

Introduction

Malignant breast cancer is the most incident cancer in Brazilian women. This study aims to investigate the epidemiological aspects and costs of breast cancer in Brazilian national public health (SUS), exploring the disease staging, demographics of the affected population and treatment characteristics.

Methods

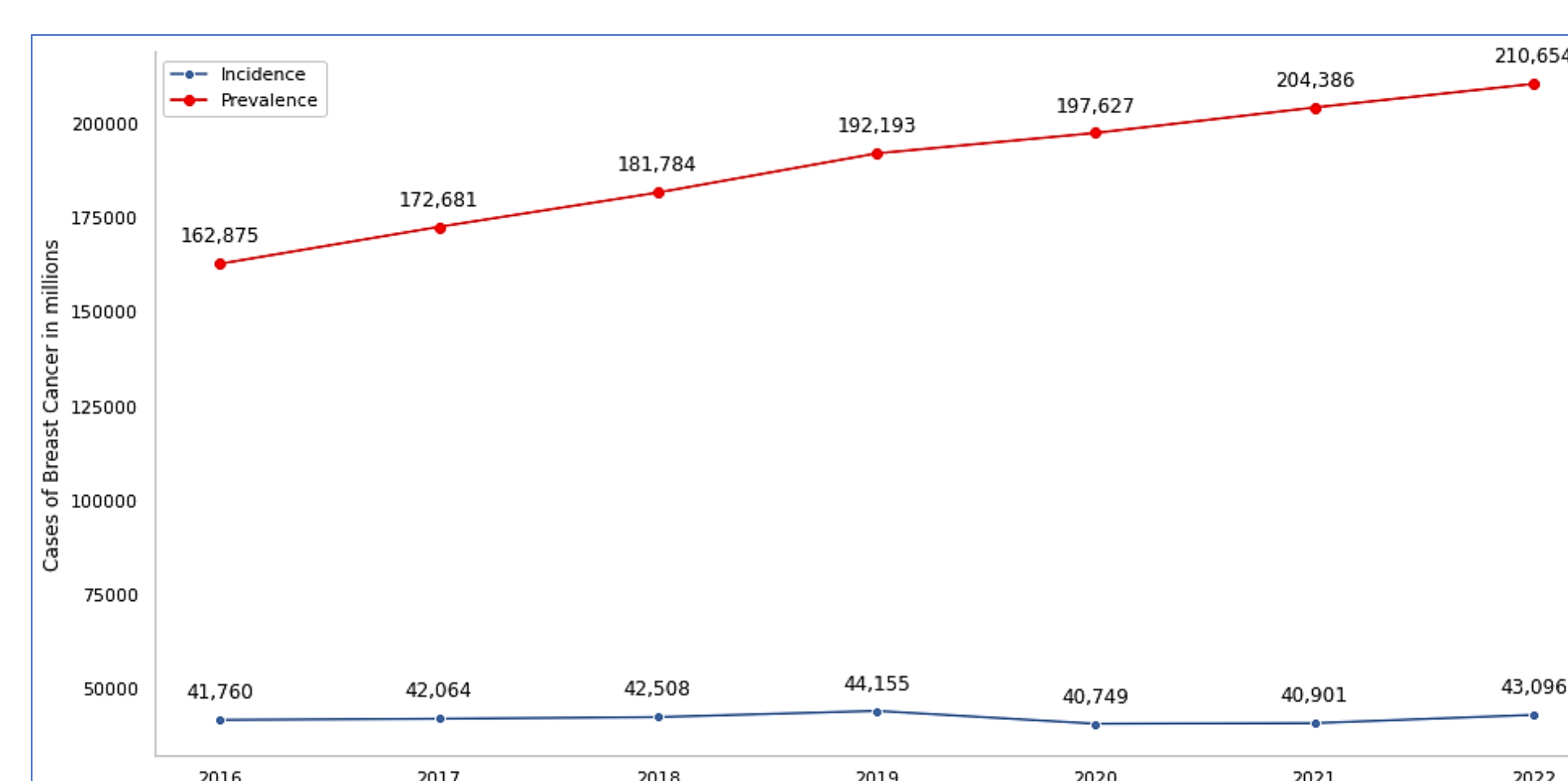
We collected data of outpatient events from the public secondary data system DATASUS (SIASUS-AQ), from 2016 to 2022. The population collected is diagnosed with breast cancer selected by ICD-10 C50. We then evaluated Costs distribution, Usage, Menopausal Status (positive: age ≥ 55 , negative: age ≤ 54), Year of First Treatment, Treatment Type for outpatients with early (stages 0/1/2) and advanced (stages 3/4) disease.

Results

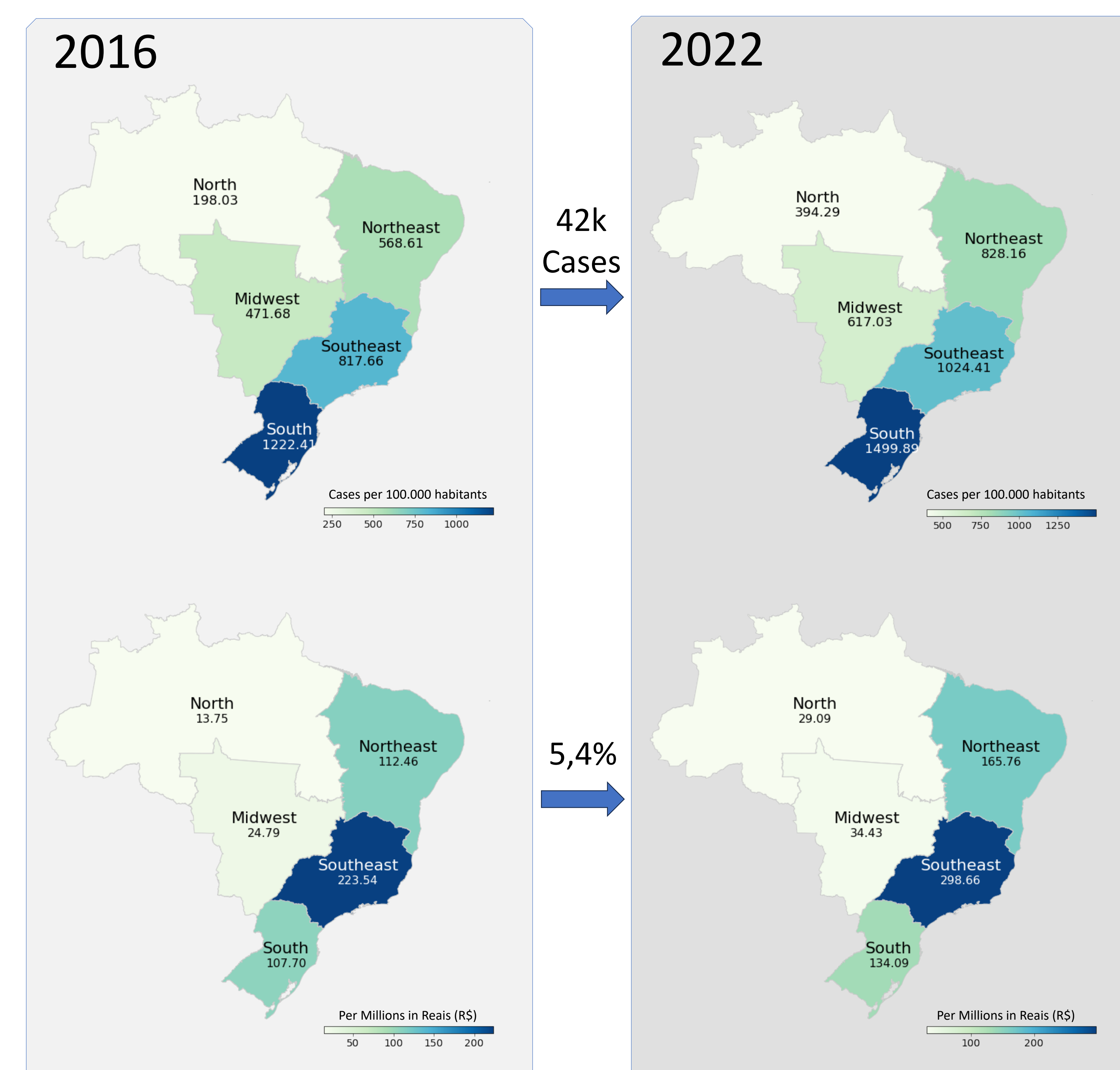
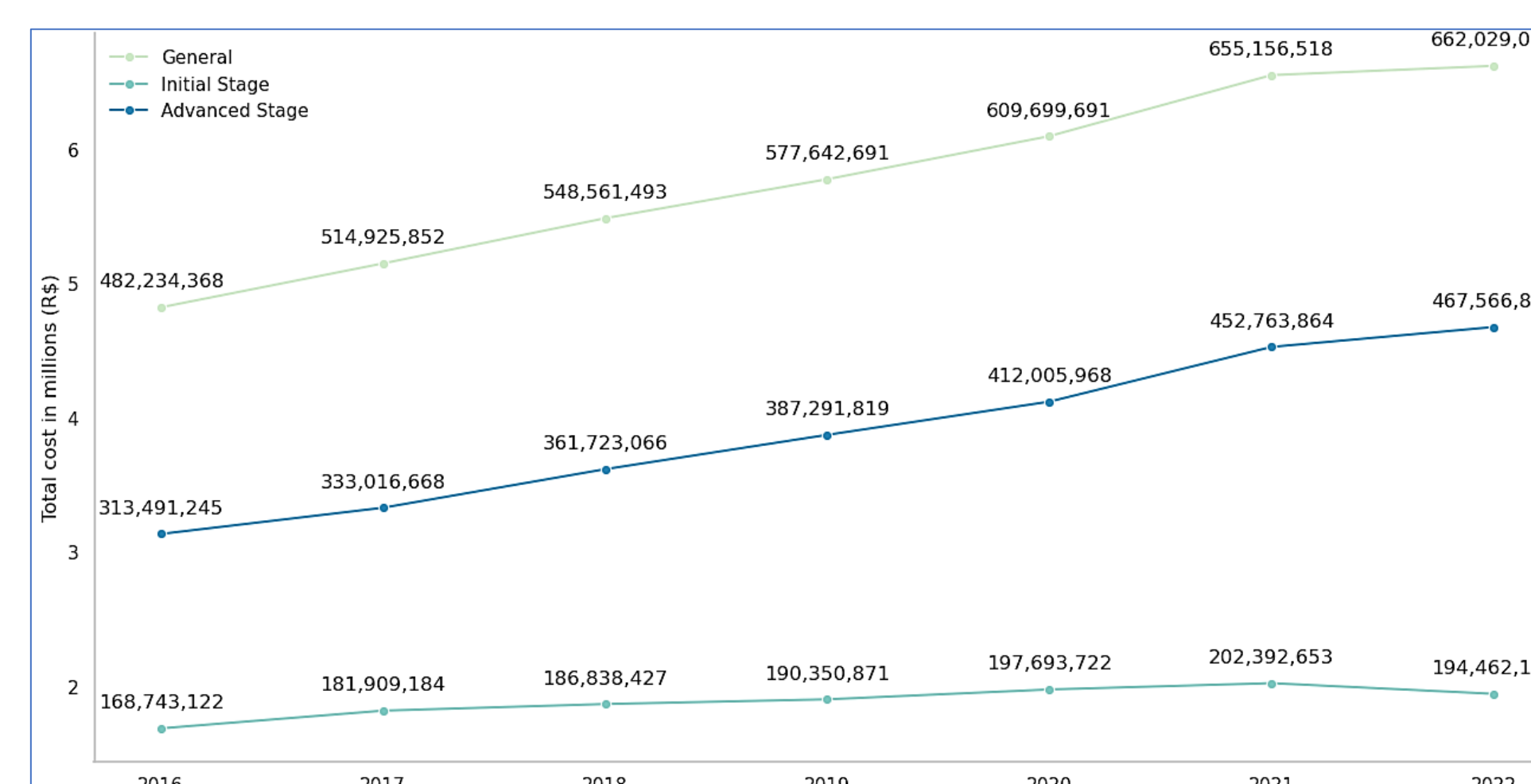
Variables	Stage groups		
	Initial (0, 1, 2)	Advanced (3, 4)	General (0, 1, 2, 3, 4)
	148,271 (50.22%)	146,962 (49.78%)	295,233
Race			
White	73,915 (49.85%)	63,508 (43.21%)	137,423
Black	6,587 (4.44%)	8,342 (5.68%)	14,929
Brown	42,744 (28.83%)	50,179 (34.14%)	92,923
Yellow	3,363 (2.27%)	3,423 (2.33%)	6,786
Indigenous	14 (0.01%)	25 (0.02%)	39
No Information	21,648 (14.6%)	21,485 (14.62%)	43,133
Geografic Regions			
North	5,558 (3.75%)	7,507 (5.11%)	13,065
Northeast	32,997 (22.25%)	35,509 (24.16%)	68,506
Southeast	68,512 (46.21%)	64,911 (44.17%)	133,423
South	33,292 (22.45%)	28,227 (19.21%)	61,519
Midwest	7,912 (5.34%)	10,808 (7.35%)	18,720
Menopausal status			
Post menopause	87,760 (59.19%)	75,839 (51.6%)	163,599
Pre menopause	60,511 (40.81%)	71,123 (48.4%)	131,634
Year of first treatment			
2016	21,931 (14.79%)	19,829 (13.49%)	41,760
2017	22,272 (15.02%)	19,792 (13.47%)	42,064
2018	22,001 (14.84%)	20,507 (13.95%)	42,508
2019	22,664 (15.29%)	21,491 (14.62%)	44,155
2020	20,421 (13.77%)	20,328 (13.83%)	40,749
2021	19,057 (12.85%)	21,844 (14.86%)	40,901
2022	19,925 (13.44%)	23,171 (15.77%)	43,096
# of Treatments reimbursed			
Chemotherapy	80,331 (54.18%)	38,378 (26.11%)	118,709
Hormonotherapy	67,940 (45.82%)	108,584 (73.89%)	176,524

Variable	Observed
Mean cost per Treatment Class	
Hormone	R\$ 103.00
Chemotherapy	R\$ 1,185.00
Median Follow-up time	
General	2.18 years
Advanced	1.51 years
Initial	2.23 years
Mean Cost of Treatment Journey	R\$ 9,953.00
Total reimbursement cost	R\$ 4,05Bi

Patient Diagnosis Rates



Treatment Costs Compiled



Conclusion

The data presents trends regarding outpatients treated in SUS. Regarding stage distribution, and treatment costs, we described high prevalence and expenditure in advanced disease than initial disease, which highlights the need for strategies that accelerate early diagnosis. Considering Brazil as a country of continental proportions, this cross-sectional study presents valuable information, describing economic and demographic characteristics from this population. Future works will address more treatment features, access to treatment and economic impact.