



LESS IS MORE: OPTIMIZING BREAST CONSERVATION STRATEGIES FOR IPSILATERAL BREAST TUMOR RECURRENCE

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Introduction

- Ipsilateral breast tumor recurrence (IBTR) affects 8–20% of women a decade after undergoing breast-conserving surgery (BCS).¹
- Despite salvage mastectomy (SM) being the standard for IBTR, patients express a preference for repeat lumpectomy.²
- Prior studies have reported controversial results on outcomes of BCS vs SM with some favoring SM³ while others not.¹
- This study seeks to comprehensively review existing literature, evaluating the prognostic impact of BCS and SM for IBTR while assessing the feasibility of favoring BCS over SM.

Materials and methods

- Conforming to PRISMA guidelines, a systematic review encompassing MEDLINE, Embase and Scopus employing targeted search strategies was conducted.
- Primary outcome was Overall Survival (OS) following repeat BCS and SM for IBTR
- Secondary outcomes were locoregional recurrence, distant metastasis, Distant Disease-Free Survival (DDFS) and Breast Cancer-Specific Survival (BCSS).

Results

- 2433 patients from nine studies (1970–2019) were included.
- Rates of repeat BCS ranged from 20.5% to 73.1%.
- No significant disparities in primary tumor characteristics were reported between two groups.
- Seven studies revealed no significant differences in OS between repeat BCS and SM, one study suggested superior DDFS, OS and BCSS with repeat BCS⁴, while another reported inferior OS in the BCS group⁵.
- Locoregional recurrence averaged 17.28% in BCS versus 9.9% in SM, and distant metastases averaged among 12.84% in BCS compared to 29.42% in SM.

Author	n: L/M	Country	Follow up (in months)	Overall Survival at 5 years (%) L/M	Secondary locoregional recurrence (%) L/M	Distant metastasis after IBTR treatment (%) : L/M	Distant disease-free survival at 5-year: L/M	Breast Cancer - Specific Survival
Alpert 2005	30/116	USA	165.6	58/65.7 (10 years)	NA	23.9/31.8	NA	61.1/73.1 (10 years)
Bruele 2022	130/192	USA	80.4	66/54	17/8	0/7	NA	Not significant
Chen 2008	179/568	USA	NA	67/78	NA	NA	NA	NA
Gentile 2021	108/108	Italy	69	92.8/68.3	18.5/5.6	7.4/21.3	90.3/65.3	94.6/70.5
Kolben 2015	58/112	Germany	49	84.7/72.6	19.6/23	NA	57.3/61.9	NA
Komoi 2002	30/11	Japan	43	90/90.9	NA	12.9/40	70.1/83	NA
Salvadori 1999	57/134	Italy	73	85/70	14/3	20/47	46/56	NA
Wu 2021	249/249	China	130	71/70 (at 10 years)	NA	NA	NA	79/84
Yoshida 2016	51/51	Japan	55	94/92	NA	NA	83/82	NA

L: Lumpectomy, M: Mastectomy
NA: Not available

Discussion / Conclusion

- BCS stands as a feasible alternative for IBTR patients.
- Mastectomy, while effective in reducing the risk of locoregional relapse, does not entirely eliminate subsequent metastatic potential.
- Nevertheless, ongoing research is imperative to elucidate optimal criteria guiding the selection of candidates for subsequent BCS interventions.

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