BC Cancer Agency

Systemic Therapy Update

Volume 9, Number 1 *for health professionals who care for cancer patients* January 2006

Website access at http://www.bccancer.bc.ca/STUpdate/

INSIDE THIS ISSUE

EDITOR'S CHOICE

NEW TREATMENT POLICY ANNOUNCEMENT

The Provincial Systemic Therapy Program of the BC Cancer Agency is pleased to inform you about the funding of a number of new treatment programs. The Program is also allowing compassionate access to several programs on a ***case-by-case*** basis via the Undesignated Request process.

These programs will be implemented once the relevant treatment protocols, patient education materials and pre-printed orders have been developed by the Provincial Tumour Groups, the Provincial Pharmacy and the Regional Cancer Centres. Implementation of the new programs will be announced in the Systemic Therapy Update and the relevant supporting documentation will be made available on the BC Cancer Agency web site (www.bccancer.bc.ca).

Funded Programs

Tumour Group	Program	Special Application Process	Projected Implementation Date
Gastrointestinal	**Capecitabine** with concurrent radiation for pre-operative therapy of rectal cancer: to replace 5FU infusion	**capecitabine class II**	February 2006
Gynecological	**Carboplatin** plus **paclitaxel** (GOENDCAT) or **docetaxel** (GOENDCAD) as adjuvant chemotherapy for potentially curable uterine carcinoma (with expanded eligibility)	**carboplatin class I, docetaxel class II, paclitaxel class I**	January 2006

Tumour Group	Program	Special Application Process	Projected Implementation Date
Lymphoma & myeloma	Palliative therapy for lymphoma using radioimmunotherapy: **rituximab**-priming for **ibritumomab** ^{90}Y (Zevalin®) (LYRITZ) or **tositumomab** and iodine I 131 (Bexxar®) (LYRITB)	**ibritumomab class II, tositumomab class II**	February 2006
Sarcoma	**Imatinib** high dose option for advanced gastrointestinal stromal cell tumours (GIST's) (SAAVGI)	**imatinib class II**	implemented
Sarcoma	**Ifosfamide** (9 g/m^2) for advanced soft tissue sarcomas (SAAI)	**ifosfamide class I**	to be determined
Sarcoma	**Gemcitabine** plus **paclitaxel** or **docetaxel** for second-line therapy of advanced soft tissue sarcoma	**docetaxel class II, gemcitabine class II, paclitaxel class I**	to be determined

Compassionate Access

Tumour Group	Program	Special Application Process	Projected Implementation Date
Breast	**Docetaxel** (3 cycles) sequentially after fluorouracil, epirubicin and cyclophosphamide (FEC 100) for locally advanced (pT3/T4 or pN2) breast cancer (UBRAJFECD)	**via undesignated request**	January 2006
Breast	**Docetaxel** concurrent with doxorubicin + cyclophosphamide (TAC) as adjuvant therapy for locally advanced (pT3/T4 or pN2) breast cancer	**via undesignated request**	February 2006
Gastrointestinal	**Bevacizumab** for metastatic colorectal cancer with in combination with first-line and selected second-line regimens for metastatic colorectal cancer (UGICIRB, UGICOXB, UGIFFIRB, UGIFFOXB)	**via undesignated request**	January 2006
Gastrointestinal	**Docetaxel, cisplatin and fluorouracil** (DCF) in first-line therapy of metastatic gastric cancer for good performance status patients	**via undesignated request**	February 2006
Leukemia/BMT	**Alemtuzumab**, **fludarabine**, and **busulfan** IV conditioning regimen for unrelated umbilical cord blood transplantation	**via undesignated request**	February 2006
Leukemia/BMT	**Alemtuzumab** for reduced-intensity conditioning unrelated donor stem cell transplantation (mini-transplants)	**via undesignated request**	February 2006

Tumour Group	Program	Special Application Process	Projected Implementation Date
Lung	**Erlotinib** for second and third line therapy of non-small cell lung cancer (ULUAVERL) (Note. Patients must have *progressive disease* on or after first- or second-line therapy. Maintenance erlotinib is inappropriate and does not improve survival. It is explicitly not approved by the Systemic Therapy Program.)	**via undesignated request**	January 2006
Lymphoma & myeloma	**Bortezomib** for third line treatment of multiple myeloma (UMYBORTEZ)	**via undesignated request**	implemented
Lymphoma & myeloma	**Rituximab** maintenance therapy of advanced indolent lymphoma following cyclophosphamide, vincristine, prednisone and rituximab (CVP-R) regimen in previously untreated patients or following chemotherapy in relapsed patients	**via undesignated request**	February 2006

UPDATED PATIENT HANDOUTS ON NATURAL HEALTH PRODUCTS

The BC Cancer Agency website provides two patient handouts on Natural Health Products: ***Natural Health Products and Breast Cancer*** and ***Natural Health Products and Cancer Therapy***. The Breast Tumour Group recently updated the breast cancer handout, prompting revisions to the more general handout as well.

Natural Health Products and Breast Cancer

The main messages are the same:

- Natural health products are not recommended during chemotherapy and radiation treatments.
- Once daily vitamin and mineral supplements are acceptable, and may be useful if patients are unable to eat a balanced diet.
- Many natural health products have estrogenic properties, and should be avoided by women with breast cancer.

The following changes have been made:

- The Natural Medicines Comprehensive Database was reviewed for estrogenic hormones and a number of products to avoid have been added to the existing handout.
- The suggestion that vitamin E may be helpful for hot flushes has been removed. Vitamin E supplementation has been associated with increased heart failure and mortality, and efficacy for hot flushes seems marginal at best. (JAMA 2005;293:1338-1347. Ann Intern Med 2005;142:37-46. JCO 16(2):495-500, 1998 Feb)
- Due to a lack of evidence, the recommendation that natural health products be avoided for one month before and after treatment has been removed.

Natural Health Products and Cancer Therapy

To ensure that our patients are getting a consistent message, the recommendation that natural health products be avoided for one month before and after treatment has also been removed from this handout. Natural health products are still not recommended during chemotherapy or radiation treatments.

This general handout represents the joint recommendation of many disciplines, and there was a great deal of lively discussion on this important topic. How can we encourage patients to talk to us, but not promise more information than we can actually deliver and not weaken the main message? In the end, the following statement was adopted for both handouts: "This is a controversial area because of the limited amount of scientific information that exists at this time. Please contact your doctor, pharmacist, nurse or dietitian for further discussion."

Health care professionals should be prepared for patients' growing interest in this area. The handouts discussed here can be found at www.bccancer.bc.ca > Patient/Public Info > Unconventional Therapies.

CHEMOTHERAPY-INDUCED ALOPECIA – MORE THAN JUST A BAD HAIR DAY

We often describe someone based on the appearance, color or style of their hair. Hair loss related to cancer therapies therefore represents a significant change in a patient's appearance.

"I felt like my face had been erased" said one woman describing her experience.

Hair loss (alopecia) is a common side effect of chemotherapy agents, which attack cancer cells or rapidly dividing normal cells, including those in the hair follicles. The subsequent damage to the hair follicles may be manifested as just hair thinning, patches of scalp hair loss, or total loss of the eyebrows and body hair (total alopecia). In some cases, hair texture can become drier and duller. Fortunately, this process is reversible once the chemotherapy treatments are finished.

Prevalence and onset

The degree of hair loss is usually influenced by the specific drug given, the dosing regimen and the administration route, as well as individual factors. Generally, a higher incidence of alopecia is seen with higher doses of chemotherapy given intermittently by the intravenous route, as well as with combination chemotherapy regimens. Hair follicles of the head have a higher mitotic (division) rate and hence are more affected than those of the general body. Eyebrows, eyelashes and pubic hair can also be affected and impact on protective function.

Understanding the potential for and the natural progression of hair loss (e.g., timing, thinning vs. total loss) can help the patient gain a sense of control over the situation. The frequency of alopecia for individual chemotherapy drugs can be found in the drug monographs of the BC Cancer Agency Cancer Drug Manual: http://www.bccancer.bc.ca/HPI/DrugDatabase/DrugIndexPro/default.htm

In general, hair loss typically begins several weeks after the first dose, usually starting with thinning at the crown and on the sides of the head due to greater likelihood of friction. Large amounts of hair may fall out while shampooing or upon awakening in the morning. Some patients may experience aching or tingling of the scalp as hair loss begins.

Emotional impact

Hair loss is emotionally upsetting as it is a constant and visible reminder of cancer to the patient. For example, loss of eyebrows, eyelashes and pubic hair can impact on the patient's self concept. Patients who are unprepared may be distressed when large amounts of hair fall out while shampooing or upon awakening in the morning. Some patients may experience anger, depression, or poor self esteem and body image, until the hair returns. There can also be cultural stigma associated with hair loss as some cultures perceive hair as a symbol of fertility or status. For these patients, alopecia can be even more difficult to accept.

Although alopecia may be viewed as more significant for women, men can also experience changes in self concept. Women with alopecia may feel shock, personal embarrassment and losing a sense of self. Some report that losing their hair might be harder than losing a breast.

Management

Hair loss is an inevitable result from many chemotherapy treatments. However, health care professionals can minimize the devastating effects of hair loss by helping patients cope with emotion or problem focused strategies (i.e., prevention and management). In general, patients can be referred to a supportive program such as "Look Good, Feel Better.", a counsellor or support group so they can talk to someone going through a similar experience.

Emotion focused strategies

These include actions that relieve the stress involved with change:

- Explore the meaning of hair loss to the patient: "How are you feeling about the thought of losing your hair?", "How do you see yourself in relation to your hair?"
- Respect differences in choices around head wear.
- Education on the expected timing of hair loss and regrowth. Being prepared can make the whole process less frustrating.
- Acknowledge the significance of hair loss to both women and men.
- Reassure that hair will grow back when chemo stops, though perhaps with a different texture and colour.

Problem focused strategies

Prevention:

- Patients may change to a short hair style which may be more appealing as the hair often does not fall out in an even pattern.
- Some patients may shave their head when hair gets wispy to minimize annoying hair on pillow and uneven hair pattern. Avoid nicks or cuts during this process.
- Use a silk pillowcase to prevent hair from sticking to the pillow.
- Even if the hair does not fall out completely, the treatment can make the hair brittle and the scalp itchy. Minimizing manipulations can reduce hair damage, such as: using a gentle shampoo and less frequent washings; avoiding chemical treatments (e.g., colouring and perming solutions), high heat and excessive brushing.
- With some treatments (e.g., doxorubicin, paclitaxel), hair loss is inevitable, regardless of the care taken.

Currently, there are no specific preventative measures that have been proven to be effective. Some strategies being investigated include:

- Reduce the amount of drug which reaches the scalp by decreasing the scalp blood flow (e.g., scalp tourniquets, scalp hypothermia) although this may not be consistently effective.
- Use medication to protect the hair bulb from the chemotherapy effects. Topical minoxidil has been tried but further studies are needed. Other drugs being investigated include alpha-tocopherol and ammonium trichloro(dioxethlyene-o,o'-)tellurate (AS101).
- Inactivate the drug locally with immunomodulating compounds (e.g., Imuvert®, biologic response modifiers, topical cyclosporine).

Management:

- Explore and choose head coverings (e.g., wigs, hats, scarves) that are most comfortable for the patients *before* hair loss starts.
- Choose headwear for aesthetic and practical reasons (fashion and warmth), as well as proper fit to avoid scalp irritation.
- Wigs should be chosen before the hair falls out so that they can be matched for style and colour. They are available in various styles and textures made of natural or synthetic hair, which can reflect the cost of the wig. Some third party health insurance plans may cover the cost of a wig upon submission of a physician's prescription noting its medical use. Refer patients to a supportive wig facility in the area.
- Hats and scarves are available in various styles, colours and shapes, and they need less care than a wig.

- Draw attention away from the hair and focus on another feature (e.g., jewellery).
- For total alopecia, apply lotions to the scalp to relieve tenderness.
- Protect the scalp when outdoors, such as by using sunscreen with a sun protection factor (SPF) of at least 15. Patients may also choose to wear a hat or scarf.
- If eyelashes have fallen out, wear glasses when in a dusty environment. False eyelashes are also an option.
- If eyebrows are thinner or have fallen out, redraw them with an eyebrow pencil to match the natural hair colour.
- Library materials on beauty, appearance, body image, as well as the video *Scarves,* are available from the library at the regional centres of the BC Cancer Agency. Go to the Library catalogue at http:\\bcca.andornot.com and search on the word "beauty".

Caring for regrown hair

Hair regrows once all chemotherapy is completed. Sometimes regrowth can begin even before the end of treatment, but the hair is very fine and baby-like. Hair with the usual texture will begin to grow in once the chemotherapy is finished.

- Complete regrowth can take months. Initially, the hair may have a different texture and even colour. However, pigment cells are usually restored, so the original colour may return. To care for new hair at this stage:
  - Limit manipulations and hair washing to a few times a week.
  - Style with care and avoid hard brushing, pinning, curling and high-heat blow drying as new hair can be finer and more prone to breakage.
  - Avoid chemical products (colouring; perming) for the same reason. If colouring is needed, ask the hairdresser for advice on natural products (e.g., henna or vegetable-based colourants). Try them on a hidden, inconspicuous area first to make sure it does not damage the hair or scalp.
- Use a wide-toothed comb and remove knots gently.
- Massage the scalp gently to remove flakes and dry skin.
- Wear a hairnet at night to avoid tugging on the hair.
- Counsel the patient on the importance of maintaining a good diet, and decreasing stress and excessive alcohol.

Chemotherapy-related hair loss can be a traumatic experience. Although not usually preventable, health care professionals can provide information to help support patients during this period.

Submitted by:
Judy Oliver, RN, BScN, M.Ed
Education Resource Nurse
BC Cancer Agency

Dawn Annable BSc(Pharm)
Pharmacy CON Educator
Fraser Valley Centre – BC Cancer Agency

Reviewed by:
Susan Ellard MD
Medical Oncologist, Breast Tumour Group
BC Cancer Agency

James Conklin BSc(Pharm)
Pharmacist, Gynecological Tumour Group
BC Cancer Agency

Bibliography:

1. Yarbro C, Frogge M, Goodman M. Cancer symptom management 2nd ed. Boston, MA: Jones ad Bartlett, 1999.
2. McGarvey E, Baum L, Pinkerton R, Rogers L. Psychological sequelae and alopecia among women with caner. Cancer Pract 2001;9(6):283-7.
3. BC Cancer Agency. Hair loss. 2002. Available from http://www.bccancer.bc.ca/ppi/cancertreatment/cancerdrugsgeneralinformationforpatients/sideeffects/hairloss.htm. Accessed October 17, 2205.
4. OncoLINK – Abramson Center of the University of Pennsylvania. Managing symptoms: hair loss. 2002. Available from http://www.oncolink.upenn.edu/coping/article.cfm?c=5&s=27&ss=49&id=576. Accessed October 17, 2005.
5. People Living with Cancer – an ASCO website. PLWC Feature: Coping with hair loss. 2004. Available from http://www.plwc.org/plwc/Shared/plwc_ArticleViewPrint/1,1890,38597,00.html. Accessed October 17, 2005.
6. The Susan G. Komen Breast Cancer Foundation. Short-term side effects of chemotherapy: hair loss. 2005. Available from http://www.komen.org/intradoc-cgi/idc_cgi_isapi.dll?IdcService=SS_GET_PAGE&ssDocName=s_002832. Accessed October 17, 2005.
7. Care during chemotherapy and beyond. managing side effects: hair loss and chemotherapy. 2005. Available from http://www.chemocare.com/managing/hair_loss_and_chemotherapy.asp. Accessed October 17, 2005.
8. Canadian Cancer Society. Hair loss. 2005. Available from http://www.cancer.ca/ccs/internet/standard/0,3182,3172_210289022_211938984_langId-en,00.html. Accessed October 17, 2005.

9. National Cancer Institute. Coping with side effects: hair loss. 1999. Available from http://www.cancer.gov/cancertopics/chemotherapy-and-you/page4#C6. Accessed October 17, 2005.
10. UpToDate Online 13.2 Chemotherapy-induced alopecia. 2005. Available from http://www.utdol.com/application/topic.asp?file=chemagen/6359&type=A&selectedTitle=3~33. Accessed October 17, 2005.
11. American Cancer Society: Coping with physical and emotional changes: managing side effects of chemotherapy. How do I deal with losing my hair. 2001. Available from http://www.cancer.org./docroot/MBC/content/MBC_2_2X_How_Do_I_Deal_With_Losing_My_Hair.asp?sitearea=MBC. Accessed October 17, 2005.
12. American Cancer Society: Treatment Topics and Resources. Physical changes and appearance: hair loss. 2005. Available from http://www.cancer.org./docroot/MIT/content/MIT_7_2X_Hair_Loss.asp? Accessed October 17, 2005.

CancerBACUP - Helping People Live With Cancer. Resources and Support. Symptoms and side effects: hair loss. 2004. Available from http://www.cancerbacup.org.uk/Resourcessupport/Symptomssideeffects/Hairloss/Hairloss

CANCER DRUG MANUAL

Pegylated liposomal doxorubicin (Caelyx®) monograph and handout These have been developed for this agent which is currently covered by the BC Cancer Agency for management of Kaposi's sarcoma (protocol KSLDO). In Canada, it is also licensed for treatment of metastatic ovarian and breast cancers.

Asparaginase monograph has been revised to clarify the reconstitution of the product. In September 2005, the BC Cancer Agency reconstitution and concentration standards for asparaginase were changed. L-asparaginase (Kidrolase®, Aventis) 10 000 IU vials should be reconstituted with 4 mL sterile water for injection, and should be considered to yield 2 500 IU/mL, regardless of the potential for overfill or underfill. The Cancer Drug Monograph monograph has been updated to clarify this issue. As well, the new monograph recommends against reconstituting the 10 000 IU vials with 0.5 or 1 mL of NS. This practice is not supported by the literature and not recommended by the manufacturer. Finally, storage and stability information has been updated.

Gefitinib monograph and handout have undergone minor revision to make spelling of "rifampin" consistent.

Leuprolide monograph and handout have been updated to clarify the storage recommendations for leuprolide acetate (Eligard®).

LIST OF NEW AND REVISED PROTOCOLS

The **BC Cancer Agency Protocol Summaries** are revised on a periodic basis. New and revised protocols for this month are listed below. Protocol codes for treatments requiring "Undesignated Indication" approval are prefixed with the letter **U**.

New protocol:

Code	Protocol Name
UBRAJFECD	Adjuvant therapy for breast cancer using fluorouracil, epirubicin and cyclophosphamide and docetaxel
UGICIRB	Palliative combination chemotherapy for metastatic colorectal cancer using irinotecan, bevacizumab and capecitabine
UGICOXB	Palliative combination chemotherapy for metastatic colorectal cancer using oxaliplatin, capecitabine and bevacizumab
UGIFFIRB	Palliative combination chemotherapy for metastatic colorectal cancer using irinotecan, fluorouracil, folinic acid (leucovorin) and bevacizumab
UGIFFOXB	Palliative combination chemotherapy for metastatic colorectal cancer using oxaliplatin, 5-fluorouracil, folinic acid (leucovorin) and bevacizumab
GUBPW	Treatment of locally advanced bladder cancer with weekly cisplatin and concurrent radiation

Revised protocols:

Code	Changes	Protocol Name
BRJACTTG	*protocol code renamed to BRAJACTTG*	Adjuvant therapy for breast cancer using dose dense therapy: doxorubicin and cyclophosphamide followed by paclitaxel and trastuzumab
BRAJACTTG	*protocol code renamed from BRJACTTG*	Adjuvant therapy for breast cancer using dose dense therapy: doxorubicin and cyclophosphamide followed by paclitaxel and trastuzumab
GIOCTLAR	*reminder for class II form added, contact information revised*	Symptomatic management of functional carcinoid and neuroendocrine tumors of the GI tract using octreotide (Sandostatin LAR®)
GOENDCAD	*eligibility revised*	Treatment of primary advanced or recurrent endometrial cancer using carboplatin and docetaxel
GOENDCAT	*eligibility revised*	reatment of primary advanced or recurrent endometrial cancer using carboplatin and paclitaxel (GO 95 01)
HNFL	*deleted*	Recurrent/Metastatic head and neck cancer, including nasopharyngeal using 5-fluorouracil and levamisole
ULUAVERL	*eligibility revised*	Treatment of advanced non-small cell lung cancer (NSCLC) with erlotinib (Tarceva®)
LUCISDOC	*dosing modifications clarified*	First-line treatment of advanced non-small cell lung cancer (NSCLC) with cisplatin and docetaxel
LUDOC	*dosing modifications clarified*	Second-line treatment of advanced non-small cell lung cancer (NSCLC) with docetaxel
SCHYPCAL	*dose modifications for renal function impairment added*	Guidelines for the diagnosis and management of malignancy related hypercalcemia

LIST OF NEW AND REVISED PRE-PRINTED ORDERS

The **INDEX to BC Cancer Agency Pre-printed Orders** are revised on a periodic basis. The revised pre-printed orders for this month are listed below.

New protocol:

Code	Protocol Name
UBRAJFECD	Adjuvant therapy for breast cancer using fluorouracil, epirubicin and cyclophosphamide and docetaxel
UGICIRB	Palliative combination chemotherapy for metastatic colorectal cancer using irinotecan, bevacizumab and capecitabine
UGICOXB	Palliative combination chemotherapy for metastatic colorectal cancer using oxaliplatin, capecitabine and bevacizumab
UGIFFIRB	Palliative combination chemotherapy for metastatic colorectal cancer using irinotecan, fluorouracil, folinic acid (leucovorin) and bevacizumab
UGIFFOXB	Palliative combination chemotherapy for metastatic colorectal cancer using oxaliplatin, 5-fluorouracil, folinic acid (leucovorin) and bevacizumab
GUBPW	Treatment of locally advanced bladder cancer with weekly cisplatin and concurrent radiation

Revised pre-printed orders:

Code	*Changes*	Protocol Name
BRJACTTG	*protocol code renamed to BRAJACTTG*	Adjuvant therapy for breast cancer using dose dense therapy: doxorubicin and cyclophosphamide followed by paclitaxel and trastuzumab
BRAJACTTG	*protocol code renamed from BRJACTTG*	Adjuvant therapy for breast cancer using dose dense therapy: doxorubicin and cyclophosphamide followed by paclitaxel and trastuzumab

Code	*Changes*	Protocol Name
GIFUC	*schedule for return to clinic appointments clarified*	Palliative chemotherapy for upper gastrointestinal tract cancer (gastric, esophageal, gall bladder carcinoma and cholangiocarcinoma) and metastatic anal cancer using infusional fluorouracil and cisplatin

POLICIES AND PROCEDURES

Update on the Undesignated Request Process The Undesignated Indication Application process, used to ensure peer-reviewed, evidence-based, safe, and fiscally responsible therapy, is provided for regimens that require specific disease markers, special procedures for acquisition and/or administration, or are otherwise not current standard protocols. The application form is available on the BC Cancer Agency website (http://www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms.htm. Once submitted, these requests are reviewed by a Tumour Designate, a Systemic Therapy Program Designate, a pharmacist and a clerk.

Undesignated Indication Application Requests are faxed several times before they are finalized and are then faxed back to the requesting physician and the dispensing pharmacy. Multiple faxing deteriorates the quality and legibility of these important documents therefore we have revised this process. The Undesignated Office will now be sending you an email (BC Cancer Agency centres) or fax (Communites Oncology Network) of a standard format document that clearly outlines the final decision, request details from the original application, as well as Tumour Group and Systemic Therapy decisions and comments. The original faxed requests will continue to remain in our files for future reference.

WEBSITE RESOURCES

The followings are available on the BC Cancer Agency website (www.bccancer.bc.ca) under the Health Professionals Info section:

Reimbursement and Forms: Benefit Drug List, Class II, Undesignated Indication	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Forms
Cancer Drug Manual	www.bccancer.bc.ca/cdm
Cancer Management Guidelines	www.bccancer.bc.ca/CaMgmtGuidelines
Cancer Chemotherapy Protocols	www.bccancer.bc.ca/ChemoProtocols
Cancer Chemotherapy Pre-Printed Orders	www.bccancer.bc.ca/ChemoProtocols under the index page of each tumour site
Systemic Therapy Program Policies	www.bccancer.bc.ca/HPI/ChemotherapyProtocols/Policies
Unconventional Cancer Therapies Manual	under Patient/Public Info, Unconventional Therapies

IN TOUCH	www.bccancer.bc.ca	bulletin@bccancer.bc.ca
BC Cancer Agency	(604) 877-6000	Toll-Free 1-(800) 663-3333
Communities Oncology Network	Ext 2744	jvenkate@bccancer.bc.ca
Education Resource Nurse	Ext 2638	nursinged@bccancer.bc.ca
Nursing Professional Practice	Ext 2623	ilundie@bccancer.bc.ca
Pharmacy Professional Practice	Ext 2247	gconcon@bccancer.bc.ca
Provincial Systemic Therapy Program	Ext 2247	gconcon@bccancer.bc.ca
Communities Oncology Network Pharmacist	Ext 6277	lkovacic@bcancer.bc.ca
Drug Information	Ext 6275	druginfo@bccancer.bc.ca
Library/Cancer Information	1-888-675-8001 Ext 8003	requests@bccancer.bc.ca
OSCAR Help Desk	1-888-355-0355 Fax (604) 708-2051	oscar@bccancer.bc.ca
Undesignated Drug Application office	Ext 6277 Fax (604) 708-2026	undesignated@bccancer.bc.ca
Update Editor	Ext 2288	mdelemos@bccancer.bc.ca
Centre for the Southern Interior (CCSI)	(250) 712-3900	Toll-Free 1-(888) 563-7773
Fraser Valley Centre (FVCC)	(604) 930-2098	Toll-Free 1-(800) 523-2885
Vancouver Centre (VCC)	(604) 877-6000	Toll-Free 1-(800) 663-3333
Vancouver Island Centre (VICC)	(250) 519-5500	Toll-Free 1-(800) 670-3322