



## *Review of Practice Guidelines for Sentinel Lymph Node Biopsy*

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Symposium on Breast Cancer  
SON, BCCA, VIHA  
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## *Converging Issues*

- *Demographics*
- *Screening Mammography  
Program of British Columbia  
(SMPBC)*



## *Converging Issues*


- *Axillary nodal status- prognosticates, guides therapy*
- *Axillary Node dissection- morbidity*

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## *Converging Issues*

- *Breast Cancer surgery- BC community general surgeons*
- *20% performed SLNB 1996-2001*
- *SLNB Staging accuracy is promising but incomplete*

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## ***Practice patterns of lymph-node mapping and sentinel-node biopsy for breast cancer in British Columbia (2001)***

***Considerable variation in:***

- ***Defn of SLN, indications, surgical technique***
- ***Nuclear medicine mapping technique***
- ***Pathologic assessment***

Chua et al  
Can J Surg 46 (2003) 273-278

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## ***Practice patterns of lymph-node mapping and sentinel-node biopsy for breast cancer in British Columbia (2001)***

- ***Surgeons performing SLNB*** ***19%***
- ***Implemented with validation study*** ***48%***
- ***Mentoring plus Training Course*** ***24%***
- ***Self Taught*** ***8%***
- ***Fewer than 10 SLNB*** ***33%***
- ***Performing SLNB alone*** ***20%***
- ***Data Management*** ***60%***

Chua et al  
Can J Surg 46 (2003) 273-278

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## *Outcomes of sentinel node biopsy for breast cancer in British Columbia, 1996 to 2001*

- *547 SLNB*
- *Success rate 88%*
- *False negative rate 22%*
- *Surgeon experience- irrelevant*

Chua et al  
Am J Surg 185 (2003) 118-126

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## *Purpose of SLNB Guidelines*

- *Define Standard of Care for SLNB*
- *Harmonize technique*
- *Improve consistency and precision for SN identification and false negative rate*
- *Quality assurance- Data reporting, Outcomes assessment*

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## *Provincial SLN Guidelines*

### **2 Components**

- ***Guideline #1- Technical document***
- ***Guideline #2- Defining the Implementation of SLNB as a Stand alone procedure***

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## *Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)*



**BC Cancer Agency**  
CARE & RESEARCH

Clinical Practice Guideline

BC Surgical Oncology Network

**Provincial Guidelines For Lymphatic Mapping And Sentinel Node Biopsy For Breast Cancer**

- <http://www.bccancer.bc.ca/HPI/SON/CPG/default.htm>
- [TStrack@bccancer.bc.ca](mailto:TStrack@bccancer.bc.ca)

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***Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)***

- ***Patient Selection***
- ***Radiologic Procedures***
- ***Surgery***
- ***Pathology***
- ***Data Reporting***

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***Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)***

***Patient Selection***

- ***Indications***
  - *T1/T2 N0 Invasive Breast Cancers*
- ***Contraindications***
  - *Advanced Local Cancer Conditions*
  - *Previous surgery or breast “disruption”*
  - *Allergy to blue dye*
  - *Pregnancy or Breast feeding*

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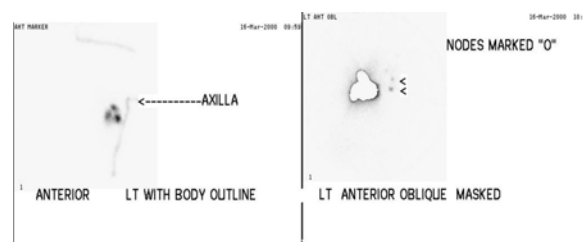
***Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)***

***Radiology***

- *Peritumoural injection 99mTc sulphur colloid*
- *Optional- Intradermal injection*
- *Preoperative Lymphoscintigram*

***Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)***

***Preoperative Lymphoscintigram***





## ***Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)***

### ***Surgery***

- *Combination technique of  $^{99m}\text{Tc}$  sulphur colloid and Lymphazurin*
- *Technique for SLN identification*
- *Definition of a completed SLN study*
- *Protocol for finding SLN if no Hot spot*
- *Data Documentation*

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## ***Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)***

### ***Pathology- Protocol***

- *Fixation in 10% buffered formalin*
- *10 Sections cut at 50 microns*
- *Slide Levels 1,5&10 stained with H&E*
- *Slide Level 2 Negative control for IHC*
- *Slide Level 6 IHC (cytokeratin)*
- *Remainder of levels kept for future use*

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## Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)

### Pathology- Optional

- **Intraoperative SLN Consultation/assessment**
  - Touch imprint H&E rapid section

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## Data Management Operative Documentation

 **Capital Health Region**  
Building Partnerships for Better Care

TITLE: RADIOGUIDED SURGICAL DATA RECORD

SITE:  VGH  Main  SDC  
 R/H  SDC  
 SPH

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
 Surgeon: \_\_\_\_\_ Recorder: \_\_\_\_\_  
 Radiocolloid Injection DATE: \_\_\_\_\_ TIME: \_\_\_\_\_  
 Incision Time: \_\_\_\_\_

SENTINEL NODE DATA (SLN)	SLN Number	Side L/R	Location (see above)	SLN Pre-Incision Count	SLN In Vivo Count	SLN Ex vivo Count	Post Excision Bed Count	Blue Stain Y/N

LOCATION:  
 0 epitrochlear  
 1 axilla  
 2 internal mammary  
 3 groin  
 4 popliteal  
 5 neck-anterior cervical  
 6 neck-posterior cervical  
 7 neck-suprascapular  
 8 neck-submental  
 9 neck-parotid  
 10 neck-garotroid

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## *Provincial Guidelines for Lymphatic Mapping and Sentinel Node Biopsy for Breast Cancer (part 1)*

- **Validation**

- **Identification (success) rate**

- [# successful ID of SLN / # surgical attempts]

- **False negative rate**

- [FN / (FN + TP)]

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## *Provincial SLN Guidelines*

### *2 Components*

- *Guideline #1- Technical document*
- **Guideline #2- Defining the Implementation of SLNB as a Stand alone procedure**

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## ***SLN Provincial Guideline #2***

### ***Implementation of SLNB as a Stand alone procedure***

- ***Define:***

- ***Patient Cohort***
- ***Surgeon Cohort***
- ***Institutional Requirements***
- ***Data set and Outcome measurements***

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## ***Guidelines***

### ***Closing comments***

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