

## POPULATION-BASED STAGE, TREATMENT AND OUTCOMES FOR PATIENTS DIAGNOSED WITH BREAST CANCER IN BRITISH COLUMBIA IN 2002

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**Background:** The purpose of this study was to describe the stage, treatment, and outcomes at a population level for patients with breast cancer in British Columbia (BC).

**Methods:** All incident breast cancer cases registered with Breast Cancer in 2002 were reviewed for information on stage, treatment with primary local surgery, chemotherapy (CT), hormone therapy (HT), and radiotherapy (RT) and outcomes were derived from cancer centre databases for patients referred to provincial cancer centres (85% of cases). For non-referred cases, stage was estimated from manual review of pathology reports available in the provincial tumour registry. Kaplan-Meier curves for BCSS and OS were calculated by stage.

**Results:** There were 2,927 incident cases of breast cancer identified in 2002. Stage distribution was: 0 (*in situ*): 15%, I: 38%, II: 32%, III: 8%, IV: 4% and unknown 3%. Age distribution was: <40: 4%, 40's: 18%, 50's: 25%, 60's: 23%, 70's: 20% and ≥80 years old: 10%. The treatments delivered within 1 year of diagnosis were: RT-56%, CT-32% and HT-57%. The 10-year BCSS rates were for stage: 0: 99.5%, I: 95%, II: 81%, III: 55%, and IV: 4%. The 10-year OS rates were, for stage: 0: 89%, I: 81%, II: 68%, III: 43%, and IV: 2%.

**Interpretation:** This analysis provides a Canadian benchmark for treatment rates and 10 year outcomes by stage for all incident cases of breast Cancer. Outcomes in BC compare well to published rates in the USA and Europe.

## INTRODUCTION

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3 Outcomes for breast cancer patients have improved considerably in recent years.  
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5 Although breast cancer remains the most common cancer and the second leading  
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7 cause of cancer deaths in women, the 5-year relative survival rate rose from 75% in the  
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9 late 1970's to 90% by 2006 (1). Significant factors potentially contributing to these  
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11 improvements include the availability of breast screening (2-4) and the increasingly  
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13 multidisciplinary nature of cancer care, appropriate surgery, radiation treatment (5-7),  
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15 and systemic therapy (8,9). Despite these encouraging improvements in breast cancer  
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17 outcomes, disparities still exist within and among populations (10-12). Reasons for  
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19 these differences relate in part to variation in utilization of screening, diagnostic, and  
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21 treatment modalities. In order to optimally benefit from important advances, an effective  
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23 provider of cancer care services must ensure that individuals in a given population have  
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25 equal access to these modalities.  
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33 British Columbia has been identified as a population having one of the best breast  
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35 cancer survival rates in the world (10). There are many potential factors accounting for  
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37 the favourable outcome. BC is part of a country with a strong economy and a fully  
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39 publicly funded cancer care system. BC organized the first public screening  
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41 mammogram program in Canada, which currently screens approximately 50% of its  
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43 target population (13). Mammography screening is available within the provincial health  
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45 plan to BC women, free of charge, through the Screening Mammography Program of  
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47 BC (SMPBC). Coldman and colleagues have previously reported that SMPBC  
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49 participation is associated with a lower rate of chemotherapy use and an increased rate  
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51 of breast-conserving surgery (14). BC also has a centralized organized cancer care  
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53 program through the BC Cancer Agency (BCCA), which provides, for free, all  
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55 radiotherapy and provides, for free, all chemotherapy and hormone therapy that is  
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1 prescribed in the province. Although there are significant geographic issues within the  
2 province, which cause some regional variation in access (15), the referral rate for a  
3 breast cancer patient to a BCCA centre for the province as a whole was 85%  
4 throughout the 2000's.  
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11 For many decades the BCCA has developed treatment guidelines and disseminated  
12 them to all the physicians in the province and is often the first province in Canada to  
13 implement new therapeutic agents and regimens. Due to the quality of the outcomes,  
14 treatment and stage data, outcomes for patients with breast cancer in British Columbia  
15 have been used in international studies assessing prognostic information and to validate  
16 prognostic models used in clinics internationally (16) but there has been no  
17 comprehensive paper describing outcomes and treatment rates with long term follow-  
18 up. With these considerations in mind, the primary objective of this study was to  
19 describe the patient characteristics, stage distribution, stage-specific treatment  
20 utilization and outcomes at a population level for all patients diagnosed with breast  
21 cancer in BC in 2002. Our second objective was to compare the stage distribution and  
22 survival by stage for breast cancer patients in BC to published international reports from  
23 American and European databases, where available.  
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## 45 **METHODS**

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47 The BCCA has a mandate to deliver cancer care services to the culturally,  
48 economically, and geographically heterogeneous population of BC (17). There is a legal  
49 requirement to send all pathology reports with a neoplastic diagnosis to the British  
50 Columbia Cancer Registry, which thereby captures all incident cases of breast cancer.  
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52 Death and cause of death information are collected by Vital Statistics. All radiotherapy  
53 was provided at one of the four BCCA cancer centres, which are the only providers of  
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1 RT in the province, in 2002. All funded anti-cancer drugs are reimbursed by the BCCA,  
2 and each drug, dose, and dispensing date is recorded in the BCCA pharmacy data  
3 repository since 1998. This information is available to the Breast Cancer Outcomes  
4 Unit (BCOU) and its periodic review is an important index of performance for the  
5 delivery of breast cancer care to residents of British Columbia.  
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14 All incident patients with breast cancer diagnosed between January 1<sup>st</sup> and December  
15 31<sup>st</sup> of 2002 were identified from the BC Cancer Registry. Cases were then linked to  
16 radiotherapy records and to the BCCA pharmacy data repository. Pre-treatment  
17 prognostic factors such as grade, stage, lymphatic and vascular invasion, estrogen  
18 receptor, tumour size, and nodal status, as well as primary surgical therapies, were  
19 collected prospectively in the BCOU for the cases referred to the BCCA.  
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31 For cases not referred to the BCCA, registry pathology records were reviewed to  
32 determine the grade, ER, tumour size, nodal status, and definitive local and regional  
33 surgery. Stage was determined for these cases based on the pathology reports.  
34 Utilization of radiotherapy (RT), chemotherapy (CT), and hormone therapy (HT) within  
35 one year of diagnosis were extracted by stage. For cases not referred to the BCCA,  
36 systemic therapy dispensed at other institutions is still captured by the BCCA pharmacy  
37 database.  
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50 Patients diagnosed with breast cancer in BC during the 2002 year were matched to the  
51 SMPBC records and screening information was extracted, including whether or not the  
52 cancer was screen-detected. The definition of a screen-detected cancer was a breast  
53 cancer diagnosis within one year of an abnormal screen. Patients were considered  
54 attendees of the SMPBC if they had a screening mammogram result listed in SMPBC  
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1 records. Those who had been screened within the 30 months prior to their diagnosis  
2 were considered active attendees.  
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7 Overall and disease-specific survivals were calculated using the Kaplan-Meier method.  
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9 This study was approved by the University of British Columbia BCCA Research Ethics  
10 Board.  
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## 14 15 16 17 **RESULTS**

### 18 19 **Patient Characteristics and Stage Distribution**

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21 In 2002, there were 2,927 incident cases of breast cancer diagnosed in the province of  
22 British Columbia. Figure 1 demonstrates the stage distribution and Table 1  
23 characterizes the patient population by stage of disease at presentation. The majority  
24 of cases, 82%, represented invasive disease, whereas 14% were in situ and 3%  
25 unknown. Approximately 70% of tumors were found to be either stage I or stage II at  
26 diagnosis. The stage distribution is compared with that of the United States  
27 Surveillance Epidemiology and End Results (SEER) in Table 2 (18).  
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40 The vast majority (86%) of breast cancers were diagnosed in patients between the ages  
41 of 40 and 79. Overall, the median age at diagnosis for all stages was 61, with only 5%  
42 of patients younger than 40 and only 10% older than 80. Elderly patients formed a  
43 greater percentage of those presenting with more advanced disease than with either in  
44 situ or early-stage disease.  
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52 Over 50% of all breast cancer patients were attendees of the SMPBC, and the majority  
53 of all patients diagnosed with in situ (71%) or stage I disease (63%), had been screened  
54 within the 30 months prior to their diagnosis. In contrast, most patients diagnosed with  
55 stage II-IV breast cancer were not attendees of the SMPBC. Only 46% of stage II, 35%  
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1 of stage III patients and 27% of stage IV patients had been screened within the 30  
2 months prior to their diagnosis. Of all breast cancers diagnosed, 33% were considered  
3 “screen-detected”, though this designation applied to 62% of cancers found in the 1,574  
4 breast cancer patients who were attendees of the provincial screening program.  
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### 10 11 **Treatment Characteristics**

12 The majority of patients with disease ranging from in situ to stage III underwent surgery  
13 for their breast cancer (Table 3). Approximately two-thirds of patients with in situ  
14 disease underwent breast-conserving surgery (BCS) but only one-third received  
15 radiation therapy. Few in situ patients received hormonal treatment within one year of  
16 diagnosis (22%)  
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28 For patients in the stage I category, again, approximately two-thirds received breast-  
29 conserving surgery (BCS), with the remainder treated with mastectomy. Of stage I and  
30 II patients treated with BCS, 88% also received radiotherapy within 1 year of diagnosis.  
31 Patients with stage II disease at presentation were equally likely to undergo mastectomy  
32 or BCS, whereas two-thirds of stage III patients underwent mastectomy as their initial  
33 surgery. Though the percentage of patients undergoing BCS as the initial surgery  
34 decreased from stage I to stage III (from 65% to 15%), the percentage of patients  
35 receiving radiation therapy within a year of diagnosis increased (from 59% to 77%). As  
36 would perhaps be expected, the percentage of patients that received chemotherapy  
37 increased with increasing stage (from 14% of stage I patients to 71% of stage III  
38 patients). Approximately 65% of patients with stage I-III cancer were treated with  
39 hormonal therapy. When only estrogen receptor-positive (ER+) patients are  
40 considered, there is little change to the in situ treatment rate, but 73% of stage I patients  
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1 received hormonal treatment compared with 86% of stage III and 81% of the stage IV  
2 patients.  
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7 Models of optimal radiotherapy utilization have been developed (19-20), and Table 4  
8 demonstrates a comparison between the BCCA data from the 2002 cohort and these  
9 published ideal utilization rates. The actual BCCA RT rate at 5 years of 59% for all  
10 disease stages compares well with the estimated ideal rate of 66% from a Canadian  
11 model but is lower than the estimated ideal rate from Australia (83%) (19,20). The  
12 difference between actual and ideal rates likely relates to differences in patient  
13 preferences are dealt with in the models (19,20). Ideal utilization rates have also been  
14 published for chemotherapy (21), and chemotherapy use for all stages is lower in the  
15 BCCA 2002 cohort than the ideal published rates, most notably for those patients with  
16 stage I disease but also for patients with stage III breast cancer. Endocrine therapy use  
17 in BC, however, exceeds the published ideal rate for all stages (22).  
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36 We have previously described differences in stage distribution and frequency of types of  
37 breast cancer treatments depending on population density within the province (15).  
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### 43 **Patient Outcomes**

44 Disease-specific survival (DSS) and overall survival (OS), for all stages and divided by  
45 stage, for breast cancer patients diagnosed in British Columbia in the year 2002 are  
46 shown in Figure 2. The 5 year DSS for all stages combined in 2002 was 89% (95% CI:  
47 88 - 90%) and the OS was 83% (95% CI: 81 - 84%). The 10 year DSS was 83.8%  
48 (95% CI: 82.4 – 85.2%) and the OS was 70.6% (95% CI: 68.8 - 72.4%).  
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1 Initiatives have been undertaken in other parts of the world to evaluate the effectiveness  
2 of healthcare service delivery for patients with cancer in their respective countries, and  
3 data have been published from these cancer registries {10-12, 22, 23). In Table 5,  
4 relative survival data for breast cancer patients diagnosed in a similar time period in  
5 other countries were compared with the British Columbia relative survival rates for the  
6 2002 cohort. The 5-year relative survival rate for the entire cohort of patients diagnosed  
7 with breast cancer in BC in 2002 was 90% (95% CI 88 – 91%), which numerically is  
8 higher than, or equivalent to, many European countries and similar to the relative  
9 survival rates in the United States SEER databases.  
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## 26 **INTERPRETATION**

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28 Outcomes for patients with breast cancer in British Columbia have been used in  
29 international studies assessing prognostic information and to validate prognostic models  
30 used in clinics throughout the world. This descriptive study of 2,927 breast cancer  
31 patients diagnosed in BC in the year 2002 demonstrates a stage distribution heavily  
32 weighted toward early-stage disease, particularly stages I and II. Most early-stage  
33 cancers were diagnosed in patients aged 40 to 79 years old. The case mix presented  
34 here is similar to that reported by the NCCN, a large national database in the United  
35 States (18).  
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50 Over 60% of in situ and stage I diagnoses occurred in patients who were attendees of  
51 the Screening Mammography Program of British Columbia, whereas the majority of  
52 stage III and IV diagnoses occurred in patients who had not been screened. In patients  
53 attending the SMPBC, most cancers were screen-detected, including over 70% of in  
54 situ and stage I cancers. Most patients with early-stage disease underwent breast-  
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1 conserving surgery, and adjuvant radiation therapy, whereas most patients with stage III  
2 breast cancer were treated with mastectomy and adjuvant radiation therapy. Use of  
3 both chemotherapy and endocrine therapy increased with increasing stage of disease,  
4 up to stage III. Use of radiation therapy and chemotherapy fall slightly below published  
5 ideal utilization rates, based on reviews of existing international guidelines, but compare  
6 well with other international jurisdictions. Use of endocrine therapy in BC exceeds  
7 calculated ideal utilization rates.  
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19 In recent years, data has been published from cancer registries in several regions of the  
20 world and survival rates in British Columbia are comparable to those reported from  
21 other regions such as the US, Europe, and Australia. These findings suggest that the  
22 BCCA is meeting its objective of providing timely, evidence-based cancer care services  
23 to residents of this province in the context of a widely accessible healthcare system.  
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33 Despite the comprehensive nature of the BCCA records, this report has limitations  
34 which bear consideration. As mentioned, the referral rate to the BCCA was 85%, so  
35 there was not complete data available for all breast cancer patients treated in BC but  
36 attempts were made through pathology record review in the BC Cancer Registry to  
37 garner information about non-referred cases. In 2002, HER2/*neu* status, an important  
38 prognostic and predictive indicator, was not routinely measured in early breast cancer  
39 patients because the evidence for trastuzumab (anti-HER 2 antibody) efficacy in  
40 adjuvant therapy had yet to emerge. Finally, treatments were recorded as being given,  
41 when patients received even one dose of chemotherapy or radiotherapy and a first  
42 prescription for endocrine therapy within one year of diagnosis, and do not reflect  
43 completion of systemic therapy. The non-adherence rate in British Columbia for  
44 adjuvant endocrine therapy has been reported as 40%, but compliance with  
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1 chemotherapy and radiotherapy have not been reported (24). Compliance, if different  
2 between populations, has the potential to affect comparative patient outcomes, but the  
3 primary focus of this report was the description of patient characteristics, treatment, and  
4 outcomes in BC.  
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11 In conclusion, this report indicates that breast cancer survival rates in BC are  
12 comparable to those reported in the literature from other regions of the world. The  
13 majority of patients diagnosed with early-stage disease were treated with breast-  
14 conserving surgery, as well as adjuvant radiotherapy and hormonal treatment.  
15 Continued data collection and periodic reviews are important to ensure that as breast  
16 cancer therapy evolves and its delivery to such a diverse population becomes more  
17 complex, the publicly funded provincial healthcare system is able to meet the  
18 challenges of universal access, and that the subsequent outcomes are comparable to  
19 those of any developed region of the world. The favourable results in British Columbia  
20 should serve as a benchmark for the rest of the provinces in Canada, and demonstrates  
21 the results that can be achieved with a centralized and comprehensive provincial cancer  
22 care program.  
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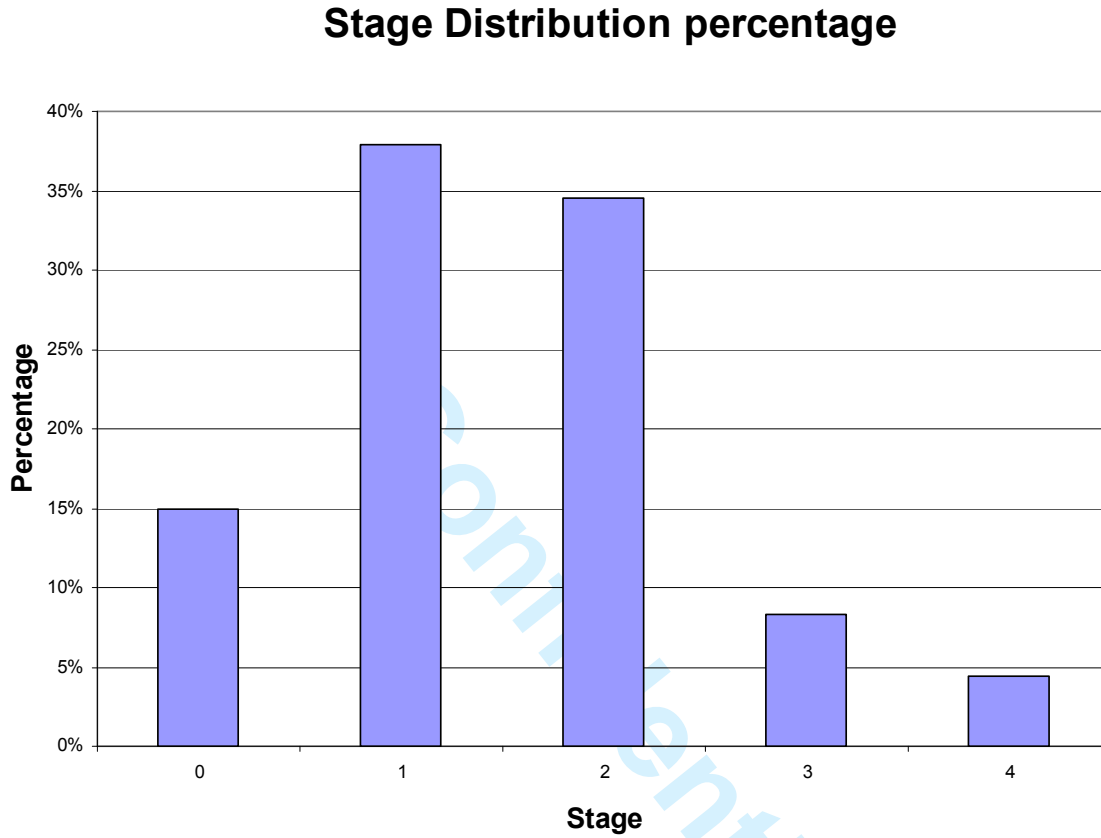
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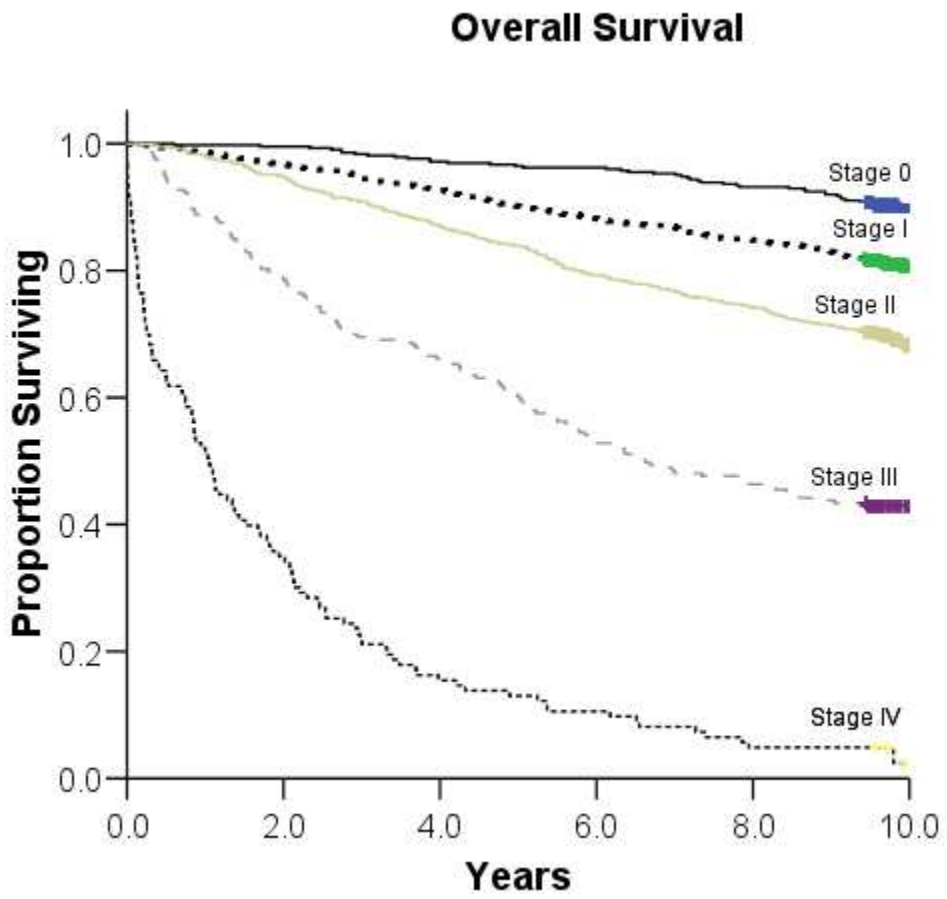
TABLES & FIGURES

Figure 1. Stage Distribution



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Figure 2. Overall Survival (A) and Disease-Specific Survival (B) for patients diagnosed with breast cancer in the year 2002 in British Columbia.



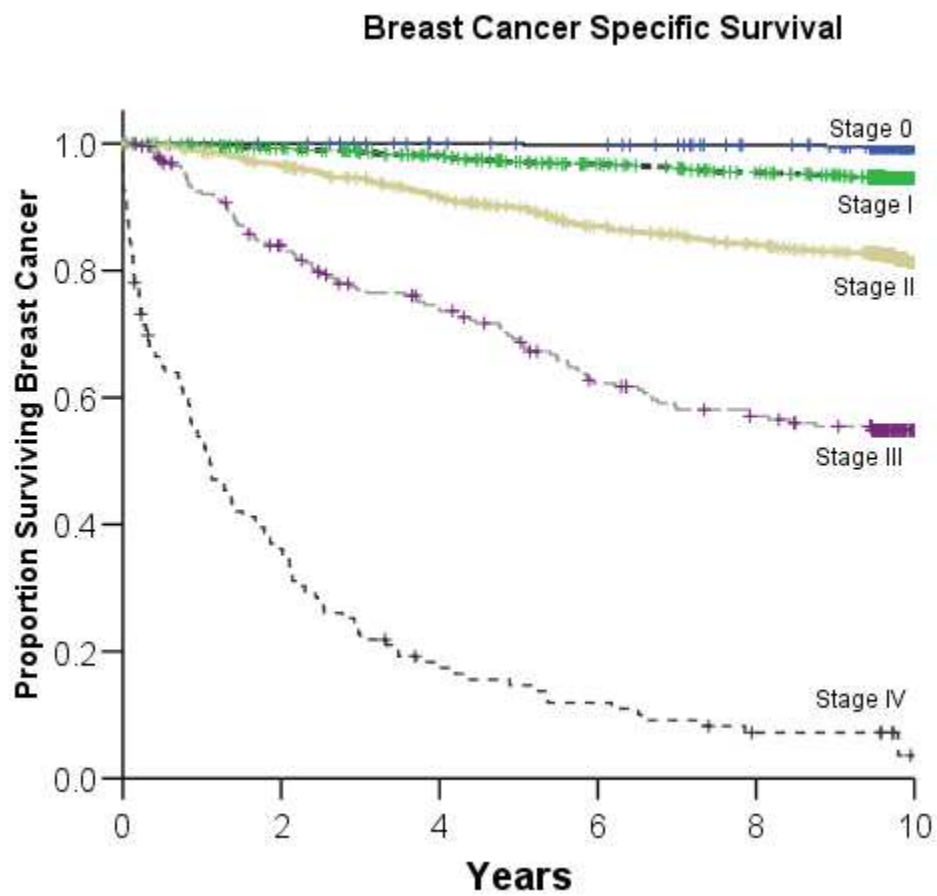


Table 1. Population Characteristics

	All Stages		Stage 0		Stage I		Stage II		Stage III		Stage IV		Stage Unknown	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
	2927	100	424	14.5	1118	38.2	938	32.0	233	8.0	123	4.2	91	3.1
<b>Gender</b>														
Female	2909	99%	422	100%	1116	100%	933	100%	229	98%	122	99%	87	96%
<b>Age at diagnosis</b>														
Median (range)	61 (27-102)		58 (28-94)		62 (29-98)		58.5(27-101)		59 (30-95)		64 (35-96)		74 (39-102)	
<40	127	4%	6	1%	38	3%	62	7%	15	6%	5	4%	1	1%
40 – 49	538	18%	100	24%	176	16%	201	21%	46	20%	9	7%	6	7%
50 – 59	719	25%	124	29%	261	23%	226	24%	62	27%	33	27%	13	14%
60 – 69	660	23%	95	22%	290	26%	185	20%	40	17%	29	24%	21	23%
70 – 79	583	20%	74	18%	267	24%	164	18%	35	15%	23	19%	20	22%
80+	300	10%	25	6%	86	8%	100	11%	35	15%	24	20%	30	33%
<b>Margin status</b>														
Positive	123	4%	14	3%	20	2%	39	4%	26	11%	15	12%	9	10%
Negative	2356	81%	371	88%	990	89%	795	85%	168	72%	32	26%	0	-
Close	165	6%	29	7%	56	5%	61	7%	16	7%	3	2%	0	-
Unknown	283	10%	10	2%	52	5%	43	5%	23	10%	73	59%	82	90%
<b>Tumour Size</b>														
Median (range)	1.7 (0.1-9.9)		1.5 (0.1-9.9)		1.2 (0.1-2.0)		2.5 (0.1-9.9)		5.4 (0.1-9.9)		4.3 (0.4-9.9)		1.3 (1.1-1.5)	
<1.0 cm	529	18%	122	29%	370	33%	27	3%	8	3%	2	2%	0	-
1.0 to 2.0 cm	1110	38%	139	33%	708	63%	227	24%	20	9%	14	11%	2	2%
2.1 to 5.0 cm	822	28%	90	21%	0	-	628	67%	70	30%	34	28%	0	-
>5.0 cm	204	7%	34	8%	0	-	19	2%	115	49%	36	29%	0	-
Unknown	262	9%	39	9%	40	4%	37	4%	20	9%	37	30%	89	98%
<b>ER status</b>														
Positive	1920	66%	30	7%	943	84%	707	75%	165	71%	63	51%	12	13%
Negative	457	16%	13	3%	139	12%	219	23%	57	25%	26	21%	3	3%
Unknown	550	19%	381	90%	36	3%	12	1%	11	5%	34	28%	76	84%
<b>Grade</b>														
1	784	27%	85	20%	487	44%	177	19%	22	9%	9	7%	4	4%
2	1050	36%	152	36%	413	37%	361	39%	82	35%	35	29%	7	8%
3	875	30%	147	35%	195	17%	383	41%	108	46%	38	31%	4	4%
Unknown	218	7%	40	9%	23	2%	17	2%	21	9%	41	33%	76	84%
<b>LVI</b>														
Positive	519	18%	0	-	77	7%	297	32%	114	49%	28	38%	3	3%
Negative	1747	60%	18	4%	994	89%	600	64%	85	36%	40	33%	10	11%
Unknown	661	23%	406	96%	47	4%	41	4%	34	15%	55	45%	78	86%



<b># Positive nodes</b>									
0	1439 49%	71 17%	1005 90%	339 36%	17 7%	7 6%	0 -		
1-3	497 17%	0 -	0 -	422 45%	65 28%	10 8%	0 -		
4+	252 9%	0 -	0 -	124 13%	107 46%	20 16%	1 1%		
Positive (# unk)	3 0%	0 -	0 -	0 -	3 1%	0 -	0 -		
Nodal status unk	736 25%	353 83%	113 10%	53 6%	41 18%	86 70%	90 99%		
<b>SMPBC attender</b>									
Yes	1574 54%	302 71%	704 63%	431 46%	81 35%	33 27%	23 25%		
No	1353 46%	122 29%	414 37%	507 54%	152 65%	90 73%	68 75%		
<b>Screen detected*</b>									
Yes	971 62%	238 79%	499 71%	189 44%	25 31%	11 33%	9 39%		
No	603 38%	64 21%	205 29%	242 56%	56 69%	22 67%	14 61%		

\* Screen detected defined as diagnosis of breast cancer within 1 year of an abnormal screen. For patients with synchronous bilateral disease, the first diagnosis was used to define the screen detected variable, which was then assigned to both diagnoses.

ER = Estrogen Receptor

LVI = Lymphovascular Invasion

Unk = Unknown

SMPBC = Screening Mammography Program of British Columbia

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**Table 2. Comparison of stage distribution for British Columbia and Surveillance Epidemiology and End Results breast cancer cases.**

<b>Stage</b>	<b>BC % of Cases</b>	<b>SEER % of Cases</b>
In Situ	14%	15%
I	38%	42%
II	32%	32%
III	8%	7%
IV	4%	4%
Unknown	3%	-

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Table 3. Treatment Characteristics

	All Stage		Stage 0		Stage I		Stage II		Stage III		Stage IV		Stage Unknown	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
	2927	100	424	14.5	1118	38.2	938	32.0	233	8.0	123	4.2	91	3.1
<b>Initial Surgery</b>														
None	121	4%	1	0%	7	1%	13	1%	22	9%	65	53%	13	14%
BCS	1510	52%	281	66%	726	65%	445	47%	34	15%	22	18%	2	2%
Mastectomy	1086	37%	104	25%	344	31%	458	49%	154	66%	22	18%	4	4%
Unknown	210	7%	38	9%	41	3%	22	2%	23	10%	14	11%	72	79%
<b>RT within 1 year of diagnosis</b>	1649	56%	159	38%	655	59%	599	64%	179	77%	57	46%	0	-
<b>RT within 5 years of diagnosis</b>	1719	59%	167	39%	679	61%	619	66%	184	79%	65	52%	NA	
<b>RT within 1 year of BCS</b>	1223	81%	155	55%	639	88%	394	88.5%	26	77%	NA		NA	
<b>Chemotherapy (CT) within 1 year of diagnosis</b>	928	31%	0	-	159	14%	543	58%	166	71%	53	43%	7	8%
<b>CT within 5 years of diagnosis</b>	1008	34%	0	-	177	16%	558	59%	168	72%	61	49%	NA	
<b>Hormonal therapy within 1 year of diagnosis (All)</b>	1664	57%	95	22%	709	63%	610	65%	156	67%	63	51%	31	34%
<b>HT within 5 years of diagnosis</b>	1777	61%	109	26%	734	66%	657	70%	169	73%	67	54%	NA	
<b>Hormonal therapy within 1 year of diagnosis (ER+)</b>	2283	78%	89	21%	816	73%	788	84%	200	86%	100	81%	NA	

RT = Radiation Therapy

CT = Chemotherapy

HT = Hormone therapy

ER+ = Estrogen Receptor-Positive

**Table 4. Comparison of 5 year BCCA and optimal use of RT and systemic therapies.**

		All Stages	Stage I	Stage II	Stage III	Stage IV
RT (%)	BCCA	59	61	66	79	52
	Ideal (19)	66	69	82	95	64
	Ideal (20)	83	84	84	91	47
Chemotherapy (%)	BCCA	34	16	59	72	49
	Ideal (21)	59	56	56	90	29
Hormonal therapy (%)	BCCA	61	66	70	73	54
	Ideal (22)	64	NR	NR	NR	NR

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**Table 5A. Comparison of British Columbia outcomes for patients diagnosed in 2002 with data from the United States SEER database.**

<b>Stage</b>	<b>5 Year OS BC</b>	<b>5 Year RSR BC</b>	<b>5 Year RSR USA SEER (18)</b>
In Situ	<b>96%</b>	<b>103%</b>	100%
I	<b>90%</b>	<b>98%</b>	100%
II	<b>84%</b>	<b>91%</b>	86%
III	<b>60%</b>	<b>65%</b>	57%
IV	<b>12%</b>	<b>13%</b>	20%
<b>All Cases</b>	<b>83%</b>	<b>90%</b>	<b>89%</b>

OS = Overall Survival  
 BC = British Columbia  
 RSR= Relative Survival Rate  
 SEER = Surveillance Epidemiology and End Results

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**Table 5B. Comparison of British Columbia outcomes for patients diagnosed in 2002 with data from other cancer registries in the United States and Europe.**

<b>5 Year RSR BC</b>	<b>5 Year RSR USA SEER (18)</b>	<b>5 Year RSR ICBP Denmark (10)</b>	<b>5 Year RSR ICBP Norway (10)</b>	<b>5 Year RSR ICBP Sweden (10)</b>	<b>5 Year RSR ICBP UK (10)</b>	<b>5 Year OS EUROCARE (11)</b>	<b>Germany 5 Year RSR (23)</b>
<b>90%</b>	<b>89%</b>	<b>82%</b>	<b>84%</b>	<b>89.3%</b>	<b>78.8%</b>	<b>79%</b>	<b>81%</b>

RSR= Relative Survival Rate  
 SEER = Surveillance Epidemiology and End Results  
 ICBP = International Cancer Benchmark Project  
 UK- United Kingdom

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