

# Economic Burden of Triple-Negative Breast Cancer in Portugal.

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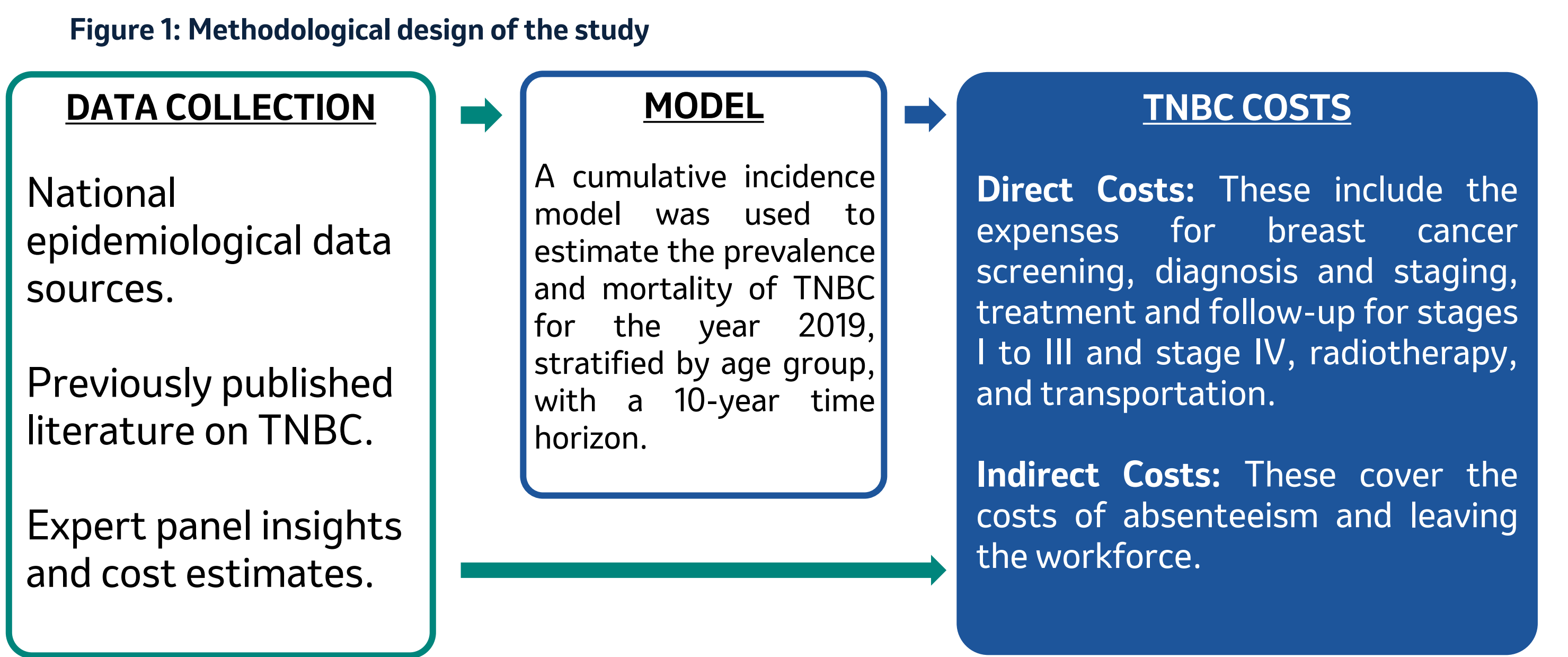
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## Background and Objectives

- Triple-negative breast cancer (TNBC) is associated with lower survival rates and higher early recurrence rates among younger women compared to other types of breast cancer (BC)<sup>1-3</sup>.
- TNBC accounts for approximately 15% of all breast cancer cases<sup>4</sup>.
- This aggressive disease significantly impacts healthcare resources utilization (HCRU) and productivity due to labor absenteeism and early retirement<sup>2,5</sup>.
- In this study, we aimed to determine the economic burden of TNBC in the female population in Portugal for the year 2019, considering both direct medical costs and indirect costs related to labor issues.

## Methods

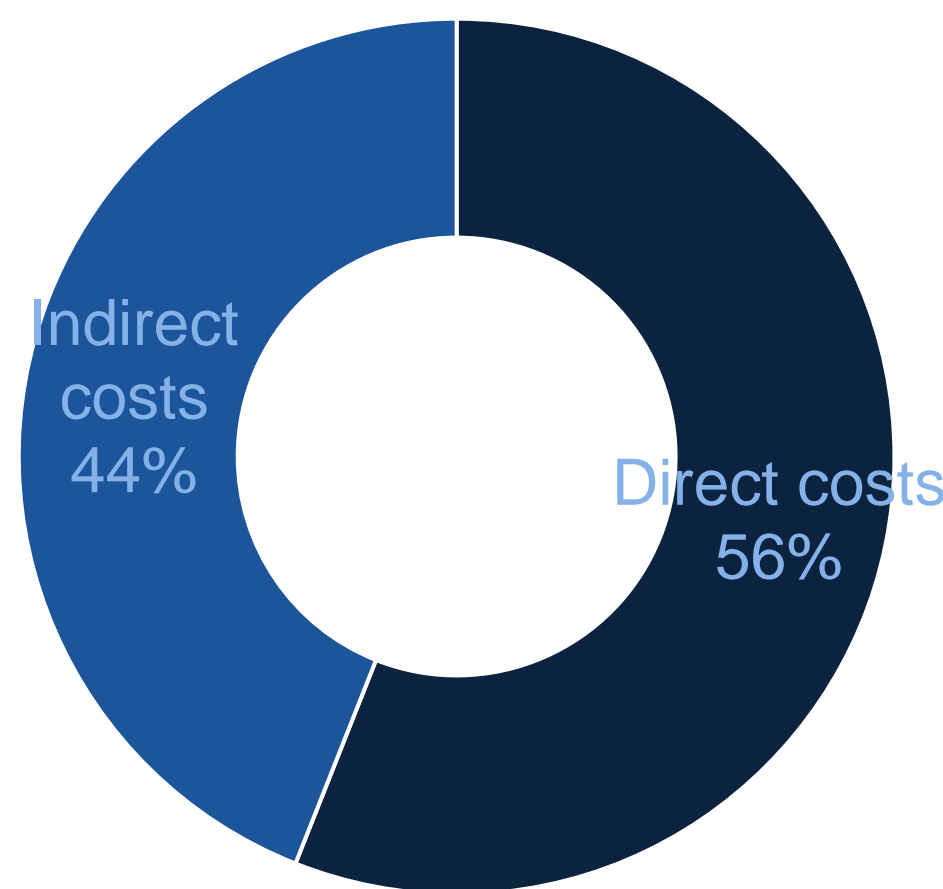
- This study used published literature and expert opinions to design a model that estimates the prevalence, mortality, burden, and costs of TNBC in Portugal for 2019 (Figure 1).



## Results

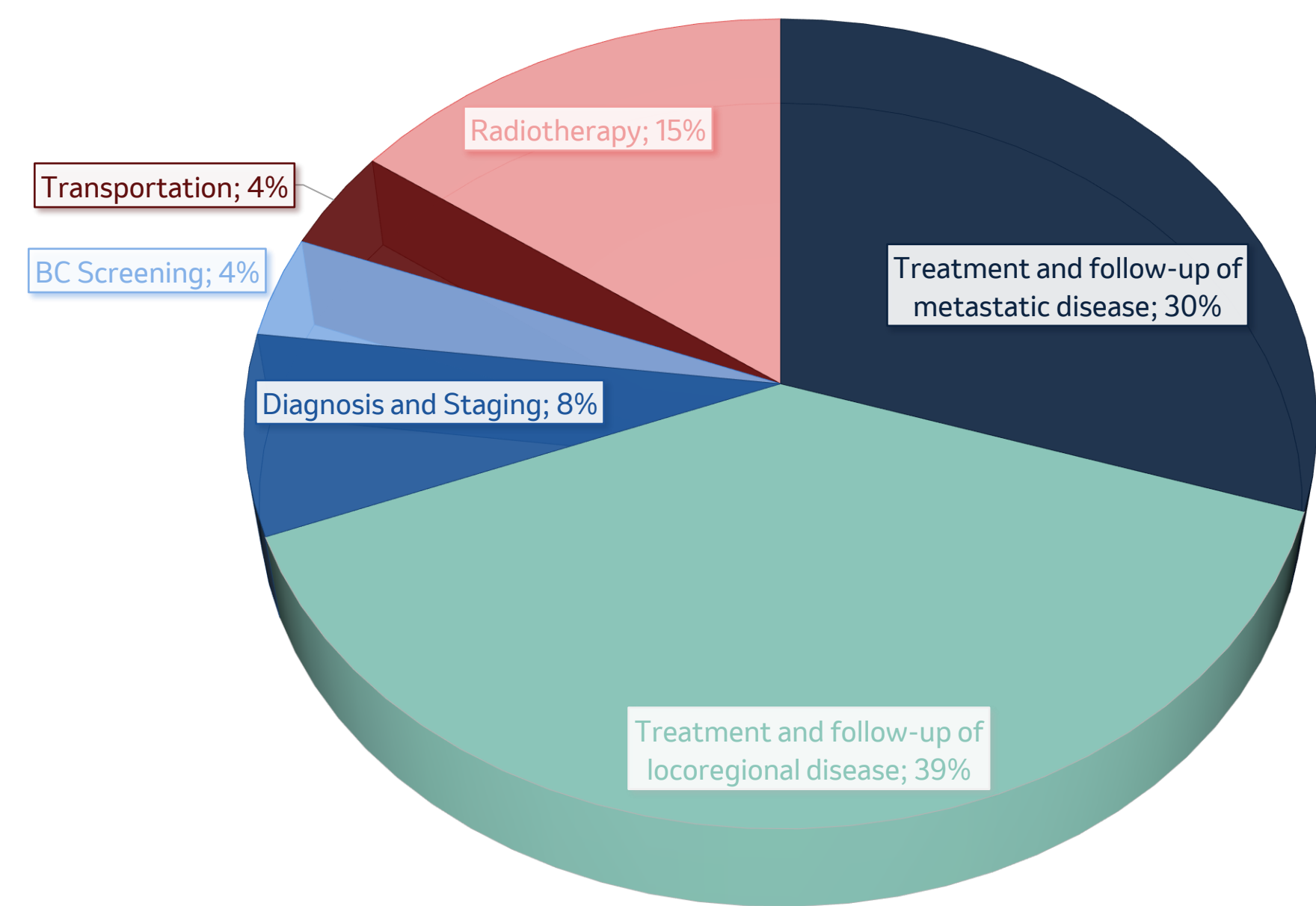
- **Prevalence:** 7,052 TNBC cases in 2019, being the majority of newly diagnosed cases at Stage I-II.
- **Average Annual Cost per Patient:** €7,140.
- **Total Cost:** €50 million, representing 16% of total BC costs.
  - Direct costs account for the majority of expenses (56% compared to 44% for indirect costs) (Figure 2).

Figure 2: Split between Direct and Indirect Costs.



- Though, the total estimated direct costs for TNBC in Portugal, in 2019, are €28 million, 39% being allocated to the treatment of patients with locoregional disease and 30% to the treatment and follow-up of metastatic disease (Figure 3).

Figure 3: Allocation of Expenses, Direct Costs Breakdown.



- The indirect costs (costs of absenteeism and leaving the workforce) are estimated to be around €22 million. *Table 1* shows the breakdowns of these indirect costs.

Table 1: Breakdown of Indirect Costs.

	Annual Cost (€)
<b>Total cost of leaving the labor market</b>	<b>20.9 M€</b>
Cost of temporary exit from the labor market	11.3 M€
Cost of permanent exit from the labor market.	9.6 M€
<b>Total cost of absenteeism</b>	<b>1.3 M€</b>
<b>Total indirect costs</b>	<b>22.2 M€</b>

## Conclusions

- In the year 2019, TNBC generated a cost of around 50 million euros.
- The high percentage of indirect costs linked to job market abandonment emphasizes the socio-economic impact of TNBC. This loss of productivity not only affects individual families but also has broader implications for the national economy.
- These findings underscore the substantial economic burden TNBC imposes, when considering advanced stage’s management and treatment.
- Early intervention and efficient management strategies could potentially alleviate this burden, benefiting both society and the Portuguese healthcare system.

## References

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