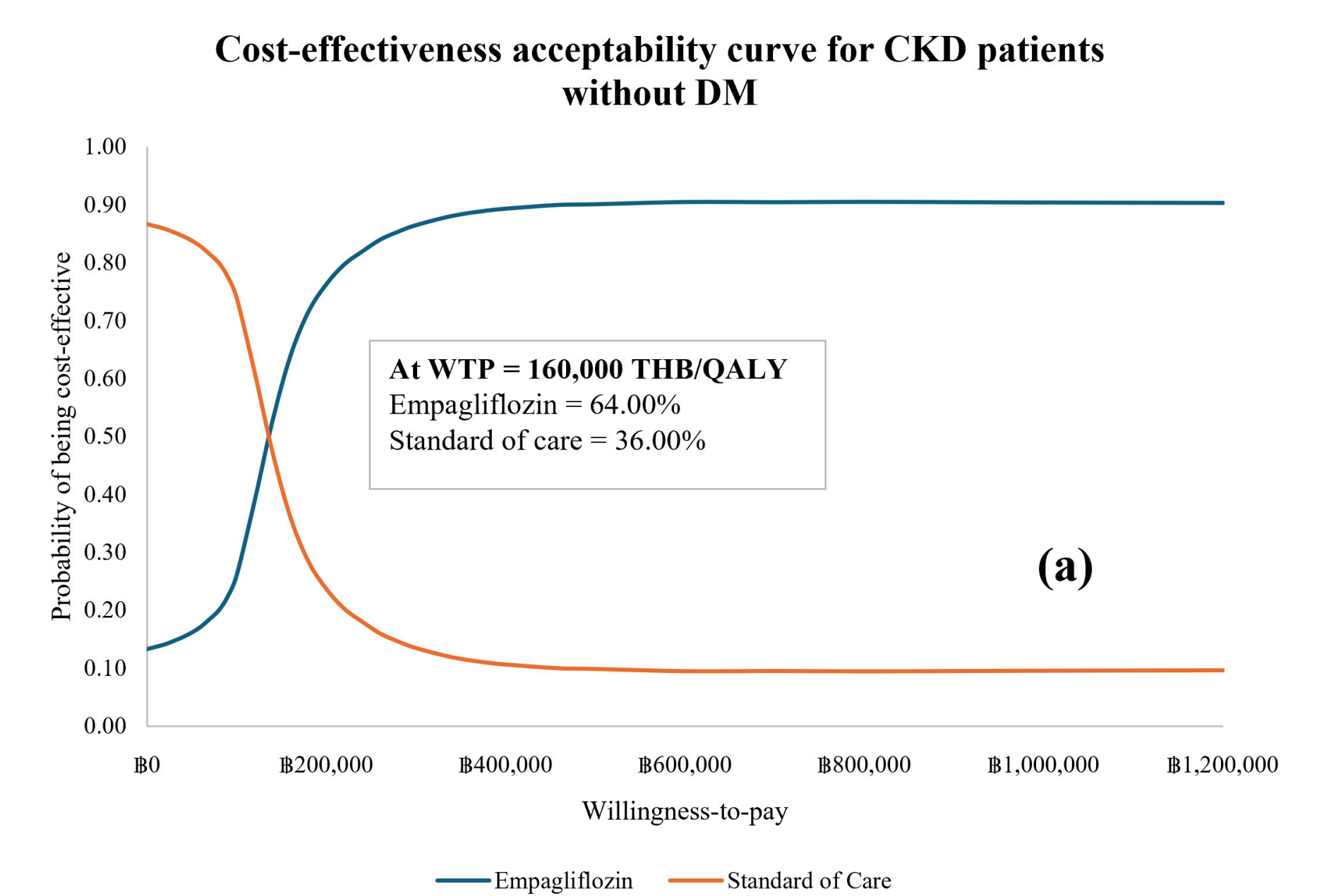
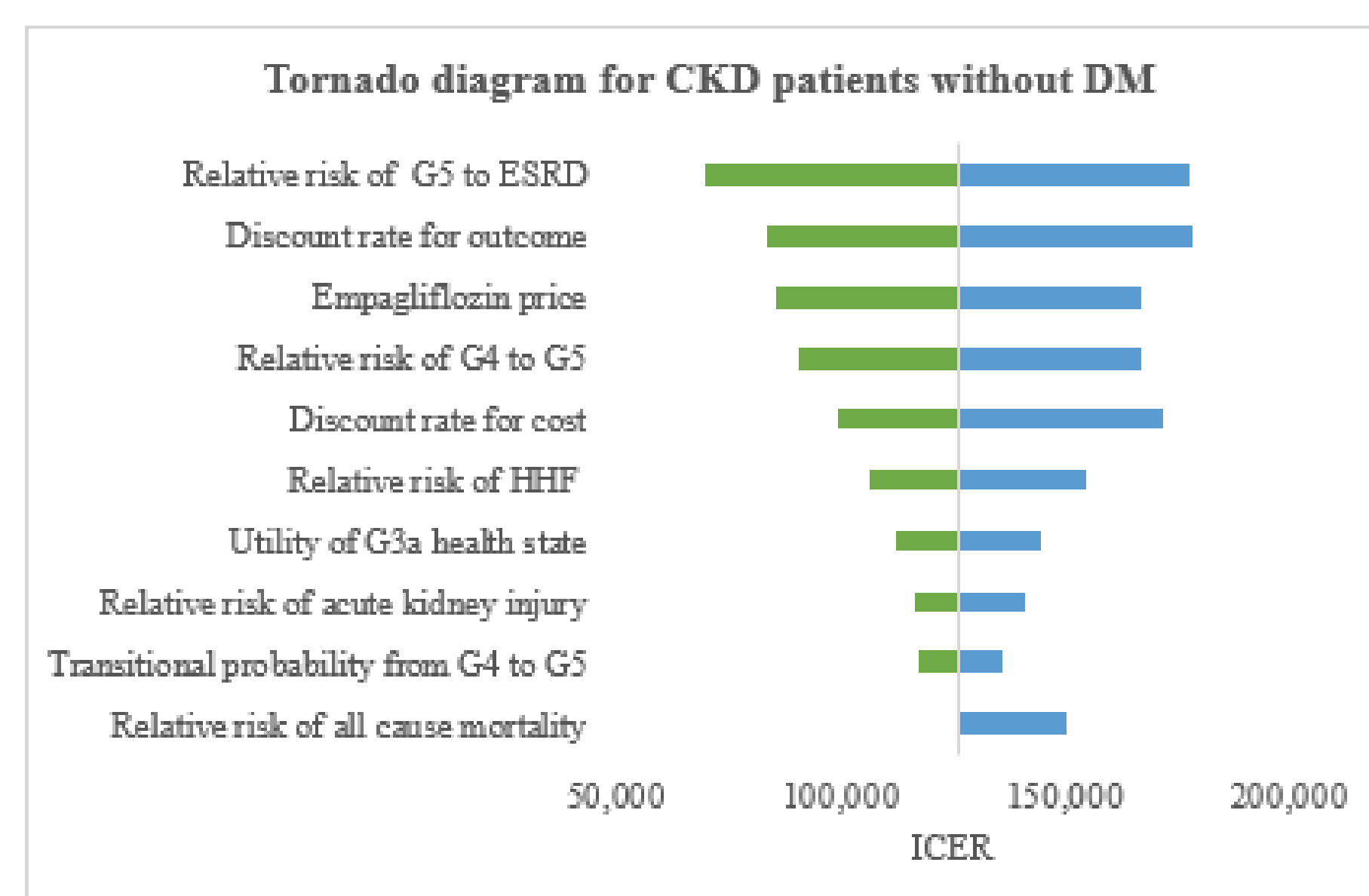
**Fig. 1** A Markov model

KT: kidney transplantation

## RESULTS

**Table 1** Base-case analysis findings

Patients	Empagliflozin Cost (THB)	Empagliflozin QALY	Standard of care Cost (THB)	Standard of care QALY	Incremental cost (THB)	Incremental QALY	ICER/QALY gained (THB)
CKD with no DM	654,255	6.24	576,259	5.62	77,966	0.62	126,201 (3,609 USD)
CKD with DM	584,550	6.12	525,096	5.41	59,454	0.71	83,473 (2,387 USD)



(b)

**Fig. 2** Sensitivity analysis findings, (a) CKD without diabetes (b) CKD with diabetes

## CONCLUSIONS

At the current willingness-to-pay threshold of 160,000 Thai baht/QALY, empagliflozin is cost-effective for treating CKD patients with and without diabetes.

## DISCLOSURE STATEMENT

This study was supported byBoehringer Ingelheim (Thai). The EMPA-KIDNEY trial was initiated, designed, and conducted by the University of Oxford in collaboration with a Steering Committee of experts and Boehringer Ingelheim. The presented analyses were initiated and conducted independently from the EMPA-KIDNEY Collaborative Group.