

**IN THIS ISSUE**

- **SENTINEL NODE BIOPSY IN WOMEN 70 YEARS +**
- **CONTRALATERAL PROPHYLACTIC MASTECTOMY**
- **2014 SSO-ASTRO INVASIVE BREAST MARGINS GUIDELINES IMPACT**
- **RE-EXCISION RATES FOLLOWING BREAST CONSERVATION SURGERY**

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FALL UPDATE ON HEAD & NECK ENDOCRINE TUMOURS  
SATURDAY OCTOBER 13, 2018



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## SENTINEL NODE BIOPSY IN WOMEN 70 YEARS OF AGE OR OLDER WITH CLINICALLY NODE NEGATIVE ER POSITIVE BREAST CANCER



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SURGICAL ONCOLOGY

In July 2016 the Society of Surgical Oncology published a Choosing Wisely statement that recommended against routine SLNB with cN0 patients, 70 years of age or over, with ER positive tumours, based on literature showing no survival benefit for axillary dissection in these patients.

This recommendation was based on two large studies with long term follow-up.<sup>1,2</sup> The first study compared the outcomes of patients randomized to receive lumpectomy plus tamoxifen with or without irradiation (i.e. no axillary staging) and the second retrospectively compared the outcomes in patients who did or did not receive axillary dissection as part of their breast cancer management. In this study all patients had been prescribed Tamoxifen for at least 2 years. In the follow up publications, they reported on 636 patients in the first study and 671 patients in the second, with 15 years of long term follow up.

In the first study, patients who did not receive axillary radiotherapy had a lower local disease free rate of 90% vs

98% (i.e higher local recurrence rate).<sup>1</sup> In the second study the axillary recurrence rate in patients who did not receive an axillary dissection was 5.8% overall and only 3.7% for T1 patients.<sup>2</sup>

The first study did not report the T1 subgroups or grade of the tumours involved, but T stage and grade were reported in the second study, as follows:

	With ALND (%)	No ALND (%)
Grade 1	20.2	24.5
Grade 2	67	65.5
Grade 3	11	7.3
Unknown grade	1.8	2.7

POPULATION DISTRIBUTION BY GRADE<sup>2</sup>

	With ALND (%)	No ALND (%)
T1a	1.8	5.4
T1b	27.6	40
T1c	63.3	47.3
T2<25mm	7.3	7.3

POPULATION DISTRIBUTION BY STAGE<sup>2</sup>

So, this study consisted of mostly grade 2, T1b or C tumours, not just grade T1a, Grade 1 tumours. In this study, the node positive rate was 23%, with 72% having only a single node involved but 24% having more than three nodes involved. They also reported that 15% of patients took Tamoxifen discontinuously because of side effects (i.e. they did not have 100% compliance with Tamoxifen).<sup>2</sup>

Subsequent to the publication of the Choosing Wisely guidelines, another study reviewed a national cancer data base of 71,834 cases of cN0 ER+ patients. They identified groups, including T1mic-b grade 1-2 and T1mic-c grade 1, that were at particularly low risk of having a positive sentinel node, with a 7.8 % node positive rate, compared to 22% for women who did not meet these criteria. They suggested that the Choosing Wisely guidelines can be used safely in the low risk group.<sup>3</sup>

Locally, we have reviewed 364 patients 70 years of age or older who underwent surgery for stage 1-3 breast cancer between 2012 and 2016 from a prospective database who were cN0, ER+ and Her2 -. There was a 23% node positivity rate. T stage was the only factor associated with node positivity and significant rates of node positivity were identified even in T1 tumours.<sup>4</sup> (Table 1)

This study also looked at the use of adjuvant therapy in this patient population. In the node positive population, there was a significant increased use of nodal radiation (44.4% vs 1.6 %; p<0.001) and a significant increase in the administration of systemic therapy, primarily hormonal blockade (90.7% vs 69.3 %; p=0.001) compared to the node negative group.<sup>4</sup> We do not have survival or local recurrence data on this study population.

The liberal use of nodal radiation in our population is not surprising, as BC has been a strong advocate of nodal irradiation even with a single sentinel node positive based on the MA.20 study. This study randomized patients who were node positive (N1) or had high risk node negative tumours (greater than 5 cm or greater than 2 cm with less than 10 nodes retrieved and grade 3 or ER negative or LVI) to receive nodal irradiation or not, in addition to whole breast irradiation following breast conserving treatment (lumpectomy and SLNB or ALND) and adjuvant systemic therapy. They showed a decreased local recurrence in patients receiving nodal radiation with rates of disease-free survival of 82.0% in the nodal-irradiation group and 77.0% in the control group (P=0.01). Of importance though; there was no survival benefit demonstrated in this study (82.8% vs 81.8%).<sup>5</sup>

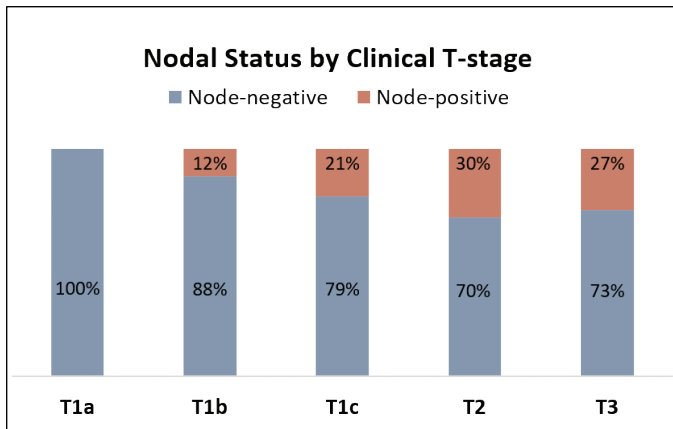
The current recommendations in Up to Date suggest that multidisciplinary conference with input from medical and radiation oncology be employed especially for patients 65-

70 for whom omission of SLNB is being considered. This is younger than the group addressed by the SSO guideline but recognizes that breast cancer care is multidisciplinary. Generally, however, Up to Date states that older women may not require axillary lymph node surgery because the knowledge gained may not influence adjuvant treatment choice or outcome particularly when primary tumor characteristics are favorable or co-morbid disease is present.<sup>6</sup>

In BC, it would appear that surgical axillary staging demonstrating node positivity significantly affects the choice of adjuvant therapy for this patient population. Despite the well supported recommendations of Choosing Wisely, it would be therefore be difficult for surgeons to unilaterally adopt these recommendations without the multidisciplinary support of the provincial Breast Tumour Group.

#### **RECOMMENDATIONS FROM THE BC CANCER SURGEON NETWORK BREAST TUMOUR GROUP, JUNE 2018:**

- **SURGEONS SHOULD DISCUSS THE CHOOSING WISELY RECOMMENDATIONS FOR OMITTING SLNB WITH THESE PATIENTS AS PART OF INFORMED CONSENT.**
- **PATIENTS WITH 1MIC-T1A GRADE 1-2 TUMOURS HAVE A LESS THAN 10% NODE POSITIVITY RATE, SO FOR THOSE PATIENTS HAVING BREAST CONSERVING SURGERY, CONSIDERATION MAY BE GIVEN TO OMISSION OF SLNB PER SSO GUIDELINES AS THEIR TREATMENT AND OUTCOME IS UNLIKELY TO BE INFLUENCED BY THE SLNB.**
- **FOR ALL OTHER PATIENTS, OMISSION OF SLNB SHOULD BE DISCUSSED WITH THE PATIENT, WITH THE EXPLANATION THAT IN OUR CENTRES, THE PATHOLOGIC FINDINGS OF A SLNB DO SEEM TO IMPACT THE ONCOLOGISTS TREATMENT RECOMMENDATIONS, THOUGH WE DO NOT YET HAVE INFORMATION THAT THESE TREATMENT DECISIONS IMPACT SURVIVAL OR LOCAL RECURRENCE IN THIS POPULATION.**
- **IF PATIENTS 70 YEARS OF AGE OR OLDER WITH ER POSITIVE cN0 BREAST CANCER HAVE CO-MORBIDITIES THAT INCREASE THEIR RISK OF GENERAL ANAESTHESIA, THEY CAN BE OFFERED LUMPECTOMY ALONE UNDER LOCAL ANAESTHETIC WITH THE ASSURANCE THAT THERE IS NO EVIDENCE THAT OMISSION OF SLNB INCREASES THEIR RISK OF DEATH.**
- **THE ISSUE OF OMISSION OF SLNB IN ALL PATIENTS 70 YEARS OF AGE OR OLDER WITH ER POSITIVE cN0 BREAST CANCER, AS RECOMMENDED BY THE SSO, WILL BE FURTHER INVESTIGATED BY THE BC CANCER SURGEON NETWORK BREAST TUMOUR GROUP VIA REVIEW OF THE PROVINCIAL BREAST CANCER OUTCOMES UNIT DATA FOR THIS POPULATION TO DETERMINE WHETHER IN BC THERE IS A BENEFIT TO SLNB IN THIS POPULATION BASED ON THE DIFFERENTIAL DELIVERY OF ADJUVANT THERAPY BASED ON SLNB RESULTS.**



Clinical T-stage	Axillary Surgery % (n=331)	No Axillary Surgery % (n=33)
T1a	6	18.2
T1b	25.4	24.2
T1c	31.1	27.3
T2	33.8	30.3
T3	3.3	0.0

TABLE 1. CLINICAL T-STAGE OF TUMOURS AT MOUNT ST. JOSEPH HOSPITAL 2012-2016<sup>4</sup>

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# BILATERAL MASTECTOMY: TWICE AS GOOD OR DOUBLE TROUBLE?

## REVIEW OF CANADIAN AND AMERICAN RECOMMENDATIONS FOR CONTRALATERAL PROPHYLACTIC MASTECTOMY



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GENERAL SURGERY

The number of women seeking a contralateral prophylactic mastectomy (CPM) is on the rise, and most notably in the population undergoing a therapeutic mastectomy with reconstruction. For the majority of women with early stage breast cancer, this additional surgery offers no survival benefit but does come with an increased risk of complications including infection, chronic pain and psychological effects related

to body image and sexuality.

To provide guidance with this controversial topic, consensus statements have been developed. The American Board of Medicine's Choosing Wisely campaign released the statement "Don't routinely perform double mastectomy in patients who have a single breast with cancer".<sup>1</sup> This statement was endorsed by the American Society of Breast Surgeons (ASBrS). However, there are women who may benefit from a CPM. The ASBrS convened a panel of experts to develop a consensus statement to guide the decision-making process. The ASBrS consensus statement on CPM is listed in Table 1.<sup>2</sup>

CPM should be considered for those at significant risk of CBC
<ul style="list-style-type: none"> <li>Documented <i>BRCA</i> 1/2 carrier</li> <li>Strong family history, but patient has not undergone genetic testing</li> <li>History of mantle chest radiation before age 30 years</li> </ul>
CPM can be considered for those at lower risk of CBC
<ul style="list-style-type: none"> <li>Gene carrier of non-<i>BRCA</i> gene (e.g., <i>CHEK-2</i>, <i>PALB2</i>, <i>p53</i>, <i>CDH1</i>)</li> <li>Strong family history, patient <i>BRCA</i> negative, no known <i>BRCA</i> family member</li> </ul>
CPM may be considered for other reasons
<ul style="list-style-type: none"> <li>To limit contralateral breast surveillance (dense breasts, failed surveillance, recall fatigue)</li> <li>To improve reconstructed breast symmetry</li> <li>To manage risk aversions</li> <li>To manage extreme anxiety (this may be better managed through psychological support strategies)</li> </ul>
CPM should be discouraged
<ul style="list-style-type: none"> <li>Average-risk woman with unilateral breast cancer</li> <li>Women with advanced index cancer (e.g., inflammatory breast cancer, T4 or N3 disease, stage IV disease)</li> <li>Women at high risk for surgical complications (e.g., patients with comorbidities: obesity, smoker, diabetes)</li> <li>Women tested <i>BRCA</i> negative with a family of <i>BRCA</i>-positive carriers</li> <li>Male breast cancer, including <i>BRCA</i> carriers</li> </ul>

TABLE 1. CPM CONSENSUS STATEMENT FROM ASBRS

Recently, Wright *et al.* took a more rigorous approach and used the modified Delphi consensus methodology to address the topic of CPM<sup>3</sup>. General surgeons, plastic surgeons,

oncologists and a psychologist from across Canada and from both academic and community practices participated. The result is a very thorough consensus statement that can aid the practitioner with decision-making in a number of patient scenarios (Table 2).

CPM is NOT recommended
<ul style="list-style-type: none"> <li>• for average risk women with early stage unilateral breast cancer regardless of age</li> <li>• with early stage unilateral breast cancer if they are &lt;60 years of age</li> <li>• to women with early stage unilateral breast cancer if they are &lt; 50 yrs of age</li> <li>• to women with early stage unilateral breast cancer if they are &lt; 40 yrs of age</li> <li>• to women with early stage unilateral breast cancer if they are &lt; 30 yrs of age</li> <li>• for women with early stage breast cancer if they have a strong family history of multiple family members with breast cancer under 50 (NonBrCa 1/2)</li> <li>• for women with early stage breast cancer if they have a strong family history of multiple family members with breast cancer over 50 (NonBrCa 1/2)</li> <li>• for women with early stage breast cancer if they are BrCa1/2 gene negative, but a family member is BrCa 1/2 mutation carrier</li> <li>• if BRCA1-2 testing shows a variant of uncertain significance (VUS) and there is a strong family history of multiple family members with breast cancer</li> <li>• if BRCA 1- 2 testing shows a variant of uncertain significance (VUS) and there is no strong family history</li> <li>• for women with a strong family history of breast cancer who is declining BrCa1/2 mutation testing</li> <li>• if the patient's breast cancer is ER/PR negative</li> <li>• if the patient's breast cancer is ER, PR and Her2neu negative (triple negative)</li> <li>• if the patient's breast cancer is Her2neu positive</li> <li>• if the patient has a locally advanced unilateral breast cancer (LABC: &gt; 5 cm (T3), extensive palpable nodes (N2,N3), chest wall and/or skin involvement)</li> <li>• if the patient has unilateral multifocal or multi-centric disease</li> <li>• if the patient has high grade breast cancer</li> <li>• is not recommended if the patient has a contralateral indeterminate or benign breast imaging finding</li> <li>• if the patient has a lobular breast cancer</li> <li>• if the initial cancer was only identified on MRJ imaging</li> <li>• based on timing (immediate or delayed) or type (implant or tissue-based) of reconstruction</li> <li>• based solely on patient anxiety around developing a contralateral breast cancer, distant metastases. breast cancer related death, and/or ongoing breast surveillance</li> <li>• even if the patient's nonmedical sources of information strongly advocate for CPM</li> </ul>
CPM is recommended
<ul style="list-style-type: none"> <li>• in women who had Mantle field radiation with a unilateral breast cancer</li> <li>• in women with a mutation in the BrCa 1/2 gene with a unilateral breast cancer</li> </ul>
CPM can be considered
<ul style="list-style-type: none"> <li>• if there is insufficient evidence to recommend for or against CPM and therefore CPM may be considered on an individual basis for women with early stage breast cancer and a genetic mutation in CHEK2/ PTEN/ p53/ PALB2/CDHI genes</li> <li>• CPM (with or without reconstruction) is not recommended, but may be considered, in a woman in whom breast symmetry may be a major issue after unilateral mastectomy (with or without reconstruction)</li> </ul>

TABLE 2. SUMMARY OF RECOMMENDATIONS FOR CPM - WRIGHT *ET AL*

The BC Cancer Surgeon Network Breast Tumour Group encourages surgeons to discuss the consensus statements with their average risk patient with breast cancer requesting CPM. In addition, Wright *et al.* summarized some statistics that may be useful when counselling on CPM:

- **WOMEN SHOULD UNDERSTAND THAT THEIR LIKELIHOOD OF DEVELOPING A CONTRALATERAL BREAST CANCER AT 10 YEARS AFTER INITIAL DIAGNOSIS IS 3-5%**
- **CPM PROVIDES A 95% RISK REDUCTION IN THE DEVELOPMENT OF CONTRALATERAL BREAST CANCER**
- **THERE IS A 0.5% RISK OF CHEST WALL OCCURRENCE AFTER CPM**
- **CPM DOUBLES THE RISK OF POST-OPERATIVE BLEEDING AND INFECTION**
- **DESPITE THE POTENTIAL FOR BETTER BREAST SYMMETRY WITH A CPM SOME WOMEN EXPERIENCE LONG-TERM CHRONIC PAIN AND BODY IMAGE ISSUES**

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# OBTAINING SYMMETRY WITH BREAST RECONSTRUCTION: CONSIDERATIONS FOR MULTIDISCIPLINARY DECISION MAKING



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PLASTIC SURGERY

When women are presented with a diagnosis of Breast cancer requiring mastectomy, this often leads to a discussion about what should be done with the contralateral side. Although patients often ask about a “double mastectomy” considering how best to obtain symmetry is an important part of breast reconstruction.

There is often a discussion about contralateral prophylactic mastectomy (CPM) due to concerns about survival, family history, cell type, genetic testing or difficulty with diagnosis. The surgical oncologist/general surgeon should perform a risk assessment and have a discussion about risk of Contralateral Breast Cancer (CBC).

If there is no compelling reason to have a prophylactic mastectomy then the decision to have something done on the normal breast is a matter of symmetry. In order to achieve the appropriate balance between the two breasts it might be suggested that the patient undergo a breast reduction, implant placement or mastopexy. In some cases a CPM is considered for symmetry after assessing the patient’s anatomy and goals post surgery. These procedures might be done the day of therapeutic mastectomy or be delayed and done secondarily.

Once the extent of surgery is determined the next decision is for type of reconstruction: autologous versus implant based reconstruction. The history of radiation or the likelihood of radiation after surgery are important facts to note in the decision making. There can be increased rates of complication if implants are based in the field of radiation. This includes cosmetic asymmetries, encapsulation, pain on the radiated side, or worse case scenario, implant loss secondary to infection. These concerns may prompt a more detailed discussion about using the patient’s own tissue versus selecting an implant.

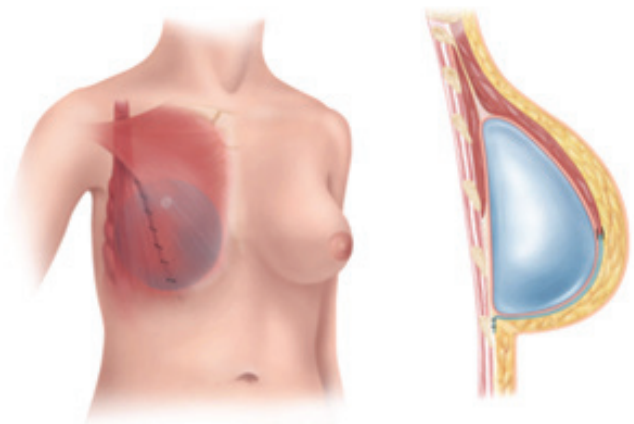
If the abdomen is used for a TRAM or a DIEP flap, that source can only be accessed once and be unavailable if only one side has surgery, and at a later date the patient goes on to require a mastectomy on the contralateral side. It is never as satisfactory to have one breast reconstruction done with the patient’s own tissue and the other with an implant.

Outcomes are uniformly better if the reconstructions are

done on the day of mastectomy rather than in a delayed fashion.<sup>1</sup> All of these factors require a collaborative team approach to decision making involving the oncological surgeon, plastic surgeon and medical and radiation oncologist. In the plastic surgery literature, patient reported outcome studies show greater rates of satisfaction with breasts for bilateral reconstruction compared with unilateral reconstruction with lower anxiety levels.<sup>2</sup>

As the incidence of breast cancer is rising and the diagnosis is more frequently being made in younger women there is more awareness of the cosmetic outcome of the surgical procedures that are recommended and an increased awareness of the value of symmetry. Symmetry after surgery has been proven to add to satisfaction with treatment and is an important factor in surgery decision making.

The decision of how best to obtain symmetry is complex and individualized and requires input from the breast surgical oncologist, breast reconstructive surgeon and the patient. If the patient is well informed and understands the actual risk of CBC, the increased risk of bilateral surgery (which may impact adjuvant treatments) and issues and options surrounding symmetry we must support the patient with shared decision making.



ALLOPLASTIC BREAST RECONSTRUCTION

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# IMPACT OF 2014 SSO-ASTRO INVASIVE BREAST MARGINS GUIDELINES ON RE-EXCISION AFTER BREAST CONSERVING SURGERY

BY ALEX MONAGHAN (2018 UBC/SON SUMMER STUDENT RESEARCH AWARD RECIPIENT)  
SUPERVISOR: DR. CHRIS BALISKI

In Canada, breast cancer is a common malignancy, affecting one out of nine women in their lifetime. Breast conserving surgery (BCS) is the preferred option for early-stage invasive breast cancer. The conservative nature of BCS necessarily risks the possibility of obtaining positive margins, which is a strong predictor of local recurrence. While the definition of positive margins is widely accepted, there has been much less acceptance of one unified definition of negative margins. The lack of standardization has resulted in widely disparate re-excision rates (0-60%), exposing some patients to the potential negative and unnecessary consequences of a revision surgery.

In view of the history of variable practice and uncertainty regarding margins, a consensus panel commissioned by the Society of Surgical Oncology and the American Society of Radiation Oncology (SSO-ASTRO) in 2014 recommended that negative margins be defined as “no tumour on ink”.<sup>1</sup> It was suggested that further excision to achieve wider negative margins was not indicated for patients with early-stage invasive breast cancer undergoing whole-breast irradiation following partial mastectomy. There have been several studies published to date suggesting a decrease in re-excision rates (range: 1-16%).<sup>2,3</sup> Canadian data regarding SSO-ASTRO guideline implementation is limited; therefore, we aimed to determine the effect of these guidelines in a Canadian health care setting.

Our project aims to investigate the effects of these guidelines in the catchment area of the BCCA SAH-CSI (i.e. Interior Health Authority), in terms of re-excision rate, compliance with guidelines, and patient and tumour characteristics associated with re-excision and non-compliance with guidelines. A retrospective chart review was conducted on patients referred to the BCCA SAH-CSI with invasive breast carcinoma, who were treated by lumpectomy and subsequent adjuvant therapy, diagnosed between July 1, 2011 and December 31, 2016. 1148 patients met pre-determined inclusion criteria and were separated into pre- and post-guidelines cohorts (n=565, n=583, respectively). Relevant information regarding pathological margin status, patient and tumour characteristics was obtained from the BC Cancer Agency and stored in a secure database. Basic statistical analysis was performed, pending univariate and multivariate analysis by a biostatistician.

The overall re-excision rate following BCS decreased by 3.95% following the publication of the SSO-ASTRO guidelines (22.7% pre, 18.7% post, p=0.097), but did not

reach statistical significance in univariate analysis. Given that the guidelines were developed primarily to prevent patients with negative pathologic margins from undergoing further surgery, more importantly we found a significant decrease in re-excisions for “close but negative margins” (less than 1mm) from 25% to 11% (p=0.0036) of re-excisions. (Table 1) The guidelines appear to be reducing re-excisions for pathologically negative margins, to the extent that 85% of re-excisions are now for positive margins (as compared to 64% before guidelines publication). This study validates the findings of previous studies and demonstrates the utility of these guidelines in Canada.<sup>2,3</sup>

The next steps in this project include formal statistical analysis, preparation of a manuscript, and presentation at the 100th annual meeting of the North Pacific Surgical Association in November. On a personal note, I’d like to thank the BC Cancer Surgeon Network for supporting me through an SSRP to be able to conduct this research.

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Margin Status	Pre-guidelines re-excisions (% of cohort re-excisions)	Post-guidelines re-excisions (% of cohort re-excisions)	p-value
Negative (>2 mm)	2 (2%)	0 (0%)	0.25
1-2 mm	10 (8%)	4 (4%)	0.1795
Close but negative (<1 mm)	32 (25%)	12 (11%)	0.0036
Positive (0 mm)	82 (64%)	93 (85%)	0.4497

TABLE 1. RE-EXCISION RATE FOLLOWING BREAST CONSERVING SURGERY (BCS) STRATIFIED BY PATHOLOGIC MARGIN STATUS

# LOWER RE-EXCISION RATES FOLLOWING BREAST CONSERVATION SURGERY IN HIGH VOLUME SURGEONS: MORE ACCURATE, OR JUST MORE BREAST TISSUE?

BY LAUREN HUGHES (2018 SURGEON NETWORK TRAVEL AWARD RECIPIENT)  
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Breast conserving surgery (BCS) is the preferred surgical approach for most patients with early stage breast cancer. While this approach is beneficial in terms of breast preservation, a disadvantage is the potential need for re-excision to address concerns regarding pathological margins. Re-excision may worsen cosmetic result, increase complication rates and health care costs, and cause undue psychological stress to patients.<sup>1,2,3</sup> Therefore, the surgeon performing the procedure must delicately and accurately balance obtaining clear margins with minimizing the amount of tissue resected.<sup>4</sup>

There is significant variability in reoperation rates, with institutions reporting rates ranging from 10-60% and larger population-based studies reporting rates ranging from 17-35%.<sup>1,5</sup> This team has conducted previous research that investigated the most predictive factors for reoperation. While certain patient and disease related factors including tumour size, tumour histology and patient age were influential, surgeon variability was also found to be a contributor. Our results revealed a clear trend of lower reoperation rates with increasing surgeon case volume, with very high case volume surgeons having lower reoperation rates than low volume surgeons.<sup>6</sup> The reason for this has not been elucidated but is important as re-excision following BCS is considered one of several quality indicators related to BCS.<sup>7,8</sup> That is the impetus for our current project. The aim was to determine if lower re-excision rates among higher volume surgeons could be attributed to larger volumes of breast tissue being removed at the time of initial BCS. Removal of equivalent breast tissue volume would suggest greater accuracy during the procedure.

A retrospective analysis of all patients referred to our cancer center over a 3-year period (January 1, 2011 to December 31, 2013) was performed. For those who underwent BCS, we calculated both the actual and optimal amount of breast tissue removed using methods published by Krekel *et al.* The optimal resection volume was the removal of a one-centimeter margin of normal tissue around the tumour. Any further tissue removed was considered excessive. These volumes were then used to produce a ratio reflecting the amount of excess breast tissue removed. A multivariate analysis was then performed to determine factors influencing reoperation rates and to better characterize the relationship between surgeon annual case volume and reoperation rate.

Similar to our previous study (which included a slightly different patient cohort), we found that tumour size was highly predictive of the need to re-excision following BCS. Surgeon case volume was also found to be independently associated with reoperation rates, but in this case was only statistically significant between very high and intermediate case volume surgeons. The same trend and difference in re-excision rates remained significant after controlling for both tissue resection volume and tumour size, suggesting that lower re-excision rates were not at the expense of larger resection volumes.

Further investigation is required to determine what structural or process related factors are responsible for surgeon case volume variability in re-excision rates after BCS.

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## 2018 BC CANCER SURGEON NETWORK TRAVEL AWARDS RECIPIENTS

Alex Monaghan

North Pacific Surgical Association Annual Meeting, November 9-10, Boise, Idaho  
Impact of SSO-ASTRO Guidelines on Reoperation Rates Following Breast Conserving Surgery

Subin Punnen

Canadian Surgery Forum, September 13-15, 2018, St. John's, Newfoundland  
Transanal Endoscopic Microsurgery (TEM) for Rectal GI Stromal Tumour

Daniel Lustig

The American College of Surgeons Clinical Congress, October 21-25, 2018, Boston  
Is Microductectomy Still Necessary to Diagnose Breast Cancer: A Ten-Year Study on the Effectiveness of Duct Excision and Galactography

Amandeep Ghuman

American College of Surgeons Quality and Safety Conference in Orlando, Florida, July 21-24, 2018  
Surgical Site Infection in Elective Colon & Rectal Resections: Effect of Oral Antibiotics

Lauren Hughes

American Society of Breast Surgeons 19th Annual Meeting in Orlando, Florida, May 2-6, 2018  
Lower re-excision rates following breast conservation surgery in high volume surgeons: more accurate, or just more breast tissue?

For more information on the travel awards please visit the BC Cancer Surgeon Network Website

## UPCOMING CONFERENCES

BC Cancer Surgeon Network Annual Fall Update, Vancouver BC  
October 13, 2018, [www.bccancer.bc.ca/surgeonnetwork](http://www.bccancer.bc.ca/surgeonnetwork)

American College of Surgeons Clinical Congress, Boston MA  
October 21-25, 2018, [www.facs.org](http://www.facs.org)

Ontario Association of General Surgeons Annual Meeting, Toronto ON  
November 3, 2018, [www.oags.org](http://www.oags.org)

Western Surgical Association Annual Meeting, San Jose del Cabo, Mexico  
November 3-6, 2018, [www.westernsurg.org](http://www.westernsurg.org)

North Pacific Surgical Association Annual Meeting, Boise ID  
November 9-10, 2018, [www.northpacificsurgical.org](http://www.northpacificsurgical.org)

BC Surgical Society Annual Meeting, Penticton BC  
May 9-11, 2019, [www.bcscs.ca](http://www.bcscs.ca)

## BC CANCER SURGEON NETWORK/UBC SUMMER STUDENT RESEARCH AWARD

2018 RECIPIENT:

ALEX MONAGHAN  
B.Sc. – SOUTHERN MEDICAL PROGRAM

PROJECT TITLE: IMPACT OF SSO-ASTRO  
GUIDELINES ON REOPERATION RATES  
FOLLOWING BREAST CONSERVING  
SURGERY

SUPERVISOR: DR. CHRIS BALISKI

## BC CANCER SURGEON NETWORK NEWSLETTER

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[www.bccancer.bc.ca/surgeonnetwork](http://www.bccancer.bc.ca/surgeonnetwork)

The BC Cancer Surgeon Network exists to promote and advance quality cancer surgery throughout the province, enable the integration of quality surgical oncology services into the formal cancer care system, and ensure that patients have the best possible outcomes through consistent access to high quality multidisciplinary care. To enhance appropriate, equitable and timely access to surgical services for cancer patients as close to home as possible, the Network supports communication and sharing of knowledge between subspecialty and community surgeons, their respective hospitals and BC Cancer.