CAPESESP

RWD158

REAL-WORLD HEALTHCARE RESOURCE UTILIZATION AND RELATED COSTS ASSOCIATED WITH BLADDER CANCER IN THE BRAZILIAN PRIVATE MARKET

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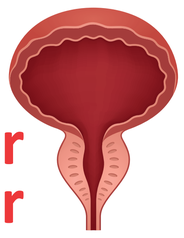
BACKGROUND

Bladder cancer (BCa) is one of the most common urological malignancies worldwide, ranking among the top ten most expensive cancers to treat over a patient's lifetime. More than 120 000 people are diagnosed annually with bladder cancer in the 28 countries of the European Union (EU). With >40 000 people dying of it each year, it is the sixth leading cause of cancer. In the USA, poses also at the sixth most common cancer with an incidence of around 83,000 patients and 17,000 deaths per year. According to the National Cancer Institute (INCA), approximately 11,370 new cases are expected annually for the 2023–2025 period, ranking 12th among the most common cancers when non-melanoma skin tumors are excluded. Between 2019 and 2022, more than 19,000 deaths from bladder cancer were reported nationwide, highlighting its epidemiological burden and impact on the Brazilian healthcare system. Risk factors include male gender, advanced age, and history of tobacco use. Despite therapeutic advances, BCa remains associated with high morbidity, significant healthcare resource utilization, and substantial costs. Understanding real-world treatment patterns and expenditures is essential for decision-making within healthcare systems, especially in Brazilian private health care plans.

Bladder cancer



TOP 10
most expensive cancers to treat

INCA

Approximately **11,370 new cases** are expected annually for the 2023–2025 period,

Between 2019 and 2022 **more than 19,000 deaths** from bladder cancer were reported nationwide

Risk factors include

- **Male gender**
- **Advanced age**
- **History of tobacco use**

OBJECTIVES

This study aims to assess epidemiological data, healthcare resource utilization (HCRU), and costs associated with bladder cancer within a Brazilian private market.

METHODS

A retrospective database study was conducted using administrative claims from January 2019 to December 2024. The eligible patients were adults (≥ 18 years) with malignant neoplasms of bladder (ICD-10 C67). Available data included demographics, comorbidities, stage at diagnosis, and healthcare resource utilization (HCRU). Direct costs were analyzed from the payer perspective, including outpatient visits, surgery, emergency department visits, therapies and tests. Kaplan–Meier curves were used to estimate the survival rates. Statistical comparisons between categorical and continuous measures were performed using Chi-square and Fisher's exact tests, and Student's T-tests, respectively. Statistical significance was defined as a p-value less than 0.05.

From January/2019 to December/2024

The **eligible patients were adults** with malignant neoplasms of bladder (ICD-10 C67)

Available data include

- Demographics
- HCRU
- Comorbidities
- Costs
- Including: Visits, Surgery, Emergency department, Therapies, Tests

Kaplan–Meier curves were used to estimate the cumulative survival rates.

Statistical comparisons used Chi-square, Fisher's exact, and Student's t-tests.

RESULTS

Among 60,824 beneficiaries (age 54 years, 59.3% female), 38 patients fulfilled the eligibility criteria (mean age 79±7.7 years; 60.5% male). 12.5% of all patients were diagnosed and started treatment at late stages (TMN III/IV). First-line treatment involved surgery and/or chemotherapy (gemcitabine plus cisplatin, gemcitabine plus carboplatin, gemcitabine plus paclitaxel). Immunotherapy combinations with chemotherapy were used in 13.2% of patients. Annual rates of procedures: visits 9.5, emergency room visits 2.4, tests 78.3 and hospitalizations 1.4. The average length of hospitalization was 5.6 days. Annualized healthcare costs associated were USD$12,922/patient (13.7% chemotherapy, 12.7% immunotherapy, 17.3% other medicines used to treat anemia/neutropenia/nausea, and 56.4% relating to other expenses, especially hospitalization. The cumulative 5-year survival rate: 51.8%.

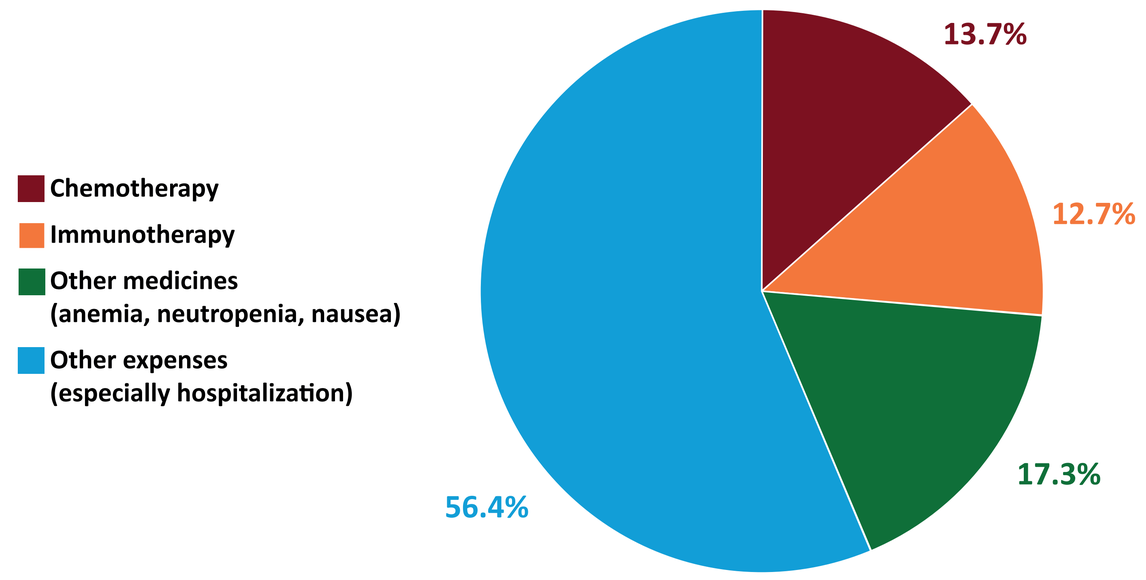
Annual Rates of Procedures

9.5	2.4	78.3	1.4
Visits	Emergency room	Tests	Hospitalization

Total Annualized Cost
USD$ 12,922 / patient

Immunotherapy + chemotherapy were used in
13.2% of patients

Bladder cancer care



CONCLUSIONS

Management of bladder cancer in the Brazilian private healthcare system is still dominated by surgery and chemotherapy, while immunotherapy adoption remains limited. BCa care is entering an exciting era, marked by a surge in new therapies and better patient outcomes. However, while medical advances are reshaping treatment strategies, they also come with substantial financial costs. Our study shows that until now, the first line treatment was surgery and chemo despite immunotherapy is available and offering a long-lasting response in some patients and generally having fewer serious side effects and the predominance of hospitalization costs suggesting opportunities for optimization through earlier diagnosis and follow-up treatment. This study reinforces the importance of real-world data analyses in guiding health policy, pharmacoeconomic assessments, and value-based contracting for cancer care in Brazil.

REFERENCES

1- Zhang Y, Rumgay H, Li M, Yu H, Pan H, Ni J. The global landscape of bladder cancer incidence and mortality in 2020 and projections to 2040. J Glob Health. 2023 Sep 15;13:04109. doi: 10.7189/jogh.13.04109. PMID: 37712386; PMCID: PMC10502766.

2- Clark O, Sarmento T, Eccleston A, Brinkmann J, Picoli R, Daliparthi V, Voss J, Chandrasekar S, Thompson A, Chang J. Economic Impact of Bladder Cancer in the USA. Pharmacoecon Open. 2024 Nov;8(6):837-845. doi: 10.1007/s41669-024-00512-8. Epub 2024 Aug 18. PMID: 39154309; PMCID: PMC11499469.

3- Chavan S, Bray F, Lortet-Tieulent J, Goodman M, Jemal A. International variations in bladder cancer incidence and mortality. Eur Urol. 2014 Jul;66(1):59-73. doi: 10.1016/j.eururo.2013.10.001. Epub 2013 Oct 16. PMID: 24451595.

4- Estimativa 2023 : incidência de câncer no Brasil / Instituto Nacional de Câncer. – Rio de Janeiro : INCA, 2022.