

## INTISARI

**Latar belakang** Penggunaan *human albumin* 20% pada pasien bedah digestif di RSUD Undata mengalami peningkatan sebesar 25% periode 2020 hingga 2022. Kondisi hipoalbuminemia berhubungan dengan kejadian komplikasi pasca operasi, sehingga perlu dilakukan pemberian infus albumin. Data terkait hubungan rasionalitas pemberian dosis *human albumin* 20% pada pasien bedah digestif dengan luaran klinis masih terbatas. Penelitian ini bertujuan untuk mengetahui hubungan rasionalitas pemberian *human albumin* 20% dengan capaian kadar serum albumin dan luaran klinis serta gambaran biaya medis langsung pada pasien bedah digestif di RSUD Undata.

**Metode** Penelitian ini merupakan studi observasional dengan desain kohort retrospektif. Sampel penelitian ini adalah pasien bedah digestif yang mendapat terapi *human albumin* 20% periode Januari 2020 – Desember 2023. Sumber data berasal dari rekam medis dan data keuangan pasien. Data yang diambil berupa dosis pemberian *human albumin* 20 %, pemeriksaan laboratorium sebelum dan sesudah pemberian, kondisi klinis dan data biaya perawatan pasien. Analisis data menggunakan uji statistik *Chi-Square*, *Mann-Whitney* dan *Multiple Logistic Regression*

**Hasil** Terdapat hubungan antara rasionalitas pemberian *human albumin* 20% terhadap capaian kadar serum albumin ( $p=0,024$ ) dan capaian kadar serum albumin terhadap luaran klinis ( $p=0,035$ ). Rata-rata biaya medis langsung pada kelompok rasional adalah Rp. 38.862.589  $\pm$  14.311.846 dan kelompok tidak rasional adalah Rp. 40.276.852  $\pm$  22.625.198.

**Kesimpulan** Rasionalitas pemberian *human albumin* 20% memiliki hubungan yang signifikan dengan capaian kadar serum dan luaran klinis. Total rerata biaya medis langsung pada pasien bedah digestif adalah Rp. 39.569.720  $\pm$  18.749.958

**Kata Kunci:** Rasionalitas, *Human albumin* 20%, Biaya Medik Langsung, Pasien Bedah Digestif

## ABSTRACT

**Background** Human albumin 20% administration in digestive surgery patients at Undata Hospital increased by 25% from 2020 – 2022 period. Hypoalbuminemia is associated with postoperative complications, and required albumin infusion administration. There is still limited data regarding the relationship between rational dosage of human albumin 20% and clinical outcomes in digestive surgery patients. This study aims to determine the relationship between the rational administration of human albumin 20% with serum albumin levels and clinical outcomes, as well as description of direct medical costs in digestive surgery patients at Undata Hospital.

**Method** This research was conducted with a retrospective cohort design. The sample for this study was digestive surgery patients who received human albumin 20% therapy from January 2020 – December 2023. Human albumin 20% dose, laboratory examinations before and after administration, clinical conditions and patient care costs were from patient medical records and financial data. Data was analyzed using Chi-square, Mann-Whitney and Multiple Logistic Regression statistical tests.

**Results** Data analysis showed that there was a relationship between the rational dose of human albumin 20% and serum albumin levels ( $p=0.024$ ) and between serum albumin levels to clinical outcomes ( $p=0.035$ ). The average direct medical costs in the rational group were Rp.  $38.862.589 \pm 14.311.846$  and in the irrational group were Rp.  $40.276.852 \pm 22.625.198$ .

**Conclusion** Rationality of human albumin 20% dose has a significant relationship with serum levels and clinical outcomes. The average total direct medical costs for digestive patients is Rp.  $39.569.720 \pm 18.749.958$

**Keywords:** Rationality, *Human albumin 20%*, Direct Medical Costs, Digestive Surgery Patients