INSIDE THIS ISSUE

- New Treatment Policy 2002/03
- Drug Update - Glutamine Ineffective for Paclitaxel Related Arthralgias and Myalgias
- Benefit Drug List – anastrozole, letrozole, bexarotene, capecitabine, docetaxel, cisplatin, gemcitabine, imatinib, LHRH agonist, tamoxifen
- Protocol Update – UBRAJACT, BRAJTM, BRAVANAS, BRAVT, BRAVCAD, BRAVLET, BRAVTAM, BRAVTAX, BRAVTRAP, GIAVCP, GIGAI, UGOCXCAT, GOENDCAT, GOOVCATM, GOOVCATR, GOOVCATX, GOOVTAX3, GOSMCC2, UGUAJPG, GUAVPG, ULKMLI, ULYMFBE, USAAVGI
- Cancer Management Manual
- Pre-Printed Order Update – BRAVTRAP, GIPGEM, GOCXRADC, GUBCV, LUDOC, LYCHOPR, LYTUXR, SAVC
- Patient Education Update - Imatinib
- Focus on Safe Handling of Cytotoxics
- Cancer Drug Manual
- Provincial Systemic Therapy Program Policies
- Acknowledgement of Support
- Library/Cancer Information Centre
- Continuing Education - Canadian Association of Nurses in Oncology Conference

FAX request form and IN TOUCH phone list are provided if additional information is needed.

NEW TREATMENT POLICY 2002/3

The Provincial Systemic Therapy Program of the BC Cancer Agency is pleased to announce the funding of a number of new treatment programs. 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. For more details, please see under Benefit Drug List and Protocol Update of this and the next issue of the Systemic Therapy Update.

DRUG UPDATE

Glutamine does not appear to be useful for the management of paclitaxel-induced arthralgias and myalgias. A recent placebo-controlled double-blind randomized crossover trial found no difference between glutamine and placebo (n=36). Consequently, glutamine has been removed from paclitaxel-containing chemotherapy protocols as a treatment option for arthralgias and myalgias. The remaining options are prednisone or gabapentin, which is being tested in randomized controlled trials.

Robin O’Brien, PharmD, BCOP
Drug Information Specialist, BCCA

Reference

BENEFIT DRUG LIST

The following new programs have been funded by the Provincial Systemic Therapy Program effective 1 July 2002:

- **Anastrozole** (Class I) or **Letrozole** (Class I) as first-line hormonal therapy in postmenopausal patients with metastatic breast cancer (BRAVANAS and BRAVLET)
- **Bexarotene** (Targretin®) (Undesignated Indication approval for each patient) for refractory cutaneous T-cell lymphoma. (Note: requires approval from Health Canada Special Access Programme) (ULYMFBE)
- **Capecitabine** (Class II) and **docetaxel** (Class II) as first or second-line combination for metastatic breast cancer in good performance status patients and those who do not have any contraindications to either drug (BRAVCAD)
- **Capecitabine** (Class II) as first line treatment for patients with metastatic or unresectable colorectal adenocarcinoma cancer and who are not suitable for or refusing GIIRFUFA (GIAVCP)
- **Cisplatin** (Class I) and **Gemcitabine** (Class II) for advanced transitional cell carcinoma of the bladder (GUAVPG)
- **Imatinib** (Gleevec®) (Undesignated Indication approval for each patient) for Philadelphia chromosome positive chronic myeloid leukaemia in accelerated or blast phase or in patients intolerant to interferon (ULKCMLI)
- **Imatinib** (Gleevec®) (Undesignated Indication approval for each patient) for advanced C-kit positive gastrointestinal stromal cell tumours (USAAVGI)
- **Tamoxifen** (Class I) for delayed adjuvant use in patients with estrogen or progesterone receptor positive breast cancer (BRAJTAM)
- **Tamoxifen** (Class I) with an LHRH agonist (Class I) in the treatment of premenopausal patients with estrogen receptor positive metastatic breast cancer (BRAVBT)

These new indications are now added to the benefit list. If applicable, a Class II form or Undesignated Indication application must be completed and submitted to the Provincial Systemic Therapy Program before the drug will be dispensed at a regional cancer centre or reimbursed to a community hospital.

Susan O’Reilly, MB, FRCPC
Provincial Systemic Program Leader

The current Benefit Drug List, Class II forms Undesignated Indication application forms are available on the BC Cancer Agency website (www.bccancer.bc.ca) under Health Professionals Info, Chemotherapy Protocols, Frequently Used Forms.

### Protocol Update

**INDEX to BC Cancer Agency Protocol Summaries** revised monthly (includes tumour group, protocol code, indication, drugs, last revision date and version). Protocol codes for treatments requiring “Undesignated Indication” approval prior to use are prefixed with the letter U.

- **UBRAJACT** revised (glutamine removed): Adjuvant therapy for breast cancer using doxorubicin and cyclophosphamide followed by paclitaxel (Taxol®)
- **BRAJTAM** revised (eligibility criteria): Adjuvant therapy for breast cancer using tamoxifen
- **BRAVANAS** revised (eligibility criteria): Palliative therapy for advanced breast cancer using anastrozole (Arimidex®)
- **BRAVTAM** revised (eligibility criteria): Palliative therapy for breast cancer using tamoxifen
- **BRAVTRAP** revised (glutamine removed): Palliative therapy for metastatic breast cancer using trastuzumab (Herceptin®) and paclitaxel (Taxol®) as first-line treatment for recurrent breast cancer refractory to anthracycline chemotherapy
- **GIAVCAP** new (replaced UGIAVCAP): Palliative therapy of advanced colorectal cancer using capecitabine
- **GIGAI** revised (new reference): Combined modality adjuvant therapy for completely resected gastric adenocarcinoma using fluorouracil + folinic acid (leucovorin) + radiation therapy
- **UGOCXCAT** revised (glutamine removed): Primary treatment of advanced/recurrent non-small cell cancer of the cervix with carboplatin and paclitaxel in ambulatory care settings
- **GOENDCAT** revised (glutamine removed): Treatment of primarily advanced or recurrent endometrial cancer using carboplatin and paclitaxel
- **GOOVCATM** revised (glutamine removed): Primary treatment of invasive epithelial ovarian, fallopian tube and primary peritoneal cancer, with no visible residual tumour (moderate-high risk) using paclitaxel and carboplatin
- **GOOVCATR** revised (glutamine removed): Second line treatment using paclitaxel and
carboplatin for epithelial ovarian cancer relapsing after primary treatment

- **GOOVCA$$TX** revised (glutamine removed): Primary treatment of visible residual (extreme risk) invasive epithelial ovarian cancer in ambulatory care settings using paclitaxel and carboplatin

- **GOOVTA$$X3** revised (glutamine removed): Treatment of progressive, platinum-refractory epithelial ovarian carcinoma, primary peritoneal carcinoma or fallopian tube carcinoma using paclitaxel (Taxol®)

- **GOSMCC2** revised (glutamine removed): Treatment of small cell carcinoma of cervix using paclitaxel, cisplatin, etoposide and carboplatin with radiation

- **UGUAJPG** new: Adjuvant therapy for urothelial carcinoma using cisplatin and gemcitabine

- **GUA$$VPG** new (replaced UGUGEMCIS): Palliative therapy for urothelial carcinoma using cisplatin and gemcitabine

- **ULKCM$$LI** new: Palliative therapy for chronic myeloid leukemia using imatinib (Gleevec®)

- **ULYMFB$$EX** new: Treatment for refractory cutaneous T-cell lymphoma using Bexarotene (Targettin®) (Note: approval from the Health Canada Special Access Programme required)

- **USAAV$$GI** new: Treatment of advanced c-kit positive gastrointestinal stromal cell tumors (GIST’s) using imatinib (Gleevec®)

Protocols are available on the BC Cancer Agency website ([www.bccancer.bc.ca](http://www.bccancer.bc.ca)) under Health Professionals Info, Chemotherapy Protocols.

**Cancer Management Manual**
The Cancer Management Manual is available are available on the BC Cancer Agency website ([www.bccancer.bc.ca](http://www.bccancer.bc.ca)) under Health Professionals Info, Cancer Management Guidelines.

**Pre-Printed Order Update**
Pre-printed orders should always be checked with the most current BC Cancer Agency protocol summaries. The BC Cancer Agency Vancouver Centre has prepared chemotherapy pre-printed orders, which can be used as a guide for reference. An index to the orders can be obtained by Fax-back.

- **BRAVTRAP** revised (reminder to re-write order for each cycle added): Palliative therapy for metastatic breast cancer using trastuzumab (Herceptin®) and paclitaxel (Taxol®) as first-line treatment for recurrent breast cancer refractory to anthracycline adjuvant chemotherapy

- **GIPGEM** revised (chemotherapy and appointments): Palliative therapy for pancreatic adenocarcinoma cancer using gemcitabine

- **GO$$CXRADC** revised (appointment times and labs): Treatment of advanced/recurrent non-small cell cancer of the cervix with cisplatin and etoposide

- **GUBCV** new: Therapy for transitional cell cancers using carboplatin-vinblastine

- **LUDOC** revised (liver function tests): Second-line treatment for advanced non-small cell lung cancer with docetaxel (Taxotere®)

- **LYCHOPR** revised (bookings section): Treatment of lymphoma with doxorubicin, cyclophosphamide, vincristine, prednisone and rituximab

- **LYRITUX** revised (bookings section): Treatment of lymphoma with single agent rituximab

- **SAVAC** revised (phone number for short stay chemo beds): Adjuvant therapy for newly diagnosed Ewing’s sarcoma/peripheral neuroectodermal tumor or rhabdomyosarcoma using vincristine, adriamycin and cyclophosphamide

**Patient Education Update**
**Imatinib (Gleevec®)** Patient information handout is now available for imatinib (Gleevec®, STI-571), an oral drug used for the treatment of chronic myeloid leukemia and gastrointestinal stromal cell tumors (GIST) (also see protocol ULKCM$LI$ and USAAVGI in Protocol Update).

Patient information handouts for cancer drugs are available on the BC Cancer Agency website ([www.bccancer.bc.ca](http://www.bccancer.bc.ca)) under Health Professionals Info, Drug Database.

**Focus on Safe Handling of Cytotoxics**
Update on Cytotoxic Contamination A seminar entitled “Cytotoxic Contamination in the...”
"Workplace" was recently presented by Dr. Thomas Connor of the U.S. National Institute of Occupational Health and Safety at the 8th International Symposium of Oncology Pharmacy Practitioners held on May 2002, in Vancouver, B.C.

Dr. Connor’s presentation reviewed and discussed recent findings in the area of occupational and environmental exposure to cytotoxic drugs, including those groups at risk for exposure, sources of contamination, and routes of exposure. It was noted that a wide range of individuals have the potential to come into contact with cytotoxic agents in their daily activities including:

- Workers in manufacturing and shipping of cytotoxic agents
- Pharmacists and pharmacy technicians
- Nurses
- Physicians
- Housekeeping personnel
- Family members and friends

Furthermore, a number of various sources may contribute to occupational or environmental contamination by cytotoxic compounds:

- Vials and packaging in which the cytotoxic agent is stored
- Leaks or spills may contribute to surface contamination of the Biological Safety Cabinet (BSC), carts, tables, counters, equipment, or even exposed skin during drug preparation
- These may further lead to contamination of minibags, syringes, or other devices used for the delivery of parenteral chemotherapy
- Subsequent contamination within the chemotherapy administration area may occur
- Excreta of patients

Finally, three main routes of exposure were discussed:

- Inhalation of droplets or vapours during the preparation of the cytotoxic agent in an area lacking proper ventilation and safety standards (i.e. drug preparation outside of a BSC).
- Ingestion due to surface contamination or substandard practices (i.e. food or drinks in areas where cytotoxic agents are prepared or administered).
- Topical contact due to spills or inadequate/improper personal protective equipment (PPE) – such as gowns, gloves, etc. – that inadvertently allow the cytotoxic agent to come into contact with the skin.

It became apparent during this discussion that the one recurring theme was that of technique in the preparation and administration of cytotoxic agents. In many of the contamination studies discussed, complacency with the technology (such as the use of BSC’s or process isolators) seemed to lead to poorer or lax technique by the workers which, in turn, contributed to increased contamination in the workplace. This can only help to emphasise the importance of basic, proper training and maintenance of these skills with personnel involved in the preparation and administration of cytotoxic agents. All groups of individuals involved in cytotoxic preparation and administration should be cognizant of their potential for exposure to cytotoxic agents. In doing so, it is important to be vigilant of the many different sources of contamination and routes of exposure in order to eliminate or minimise cytotoxic contamination in the workplace. Finally, it ultimately becomes the responsibility of the healthcare team to educate and inform those who might not otherwise consider the possibility of their occupational or environmental exposure to cytotoxic drugs.

More information on the BC Cancer Agency’s policies regarding the safe handling of cytotoxic agents can be found on our website [www.bccancer.bc.ca](http://www.bccancer.bc.ca), Health Professionals Info, Drug Database, Appendices, Safe Handling.

Other related websites:
- Worker’s Compensation Board of BC: [www.worksafebc.com](http://www.worksafebc.com)

Shawn Cassidy
Pharmacy CON Educator,
BC Cancer Agency-Vancouver Centre

**CANCER DRUG MANUAL**
The Cancer Drug Manual is available on the BC Cancer Agency website [www.bccancer.bc.ca/cdm/](http://www.bccancer.bc.ca/cdm/).

**PROVINCIAL SYSTEMIC THERAPY PROGRAM POLICIES**
BC Cancer Agency Systemic Therapy Policies are available on the BC Cancer Agency website [www.bccancer.bc.ca](http://www.bccancer.bc.ca) under Health Professionals.

ACKNOWLEDGEMENT OF SUPPORT

Partnership with Aventis Pharma  The Systemic Therapy Program is pleased to announce the establishment of a Strategic Partnership Agreement with Aventis Pharma. A feature of the partnership is support for the Chair of Breast Cancer Research in 2003.

LIBRARY/CANCER INFORMATION CENTRE

Unconventional Cancer Therapies Manual is available on the BC Cancer Agency website www.bccancer.bc.ca under Patient/Public Info, Unconventional Therapies. The manual consists of 46 short monographs on the more commonly used unconventional cancer therapies (e.g., Essiac, vitamins, teas, shark cartilage) and includes tips for the patient and family on how unconventional therapies can be evaluated. For each therapy the manual provides proponent/advocate claims, as well as evidence-based evaluation/critique quotations from the literature.

CONTINUING EDUCATION

Canadian Association of Nurses in Oncology (CANO) Annual Conference will be held in Winnipeg, Manitoba on 22-25 September 2002. The theme for this year will be “The Spirit of Caring: At the Crossroads of Oncology Nursing”. For more details, please contact: Canadian Association of Nurses in Oncology, 232-329 March Road, Box 11, Kanata, Ontario, K2K 2E1.

Editorial Review Board

Mário de Lemos, PharmD (Editor)
Sharon Allan, MD
Sandra Broughton, BA (Econ), MSc
Karen Janes, MSN
Beth Morrison, BA, MLS
Jaya Venkatesh, BCom, BA, MHA
Susan Walisser, BSc (Pharm)
Gigi Concon (Secretary)
### REGIONAL CANCER CENTRE ACCESS

<table>
<thead>
<tr>
<th>BULLETIN UPDATES</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Printed Orders</td>
<td>H:\everyone\systemic\chemo\Orders\VCC</td>
</tr>
<tr>
<td>Index of Pre-Printed Orders</td>
<td>Index.doc</td>
</tr>
<tr>
<td>BRAVTRAP</td>
<td>GOCRADC</td>
</tr>
<tr>
<td>GIPGEM</td>
<td>LUDOC</td>
</tr>
<tr>
<td>LYRITUX</td>
<td>SAVAC</td>
</tr>
<tr>
<td>Protocol Summaries</td>
<td>H:\everyone\systemic\chemo\Protocol&quot;tumour site&quot;</td>
</tr>
<tr>
<td>Index of Protocol Summaries</td>
<td>Index_NT or Index_W6</td>
</tr>
<tr>
<td>UBRAJACT</td>
<td>BRAVCA</td>
</tr>
<tr>
<td>BRAVTAM</td>
<td>BRAVTRAP</td>
</tr>
<tr>
<td>BRAVLET</td>
<td>GAVCAP</td>
</tr>
<tr>
<td>BRAVANAS</td>
<td>ULKCMLI</td>
</tr>
<tr>
<td>BRAVBT</td>
<td>ULCMLI</td>
</tr>
<tr>
<td>BRAVTAX</td>
<td>GIGAI</td>
</tr>
<tr>
<td>UGOCXCAT</td>
<td>ULYMFBEX</td>
</tr>
<tr>
<td>GOENDCAT</td>
<td>USAAVGI</td>
</tr>
<tr>
<td>GOOVCATM</td>
<td>GIOVCATR</td>
</tr>
<tr>
<td>GOOVCATX</td>
<td>GOSMCC2</td>
</tr>
<tr>
<td>Patient Education Handout</td>
<td>H:\everyone\systemic\chemo\Pt Education</td>
</tr>
<tr>
<td>Imatinib</td>
<td></td>
</tr>
<tr>
<td>Reimbursement</td>
<td>H:\everyone\systemic\chemo\Reimburse</td>
</tr>
<tr>
<td>Benefit Drug List (1 July 2002)</td>
<td>BenefitList.doc</td>
</tr>
<tr>
<td>Class 2 Form (1 July 2002)</td>
<td>Class2.doc</td>
</tr>
<tr>
<td>Filgrastim Usage Form (1 June 2001)</td>
<td>GCSF_form.doc</td>
</tr>
<tr>
<td>Undesignated Indication Form (July 2002)</td>
<td>Undesig.doc</td>
</tr>
</tbody>
</table>

For easy access, double-click your systemic chemo icon.

We appreciate your comments. Write us at bulletin@bccancer.bc.ca
BC CANCER AGENCY SYSTEMIC THERAPY UPDATE FAX REQUEST FORM

Fax (604) 877-0585
bullettin@bccancer.bc.ca

To subscribe: Fax or email your request or call @ 877-6098 Local 2247

For urgent requests please call (604) 877-6098 Local 2247
Or toll-free in BC 1-800-663-3333 Local 2247

Please feel free to make copies for your colleagues

I would prefer to receive this information via:

☐ E-mail (Word 6.0)   @
☐ Fax

( )   Attn:

Updates Please ☑ Fax-Back information below:

Add breast protocols

☐ All items

Pre-Printed Orders:
☐ Index: Pre-Printed Orders
☐ BRAVTRAP   ☐ GOCXRADC   ☐ LUDOC   ☐ LYRITUX
☐ GIPGEM     ☐ GUBCV      ☐ LYCHOPR  ☐ SAVAC

Protocol Summaries: (also available on our website www.bccancer.bc.ca)
☐ UBRAJACT    ☐ BRAVCAD    ☐ BRAVTRAP    ☐ GUAVPG
☐ BRAJTM      ☐ BRAVLET     ☐ GIACVP     ☐ ULKCLM
☐ BRAVANAS    ☐ BRAVTAM     ☐ GIGAI      ☐ ULYMFBEX
☐ BRAVBT      ☐ BRAVTAX     ☐ UGUAJP     ☐ USAAVGI
☐ UGOCCXCAT   ☐ GOENDCAT    ☐ GOOVCATM   ☐ GOOVCATR
☐ GOOVCATX    ☐ GOOVTAX3    ☐ GOSMCC2

Index: Protocol Summaries (current month)

Patient Education Handout (also available on our website www.bccancer.bc.ca)
☐ Imatinib

Reimbursement (also available on our website www.bccancer.bc.ca)
☐ Benefit Drug List (01 July 2002)
☐ Class 2 Form (01 July 2002)
☐ Filgrastim Usage Form (01 June 2001)
☐ Undesignated Indication Form (July 2002)

Systemic Therapy Update Index (also available on our website www.bccancer.bc.ca)
☐ Jan-Dec 2000
☐ Jan-Dec 2001