

Regional Cancer Surgical Lead Updates

BC Cancer has five Regional Cancer Surgical Leads (RCSL) in each of B.C.'s five regional health authorities. The RCSLs work collaboratively with surgeons, hospital administration, regional health authority executives and BC Cancer regional and provincial leadership to implement strategic quality initiatives and enhance communication between the region's surgeons and BC Cancer.

Dr. Cailan MacPherson, Island Health Region



I completed training in general surgery at UBC, in colorectal surgery at the University of Calgary and a MHS in Clinical Epidemiology at UBC. I began practice in general and colorectal surgery in Victoria in 2016 and I am the site lead for medical student and resident surgical education. I practice within a

group of 15 general surgeons. As a colorectal surgeon, I have the privilege of working in partnership and operating not only with my colleagues in general surgery, but with surgeons from other specialties including gynecology, urology, plastic surgery and thoracic surgery. My wife Kristina and I have three girls, ages 7, 7, and 9, who constantly get the better of me.

I am excited that surgery is establishing a central and foundational role within BC Cancer. It has been a long time coming and it is inspiring to see new paths being cut. The development of a surgical network to foster continuous improvement will provide an opportunity to enhance care for all patients requiring cancer surgery in BC. Closer to home, I am excited to help provide data driven tools for surgeons to improve care for patients requiring cancer surgery and see an opportunity to expand access to networked multidisciplinary care for all surgeons throughout the island. And I am personally looking forward

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to expanding my horizon to work with surgeons across Vancouver Island and to showcase the outstanding work that is already being done here.

I welcome any ideas and discussion from my colleagues. I can be reached at cailan.macpherson2@islandhealth.ca.

Dr. Chris Baliski, Interior Health Region



I was the first certified fellowship trained surgical oncologist in the province. After finishing my fellowship in Calgary, I worked in Vancouver at St. Paul's Hospital. From there I moved to Kelowna, where I have been practicing for the past 17 years. I have a broad scope of practice, which is primarily focused on surgical

oncology including breast cancer, melanoma, endocrine and other disease sites. I also continue to do general surgery.

My research over the years had focused on outcomes in the areas of melanoma and breast cancer. My main interests currently are patient reported outcomes in breast cancer as a way to improve patient care and QI initiatives. These are being used to frame conversations with patients to allow informed decisions about their care.

While a high level of care is provided in the province, there is always room for improvement and our current system is not designed to ensure all patients are provided the highest quality cancer care. I look forward to being involved in a shift towards greater equity. All communities have different challenges they are faced with in providing healthcare. Understanding these issues, and trying to make it easier for surgeons to provide optimal care is a goal. Another goal is to enhance collaboration with local colleagues which can be challenging as focused care often occurs in silos. We hope to create efficient ways of communicating best practices between and within specialties to improve collaboration.

I enjoy living in the Okanagan and the many recreational opportunities here including cycling, mountain bike riding and running. I also enjoy the vineyards, especially those close to my home, and am a big fan of the local Pinot Noir varietals. I even have some of my own grape vines. Although they won't ever be in a bottle, they are great for eating, and I enjoy the process of growing them. The only challenge is fending off the deer, who seem to favour my grapes over the hundreds of areas around me!!

I would be happy to connect with others from around the region and province on the phone, or email (cbaliski@bccancer.bc.ca). Please contact me with clinical questions, or any general issues that you feel are important.

Dr. Guy Paterson, Northern Health Region



Dr. Guy Paterson is a general urologist practicing in Prince George at the University Hospital of Northern British Columbia. He is originally from Edmonton and moved to BC in 2007. He has previously served as the Head of Surgery for Northern Health and UNBCH. His practice covers all of

urology, but includes significant number of patients with malignancy as the majority of nephrectomies, prostatectomies and bladder surgery (apart from cystectomies) are done locally. Over the last 15 years he has fostered a collaborative approach to oncology care and has built close relationships with BC Cancer and surgeons/physicians in the Prince George community and rural centers. One of the challenges that he and colleagues have faced is the lack of formal referral pathways to and between surgeons and other cancer care physicians. For example, new physicians to the area often struggle to establish what resources are available for their patients, which can lead to delays in care, lack of patient advocacy and the potential for limited access to treatment. To

facilitate a cohesive network of physicians treating cancer, Dr. Paterson plans to create well defined pathways that are easily referenced and allow for direct communication between care providers. This will help to link all northern communities and improve efficiency in matching patients with appropriate care centers and providers. One example of this is the initiation of virtual complex case discussions that he has facilitated based on an idea developed by surgeons in Prince George and Terrace. It will be available to surgeons across the north and presents an opportunity for surgeons to ask questions, review management and connect with people they were not previously engaged with. Dr. Paterson is thoughtful and perceptive in his understanding of health care in northern BC and prioritizes a cancer care strategy that is promoted alongside the management of all surgical patients recognizing the available resources. The one area that he has delayed in transitioning over the last two decades in BC is his favor of the Edmonton Oilers, but there is still hope and he accepts all feedback good-heartedly. Please feel free to contact him directly at guyp@telus.net with any comments or feedback.

Dr. Jason Park, Vancouver Coastal Health Region



Dr. Jason Park is a surgical oncologist in Vancouver practicing at BC Cancer - Vancouver, Vancouver General Hospital and the University of British Columbia Hospital. He moved to Vancouver in January 2021 from Winnipeg and has quickly established his interest in

building infrastructure for oncology care locally. His practice focuses on colon and rectal cancer, and he treats a significant proportion of patients with recurrent or locally advanced cancers. As a new physician to BC, he is actively striving to build relationships with cancer care stakeholders; surgeons, oncologists, pathologists, radiologists and others. By developing connections and fostering collaborations between surgeons and oncology care providers, he will promote surgeons as leaders in cancer care and enhance the role of surgical specialties within BC Cancer. Within Vancouver Coastal Health he plans to visit individual institutions to learn the obstacles and successes that each has had in the delivery of care to patients with cancer. By increasing awareness of the nuances in care between sites, his goal is to develop supporting infrastructure to address needs, support physicians and triage patients efficiently. When he is between site visits, you can find him playing badminton with his son, or challenging colleagues to

an arm wrestle (Dr. Peter Kim is next on the list...). Please feel free to contact him directly with any comments or questions (jason.park1@vch.ca).

Dr. Shawn MacKenzie, Fraser Health Region



Dr. MacKenzie is a hepato-pancreatico-biliary (HPB) focused surgical oncologist at Royal Columbian Hospital, and is the Regional Cancer Surgical Lead for the Fraser Health Region. Dr. MacKenzie graduated from Queen’s Medical School and completed a general surgery residency at the

University of Calgary, focusing on surgical oncology and minimally invasive surgical techniques. He followed this training up by completing a HPB surgical oncology fellowship at the University of Toronto.

Dr. MacKenzie was the medical director of HPB programs at Virginia Piper Cancer Center in Minneapolis, Minnesota from 2007 – 2013, and joined Kaiser Sunnyside Medical Center in Portland, Oregon in 2013, as the lead HPB surgeon, developing and implementing a new liver and pancreas surgical oncology program.

Dr. Mackenzie can be reached at Shawn.Mackenzie@fraserhealth.ca

Introduction to Chair – Clinical Practice & Quality Assurance, Dr. Tom Wallace



Dr. Wallace is a general and colorectal surgery at Royal Inland Hospital in Kamloops. His clinical areas of interest include minimally invasive colorectal surgery and endoscopy. He returned to the University of Ottawa to complete fellowship training in colorectal surgery after 10 years in practice. At that time, he also completed an MSc in Patient Safety and Clinical Human Factors from the University of Edinburgh. His quality improvement work includes local and provincial initiatives involving National Surgery Quality Improvement Program, Enhanced Recovery after Surgery and Preoperative Optimization. When not working, he enjoys trying to keep up with his children while skiing, running and biking. He looks forward to working with surgeons across the province to help improve the quality of cancer surgery in BC.

Surgery Network Travel Award Recipient – Kenneth Huang

The impact of routine bladder biopsies after Bacillus Calmette-Guérin treatment in patients with pure carcinoma in situ of the bladder

Bladder cancer is a common cancer of the genitourinary tract, with most patients presenting with non-muscle invasive bladder cancer (NMIBC). A portion of NMIBC

patients can have carcinoma in situ (CIS), which is a high-grade flat lesion confined to the bladder mucosa that can progress to muscle invasive bladder cancer (MIBC). Bacillus

	Patient Characteristics		
	Total n=47	Routine biopsy n=23 (49%)	For-cause biopsy n=24 (51%)
Age, median (range)	72 (41-87)	69 (41-82)	76 (55-87)
Sex			
Male	36 (76.6%)	17 (73.9%)	19 (79.2%)
Female	11 (23.4%)	6 (26.1%)	5 (20.8%)
Smoking status			
Never	20 (42.6%)	11 (47.8%)	9 (37.5%)
Current	5 (10.6%)	3 (13.1%)	2 (8.3%)
Past	22 (46.8%)	9 (39.1%)	13 (54.2%)
Follow-up, median (range)	3.0 (0-10)	3.0 (0-10)	3.5 (0-7)
History of UC prior to TURBT for pure CIS	23 (48.9%)	11 (47.8%)	12 (50%)

UC urothelial carcinoma, BCG Bacillus Calmette-Guerin, CIS carcinoma in situ

Calmette-Guerin (BCG) therapy is the standard treatment for CIS patients, but recurrence rate remains relatively high, which emphasizes the importance of identifying early signs of recurrent bladder cancer.

For the surveillance of patients with CIS, it is unclear whether routine bladder biopsies are necessary alongside cystoscopy and urine cytology. While

literature indicates that biopsies should only be considered when cystoscopy or cytology are positive (“for-cause”), evaluation with cystoscopy or cytology can be limited by BCG-induced changes. So, we aim to investigate whether routine bladder biopsy after BCG treatment can improve the follow-up care of patients with CIS.

persistent CIS with routine bladder biopsy may prevent later progression. Routine bladder biopsies can be key prognostic indicators for cancer progression, spare patients from additional cystoscopy procedures and help guide earlier decision-making for bladder cancer management.

We conducted a retrospective study at a single institution and evaluated patients with pure CIS between 2011 and 2021. All patients were treated with induction and maintenance BCG therapy unless stopped due to an early recurrence. Outcomes were compared between the routine bladder biopsy group managed by one urologist, and the “for-cause” bladder biopsy group managed by four urologists.

Our current data shows trends towards a higher rate of recurrence within 6-months, but lower rate of progression within the study period when patients were managed with routine bladder biopsy. This suggests that early detection of

Overall Outcomes from routine & for-cause bladder biopsy protocols

	Total n=47	Routine biopsy n=23	For-cause biopsy n=24
Bladder biopsy conducted	31 (66%)	23 (100%)	8 (33.3%)
Recurrence			
Overall recurrence rate	16 (34%)	8 (34.8%)	8 (33.3%)
High-grade recurrence within 6 months*	8 (17%)	5 (21.7%)	3 (12.5%)
Progression to MIBC**	6 (12.8%)	1 (4.3%)	5 (20.8%)

*CIS carcinoma in situ, MIBC Muscle-invasive bladder cancer, *p=0.399, **p=0.09*

In summary, our data shows that early detection of persistent CIS with routine bladder biopsy may prevent later progression. We hope to further increase our sample size to reach more definitive conclusions.

References for this article can be found on the [BC Cancer Surgery Network Website](#)

SPRING TRAVEL AWARDS

Applications for travel awards may be submitted for conferences that are being held virtually or in-person.

[Click here](#) or email SurgeryNetwork@bccancer.bc.ca for more information.

Applications must be submitted by March 1st, 2023

Ovarian Cancer Prevention with Opportunistic Salpingectomy

Dr. Heather Stuart, Chair – CPD-KT, Surgical Oncologist



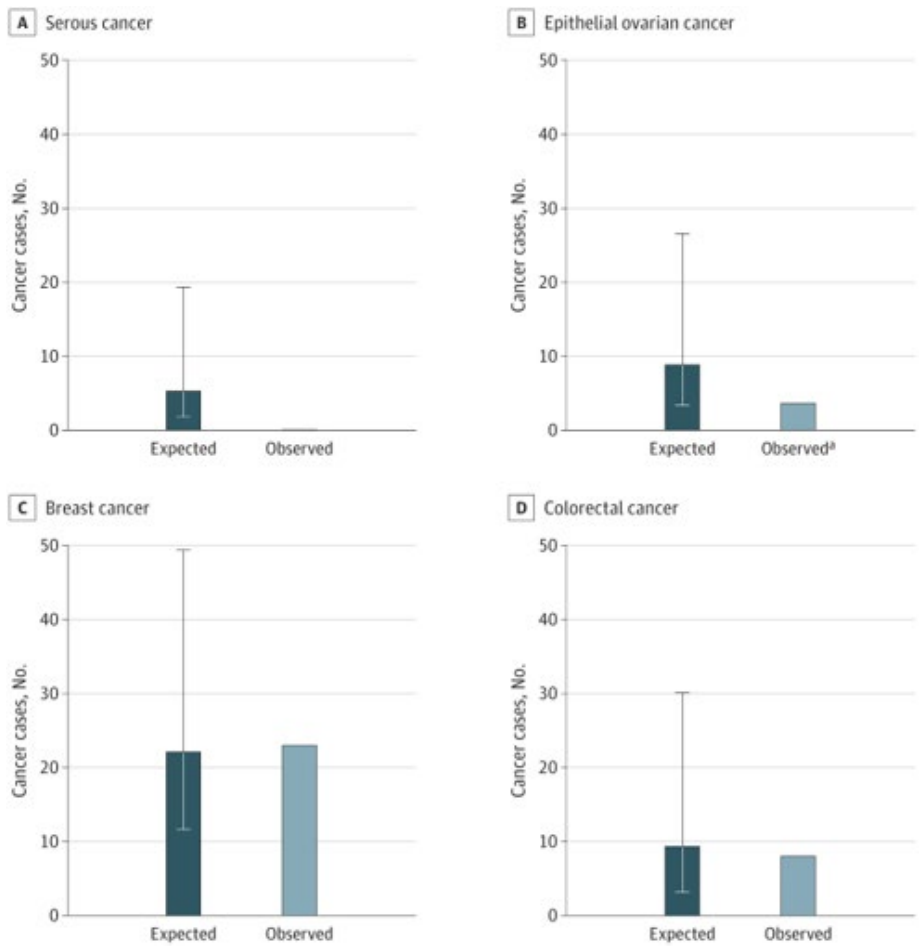
Ovarian cancer is a leading cause of cancer related death in women. In Canada, in 2020, it was the 5th ranking cause of cancer-related mortality in women^[1]. Despite significant advances in our understanding of the disease, many treatment strategies are palliative in nature. Therefore, prevention techniques have become a focus of investigation. The fallopian tubes have been recognized as the site of cancer initiation for the most common ovarian cancers and the target of a surgical prevention approach^[2, 3]. In 2022, Hanley et al. published their results of over 57,000 women in BC showing a significant reduction in expected cases of serous and epithelial ovarian cancer following salpingectomy^[4].

Outcomes from Opportunistic Salpingectomy for Ovarian Cancer Prevention

In 2010, in British Columbia, a province-wide strategy was launched to educate and engage general gynecologists on the option of opportunistic salpingectomy (OS) at the time of tubal ligation or hysterectomy. Between 2008 and 2017, the number of salpingectomies with hysterectomy increased from 6% to 80% [5, 6]. Research showed minimal risk to patients undergoing OS with studies in both BC [6] and the United States [7] illustrating no increase in perioperative adverse outcomes such as readmission, blood transfusion, length of stay, surgical infection, imaging or laboratory investigations [8]. Importantly, there was also no evidence to suggest risk of premature menopause and associated side effects [9] [10]. An American study published a Markov model that predicted a reduction in ovarian cancer mortality with OS by 14.5%, with a cost saving up to \$445 million USD annually [11]. Following the lead of OVCARE in BC, OS has since been recommended for consideration at the time of abdominal surgery in many countries, including Canada, the United States and the UK [12-15].

With a goal of maximizing the opportunity for risk reduction, a natural extension is to begin offering OS at non-gynecologic intra-abdominal surgeries. General surgeons perform a wide range of minimally invasive and open procedures, including cholecystectomy, appendectomy and bowel resection. Initially, studies have suggested that up to 95% of women undergoing an elective general surgery procedure would consider a concomitant OS [16]. Further to this, a pilot study in Austria showed that OS can safely be performed during laparoscopic cholecystectomy with no increase in complications or mean operating time [17]. As such, developing a program to inform and educate general surgeons on the value of OS may lead to similar increases in the procedure, as was seen with BC's gynecologists and has the potential to further reduce the risk of ovarian cancer in the general population.

OS is not currently a component of general surgery residency, however general surgeons have an excellent foundational laparoscopic skill-set and can learn this



Numbers of Expected vs Observed Cancers in the Opportunistic Salpingectomy. Group error bars denote 95% CIs.

^aDenotes a cell size of less than or equal to 5, not an exact number (Hanley et al. - JAMA Network, 2022)

procedure with training. The main objective in launching a program will be education surrounding the rationale for OS and counseling and consenting patients for the procedure. A pilot project has been initiated with group of colorectal general surgeons to confirm the safety of OS with concurrent elective laparoscopic procedure and evaluate obstacles that are encountered pre-, intra- or post-operatively. Once safety and efficiency has been established, a province-wide initiative will be launched to increase awareness and offer training in OS to general surgeons with future plans for integration into surgical training programs to ensure sustainability [4].

For questions or information please contact Heather Stuart, heather.stuart@vch.ca.

References for this article can be found on the [BC Cancer Surgery Network Website](#)

Fellow Introductions



Dr. Lior Flor – 1st year Surgical Oncology Fellow

Dr. Flor is originally from the Greater Toronto Area. He went to undergrad at Western University and completed medical school and general surgery residency at the University of Toronto. He is currently in his first-year of

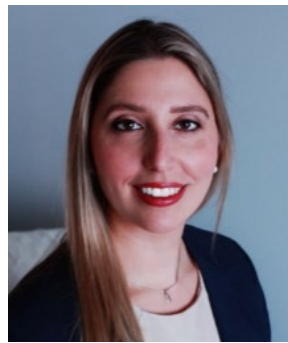
fellowship in complex surgical oncology at The University of British Columbia. When not working he enjoys spending time with his wife Jesse, playing with his dog, biking, and exploring Vancouver and British Columbia. Dr. Flor can be reached at lior.flor@vch.ca.



Dr. Stephanie Marcil – 2nd year Surgical Oncology Fellow

Dr. Marcil graduated from McGill University Medical School & went on to complete her general surgery training at University of Montreal in Quebec, Canada. She is presently completing her fellowship in complex surgical

oncology at the University of British Columbia. She has a special interest in the management of advanced gastrointestinal malignancies, more specifically in the management of gastric cancer, as well as the management of breast cancer and the evolving practice of breast oncoplasty. She is currently in the process of initiating a prospective Canadian phase II clinical trial to further clarify the role of gastrectomy combined with complete cytoreductive surgery and hyperthermic intraperitoneal chemotherapy for the management of locally advanced gastric cancer and gastric cancer presenting with limited peritoneal disease. Dr. Marcil can be reached at stephanie.marcil@vch.ca.



Dr. Olivia Hershorn – 1st year Colorectal Fellow

Dr. Hershorn is originally from Montreal, Quebec, where she completed her medical school training at McGill University. Moving west, she joined the University of Manitoba for general surgery residency, where

she also completed a Master of Science in Surgery. Finally landing on the west coast, Olivia is excited to be joining the team at St. Paul's Hospital to complete her training in colorectal surgery.

Dr. Hershorn's research focus has been in mixed-methods, applying quantitative and qualitative methodology to learn how to bridge the gap in communication amongst multidisciplinary specialists, with a focus in endoscopy. She is interested in patient centered-care, enhancing communication and ally ship between care teams and improving patient outcomes. A particular area of interest to her is also quality improvement and leadership. Dr. Hershorn can be reached at oliviah1@student.ubc.ca.



Dr. Elizabeth Clement – 2nd year Colorectal Fellow

Dr. Clement hails from Edmonton, where she completed her residency in general surgery. Before that, she matriculated from Queen's University in Kingston, Ontario, where she completed medical school. She is thrilled to

now be in Vancouver, BC, to finish her training in colorectal surgery. Dr. Clement's academic focus is on communication. Her research includes exploring the benefits of multidisciplinary rounds for both patients and doctors, as well as novel methods to explain operative and perioperative processes to patients. In addition, she has undertaken Harvard's Media and Medicine course, where she is currently working on honing her writing skills in order to advance quality of care and improve the culture within our profession. Dr. Clement can be reached at eclement1@providencehealth.bc.ca.

Clinical Trials Recruiting

Vancouver

Contact Dr. Howie Lim at hlim@bccancer.bc.ca to review for screening. Patients need to be enrolled within 60 days of surgery; they can be referred at the time of discharge for early triage.

Circulating Tumor DNA testing in Predicting Treatment for patients with stage IIA colon cancer after surgery -

This phase II/III trial studies how well circulating tumor deoxyribonucleic acid (ctDNA) testing in the blood works in predicting treatment for patients with stage IIA colon cancer after surgery. ctDNA are circulating tumor cells that are shed by tumors into the blood. Finding ctDNA in the blood means that there is very likely some small amounts of cancer that remain after surgery. However, this cancer, if detected, cannot be found on other tests usually used to find cancer, as it is too small. Testing for ctDNA levels may help identify patients with colon cancer after surgery who do benefit, and those who do not benefit, from receiving chemotherapy.

<https://clinicaltrials.gov/ct2/show/NCT04068103>

DYNAMIC-III: Circulating Tumour DNA Analysis Informing Adjuvant Chemotherapy in Stage III Colon Cancer: A Multi-centre Phase II/III Randomised Controlled Study

The aim of this study is to compare treatment informed by ctDNA results to standard care in patients with stage III colon cancer. The use of a biomarker that can better

define the risk of the bowel cancer returning could make a major impact on treatment decisions for patients with stage III colon cancer. Circulating tumour DNA (ctDNA) may act as one such biomarker. For some people, cancer DNA can be found circulating in the bloodstream after the surgery to remove their bowel cancer, which provides evidence that some cancer cells have escaped and traveled to other parts of the body.

<https://gicancer.org.au/clinical-trial/dynamic-iii/>

Kelowna

The HeLiX (Hemorrhage During Liver Resection: tranexamic Acid) Trial (HeLiX)

This is a Phase III multicentre randomized controlled trial (RCT) to evaluate the impact of tranexamic acid (TXA) on perioperative blood transfusion in patients undergoing liver resection. The rationale for this study includes: (1) experimental evidence supporting the use of TXA in other surgical populations; (2) lack of evidence in patients undergoing liver resection; (3) clinical uncertainty and extensive support amongst hepatobiliary surgeons, anaesthesiologists, and hematologists for this proposed trial; (4) a feasible and efficient study design; and (5) the importance of the question: incidence of blood transfusion in patients undergoing liver resection is high, and the consequences serious.

<https://clinicaltrials.gov/ct2/show/NCT02261415>

Update on Merkel Cell Cancer

Dr. Stephanie Marcil - 2nd year Surgical Oncology Fellow



Merkel cell carcinoma (MCC) is a rare neuroendocrine neoplasm accounting for less than 1% of all cutaneous malignancies^[1]. Likely driven by an aging population, its incidence has been increasing worldwide over the past years and this trend is expected to continue^[2,3]. MCC is an aggressive tumor with 26% of cases presenting with regional lymph node involvement and 8% with distant metastases^[4]. Localized tumors carry the best prognosis with a 5-year overall survival (OS) of 50.6%. This statistic decreases to 35.4% in patients presenting with regional nodal involvement and 13.5% in metastatic disease^[4].

Initial staging includes full body skin examination and clinical examination of all lymph node basins^[1,5]. Up to 20% of patients without suspicious findings on clinical examination have occult metastatic disease identified on staging, therefore baseline cross-sectional imaging with FDG PET-CT or CT chest, abdomen-pelvis is recommended for all primary tumor size^[1,5,6]. One study showed a 16.8% up-stage with FDG PET-CT compared to 6.9% with CT scan, supporting FDG PET-CT as the preferred imaging modality for MCC staging^[6].

Management of localized MCC remains primarily surgical. For patients presenting without clinically or radiologically identified nodal involvement, recommendation is to perform complete excision with 1-2 cm clinical margins and



sentinel lymph node biopsy. Recent data showed improved OS with clinical margins greater than 1.0 cm, with no difference in OS observed between margins of 1.1-2.0 cm or

greater than 2.0 cm [7]. Patients should be referred for assessment of adjuvant radiotherapy (RT) to the primary tumor site and regional nodal basin. Studies show adjuvant RT to primary tumor resection bed improved OS in all patients regardless of excision margins [1, 5, 7, 8, 9]. Patients with a positive sentinel lymph node biopsy should have multidisciplinary review and be considered for either completion lymphadenectomy or definitive radiation [1, 5].

If locoregional nodal metastases are detected on pre-operative staging current standard of care is for therapeutic lymphadenectomy and adjuvant radiation [1, 5].

Due to lack of prospective data, it remains unclear whether an upfront lymphadenectomy or RT is favored in the management of MCC nodal metastases. Retrospective data suggest a negative association with survival with increasing number of positive nodes, therefore the extent of lymph node involvement should be used to guide treatment of nodal basins [10].

Recent evidence supporting immunotherapy for patients with MCC has led to the use of anti-PD-1 and anti-PD-L1 antibodies for those with metastatic or un-resectable disease [11, 12, 13, 14]. Currently, there is no data supporting the use of adjuvant immunotherapy outside of clinical trials, however this landscape is changing rapidly [5].

Multidisciplinary assessment of all patients with MCC is recommended to optimize outcomes and minimize treatment related morbidity.

References for this article can be found on the [BC Cancer Surgery Network Website](#)

BC Cancer Surgery Network News

SAVE THE DATE

BC Cancer Surgery Update:
Palliative Oncology & Geriatric Care

Saturday April 22, 2023

- More details to follow in the New Year -

BC CANCER SURGERY NETWORK NEWSLETTER

Executive Editor: Dr. Heather Stuart, Chair - CPD-KT
Managing Editor: Amol Gill, Manager – Provincial Programs

Design and Layout: Alannah Bowes, Project Coordinator – Provincial Programs

To submit article ideas or for information, please contact:
SurgeryNetwork@bccancer.bc.ca

The BC Cancer Surgery 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. In enhancing 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.