EE161

THE ECONOMIC BURDEN OF BRCA+ METASTATIC CASTRATION RESISTANT PROSTATE CANCER: EXPERT PERSPECTIVE IN LATAM COUNTRIES

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Key Takeaway

Our findings highlight opportunities to increase the use of targeted therapies as first-line treatment for BRCA+ mCRPC patients and show the burden of the disease in later lines of therapy, such as increased costs of hospitalizations and utilization of resources.

Conclusions

Most costs are related to pharmacological therapies. When excluding these costs, supportive therapy and follow-up present the highest costs

There is still a relevant proportion of patients being treated with non-PARPi therapies in the first-line

Hospitalizations, ICU use, length of stay and, consequently, their associated costs, increased in the second-line of therapy

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Disclosures
Larissa La Gatta, Yudy Andrea Medina Torres, Jaime Ardila and Renato Watanabe de Oliveira are employees of Janssen-Cilag. Camilo Tamayo, David Rodriguez, Isandra Meirelles, Marina Tabares, Celeste Palma and Leticia Lopez are employees of IQVIA.

Introduction

- Prostate cancer (PC) is the second most common cause of death on cancer among men globally[1]. In Latin America, PC is the most frequent cancer in men and the leading cause of cancer death, with estimated 226,000 new cases and 61,000 deaths in 2022[2].
- Despite therapeutic advances, there are subgroups of PC patients with high unmet needs. Metastatic castration-resistant prostate cancer with BRCA+ mutations (BRCA+ mCRPC) is known for its poor prognosis and reduced survival outcomes from diagnosis[3,4].
- BRCA+ mCRPC treatment aims to control disease progression, alleviate symptoms, prolong survival, and maintain patient's quality of life.
- In Latin America, there is limited evidence of how BRCA+ mCRPC patients are treated and their healthcare resource use. This study describes the resource use and direct costs attributable to BRCA+ mCRPC in Argentina, Brazil, Colombia, Dominican Republic and Mexico.

Methods

Figure 1: study design

Literature review

- A pragmatic literature review was conducted to collect available evidence on BRCA+ mCRPC management. The structured search was conduct in MEDLINE, LILACS, ISPOR, COCHRANE, and SCHOLAR, including grey literature.

Interviews

- Double-blinded, semi-structured, online interviews with medical experts (ten per country, with at least 2 years of experience managing BRCA+ mCRPC) were performed to collect data on healthcare resource use. Participants were from the private healthcare setting in Brazil and from public healthcare settings in other countries.

Costing:

- Bottom-up micro-costing: total direct costs were estimated by multiplying the healthcare resources by unit costs in each country. Unit costs were collected from official price and reimbursement lists of the respective healthcare setting and country. Local currencies were converted to 2022 USD adjusted by purchasing power parity (PPP) obtained from The World Bank database.
- Results are described by country and Line of Therapy (LoT)

Results

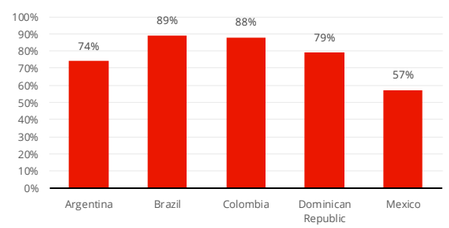
Participant's profile

Table 1: Profile of participants

Variable	N
Average number of mCRPC patients treated in the last 12 months, n	130.6
Average number of BRCA+ mCRPC patients treated in the last 12 months, n	20
Specialty distribution, n (%)	
Oncologist	48 (96)
Urologist	2 (4)
Healthcare setting distribution, n	
Argentina: Social Security	10
Brazil: Private Perspective	10
Colombia: Public Perspective (SGSSS)	10
Dominican Republic: Public Perspective	10
Mexico: Public Perspective	10

Patients' diagnosis

Figure 2: Proportion of mCRPC patients tested for BRCA mutation

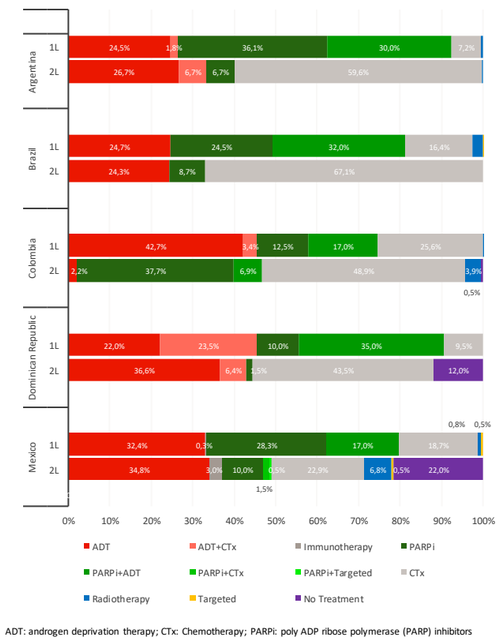


- According to participants, all mCRPC patients should be recommended for genetic testing. Surprisingly, our results show a high proportion of tested patients. However, this is probably related to the medical experts' profile, which may not reflect the real scenario.
- Barriers for diagnostic tests for mutations include coverage of tests by payers, lack of laboratories in peripheral regions, lack of adequate sample collection, industry requirements for the test.

Healthcare resource use and treatment patterns

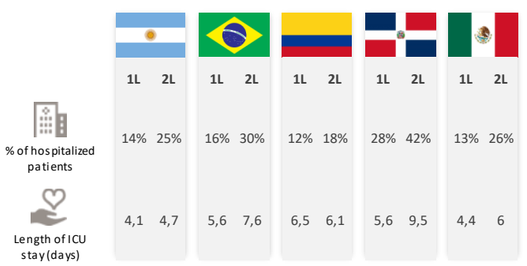
- Prostate-specific antigen screening (PSA) was the most frequently used procedure during diagnosis in almost all countries.
- Except for Colombia, poly ADP ribose polymerase (PARP) inhibitors were frequently used as 1LoT. However, a relevant proportion of patients are still treated with androgen deprivation therapies (ADT). In some countries, ADT was the most frequent used regimen.

Figure 3: Treatment patterns of BRCA+ mCRPC patients across countries



ADT: androgen deprivation therapy; CTx: Chemotherapy; PARPi: poly ADP ribose polymerase (PARP) inhibitors

Figure 4: Proportion of BRCA+ mCRPC patients hospitalized per year and the ICU length of stay during 1LoT and 2LoT

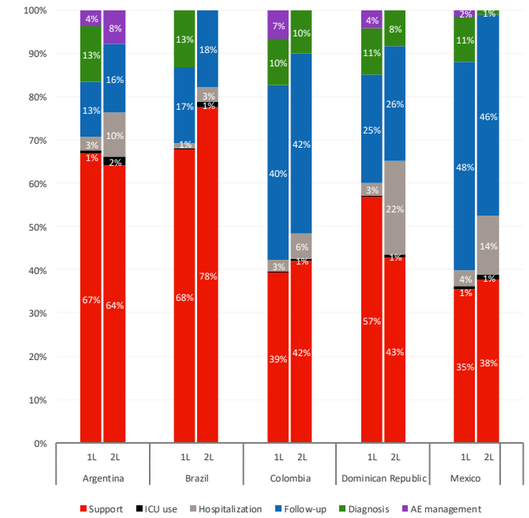


- The results also showed that there is an increase in the Intensive Care Unit (ICU) use between the 1LoT and 2LoT in all countries, with exception of Mexico

Costs

- Pharmacological therapies presented the highest costs, representing 85%-91% in the 1LoT and 68%-93 in the 2LoT
- When excluding pharmacological therapy costs, the highest expenses were related to supportive therapy and follow-up of patients on both lines of therapy

Figure 5: Total Annual Costs in PPP USD per patient and line of therapy, excluding pharmacological therapy



PPP: purchasing power parity; ICU: Intensive care unit; AE: Adverse event

- Excluding pharmacological treatment costs, BRCA+ mCRPC patients presented a total annual direct cost in the 1LoT of 50,624 USD in Argentina, 32,884 USD in Brazil, 5,928 USD in Colombia, 17,450 USD in Dominican Republic, and 13,463 USD in Mexico.
- In the second-line therapy, the average of total annual direct costs was 41,720 USD; 30,282 USD; 5,794 USD; 9,307 USD; and 14,365 USD, respectively.
- Hospitalization costs at least doubled between 1LoT and 2LoT therapies (2.03-3.58-fold)
- Supportive care represented the highest proportion of costs for both 1LoT and 2LoT in most countries, varying between 36%-68% in 1LoT and 38%-78% in 2LoT.

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Prostate Cancer

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