

## EVALUATION OF MORTALITY RATE TRENDS AND AVERAGE HOSPITALIZATION COSTS FOR PATIENTS WITH MALIGNANT PANCREATIC NEOPLASMS ACROSS BRAZILIAN REGIONS, 2020–2024

Maria Fernanda Campos Neves dos Santos<sup>1</sup>, Rodrigo Ormanes Massoud<sup>2</sup>, Kathleen Higham Giestas<sup>3</sup>, João Carlos do Nascimento Martins<sup>4</sup>, Marielle de Nazaré Gonçalves de Lima e Silva<sup>1</sup>, Edson Yuzur Yasojima<sup>2</sup>, Daniel Sorna Labeca Guerra<sup>4</sup>, Jenifer de Moura Peixoto<sup>2</sup>.

<sup>1</sup>Centro Universitário do Pará (CESUPA)

<sup>2</sup>Universidade do Estado do Pará (UEPA)

<sup>3</sup>Centro Universitário Metropolitano da Amazônia (UNIFAMAZ)

<sup>4</sup>Universidade Federal do Pará (UFPA)

**Introduction:** Pancreatic cancer is recognized as one of the most aggressive neoplasms in oncology, characterized by its silent progression and predominantly late-stage diagnosis. Due to its deep anatomical location and the absence of specific early symptoms, early detection is rare, limiting opportunities for curative treatment. The disease exhibits highly invasive behavior, with rapid local and systemic spread, contributing to its poor prognosis. Therapeutic management is complex, usually requiring a combination of surgery, chemotherapy, and palliative care. In the hospital setting, the management of pancreatic cancer demands specialized resources and entails high healthcare costs, reflecting the severity of the clinical condition and the need for high-complexity interventions. **Objective:** To evaluate the trends in mortality rates and the average hospitalization costs for patients with malignant pancreatic neoplasms in Brazil between 2020 and 2024. **Methods:** This is a descriptive, quantitative study using data from the Hospital Information System (SIH/SUS) available through DATASUS. The variables analyzed included year of processing, state unit, type of admission, average AIH cost, and mortality rate. **Results:** Between 2020 and 2024, the mortality rate for pancreatic neoplasms in Brazil was 20.23%, with the Northern region presenting the highest rate at 24.66%. The Central-West region recorded the lowest mortality rate at 17.85%. Observing the annual trend, a gradual decline was noted, with rates of 21.99% in 2020, 20.61% in 2021, 20.04% in 2022, 19.76% in 2023, and 19.23% in 2024. Regarding the type of admission, emergency hospitalizations had a significantly higher mortality rate (25.09%) compared to elective hospitalizations (10.84%), indicating a worse prognosis for cases diagnosed and treated under emergency conditions. The average hospitalization cost for malignant pancreatic neoplasms in Brazil was R\$2,018.37. Regionally, the Central-West region had the lowest average cost per hospitalization, at R\$1,889.72, while the Northeast region recorded the highest average cost, at

R\$2,409.46. **Conclusion:** Malignant pancreatic neoplasms remain among the deadliest cancer types. In the analysis of mortality, the Northern region stood out negatively with the highest mortality rate among Brazilian regions and the third-highest average hospitalization cost. The Northeast had the highest hospitalization costs and the third-highest mortality rate. However, the Central-West region stood out positively by combining the lowest mortality rate with the lowest average hospitalization cost, indicating a more efficient use of healthcare resources in that area—a model that should be expanded to other regions to achieve better clinical outcomes for patients.

**Keywords:** Pancreatic neoplasm; mortality rates; hospitalization costs.