

## ABSTRAK

Penyakit hipertensi dengan diabetes melitus tipe II berisiko tinggi untuk berkembangnya penyakit kardiovaskular. Penyakit degeneratif ini membutuhkan pengobatan jangka panjang sehingga analisis efektivitas biaya perlu dilakukan untuk membantu dalam pemilihan obat yang efektif secara biaya maupun luaran klinis. Penelitian ini bertujuan untuk menganalisis efektivitas biaya penggunaan antihipertensi amlodipin tunggal dan kombinasi amlodipin-kandesartan melalui perhitungan *Average Cost Effectiveness Ratio* (ACER) dan *Incremental Cost per Unit of Effectiveness Ratio* (ICER). Metode penelitian berupa penelitian observasional dengan rancangan penelitian *cross-sectional*. Data dikumpulkan secara retrospektif dengan menggunakan data rekam medis dan klaim kuitansi pembayaran pasien hipertensi dengan diabetes melitus tipe II rawat jalan di RSUD Sultan Syarif Mohamad Alkadrie Kota Pontianak pada Januari hingga Desember 2021. Subjek penelitian ini sebanyak 34 subjek yang memenuhi kriteria inklusi dan eksklusi. Hasil penelitian menunjukkan karakteristik terbanyak terdapat pada usia  $\geq 60$  tahun (58,82%), jenis kelamin perempuan (55,88%), menggunakan antihipertensi amlodipin tunggal (61,76%), dan tekanan darah di hipertensi *stage 1* (64,71%). Amlodipin tunggal memiliki efektivitas terapi lebih tinggi 28,57% dibandingkan kombinasi amlodipin-kandesartan (15,38%). Hasil nilai ACER amlodipin tunggal sebesar Rp90.155,93, sedangkan pada kombinasi amlodipin-kandesartan sebesar Rp358.932,05 serta nilai ICER yang sebesar (-)Rp223.246,40. Berdasarkan hasil penelitian ini, disimpulkan antihipertensi yang memiliki biaya lebih efektif adalah amlodipin tunggal dibandingkan kombinasi amlodipin-kandesartan.

**Kata Kunci :** Amlodipin, Amlodipin-Kandesartan, Diabetes Melitus Tipe II, Efektivitas Biaya, Hipertensi

## **ABSTRACT**

*Hypertension with diabetes mellitus type II is at high risk for the development of cardiovascular disease. This degenerative disease requires long-term treatment, so it is necessary to carry out a cost-effectiveness analysis in order to assist in the selection of drugs that are cost-effective and clinical outcomes. This study aimed to analyze the cost-effectiveness of using amlodipine monotherapy and the combination of amlodipine-candesartan through Average Cost Effectiveness Ratio (ACER) and Incremental Cost per Unit of Effectiveness Ratio (ICER) calculations. This study method is an observational study with a cross-sectional research design. Data were collected retrospectively using medical records and claim receipts for payment of hypertensive patients with diabetes mellitus type II outpatient at the Sultan Syarif Mohamad Alkadrie Hospital, Pontianak City from January to December 2021. The subjects of this study were 34 subjects who have the inclusion and exclusion criteria. The results of the statistical study showed that the most common were aged  $\geq 60$  years (58.82%), female (55.88%), using the antihypertensive amlodipine monotherapy (61.76%), and blood pressure was in hypertension stage 1 (64.71%). Amlodipine monotherapy has a higher therapeutic effectiveness of 28.57% compared to the amlodipine-candesartan combination (15.38%). The results of the ACER of amlodipine monotherapy was Rp90,155.93, while for the amlodipine-candesartan combination it was Rp358,932.05 and the ICER value obtained was (-)Rp223,246.40. Based on the results of this study, it was concluded that amlodipine monotherapy is more cost-effective than the amlodipine-candesartan combination.*

**Keywords :** *Amlodipine, Amlodipine-Candesartan, Cost Effectiveness, Diabetes Mellitus Type II, Hypertension.*