

Table of Content

Introduction	1
Ethics statement	4
1. Analysis of Incidence, Mortality and Survival Rates	5
1.1. Data	5
1.1.1. Inclusion and exclusion criteria	6
1.2. Methods	8
1.3. Results	9
1.3.1. Incidence	10
1.3.2. Mortality	13
1.3.3. Survival rates	15
1.3.3.1. Kaplan Meier estimations	15
1.3.3.2. The Cox proportional hazards model	17
2. Assessing the public-private survival gap	22
2.1. Methods	22
2.1.1. Breast cancer natural progression	22
2.1.1.1. Adjustment to Chilean records	26
2.1.2. Breast cancer model including screening mammograms	27
2.2. Computational experiments	30
2.2.1. Screening policies	31
2.2.2. Data	32
2.2.3. Results	35
Discussion	38
Conclusions	42
Bibliography	44
Annexes	48
A. Other breast cancer diagnosis	49
B. Failure data processing	51
C. Implementation of Cox regression	52

D. Incidence and Mortality Results	54
D.1. Breast cancer incidence and mortality by geographical region	54
D.2. Breast cancer incidence by age group	55
D.3. Breast cancer mortality by age group	56
E. Survival Records	57
F. Disease progression	60
G. Breast cancer model including screening mammograms	62