# BC Cancer Protocol Summary for Treatment of Cutaneous T-cell Lymphoma (Mycosis Fungoides/Sézary syndrome) with Bexarotene

***Protocol Code*** *LYMFBEX*

***Tumour Group*** *Lymphoma*

***Contact Physician*** *Dr. Jason Hart*

**ELIGIBILITY**:

- Special: Only patients with advanced, progressive, refractory mycosis fungoides or Sézary syndrome whose disease has not been controlled by alitretinoin (LYALIT) and at least one prior systemic chemotherapy agent should be considered for treatment with Bexarotene. Those with advanced but still exclusively cutaneous disease must have progressive disease despite topical nitrogen mustard and PUVA (if available) and, if appropriate, total body electron beam irradiation.
- Histology: mycosis fungoides or Sézary syndrome
- *Approval from the Health Canada Special Access Programme must be obtained for each patient.*

**EXCLUSIONS**:

- Pregnancy, breast feeding, concurrent gemfibrozil (Lopid) or tamoxifen, high risk factors for pancreatitis (prior pancreatitis, uncontrolled hyperlipidemia, excessive alcohol consumption, uncontrolled diabetes mellitus, biliary tract disease etc), hepatic insufficiency, vitamin A intake greater than or equal to 15,000 unit/day.

**TESTS**:

- Baseline: CBC and diff, platelets, ALT, bilirubin, fasting triglycerides, LDH, T4, TSH
- Subsequent:
  - ALT, bilirubin and fasting triglycerides weekly after initiating treatment (until stabilisation – usually 2-4 weeks)
  - CBC and diff, platelets, ALT, bilirubin, fasting triglycerides, TSH and T4 every 2 months

**PREMEDICATIONS**:

None

**TREATMENT**:

| Drug | Dose | BC Cancer Administration Guideline |
|---|---|---|
| bexarotene | 300 mg/m$^2$/day orally | Once daily with a meal |

Reassess all sites of disease after 2 months to determine if dose escalation indicated.

**DURATION OF TREATMENT**:

For 3 months after attaining a complete response, or if a partial response, until progression, to a maximum of 8 months of treatment.

**DOSE MODIFICATIONS**:

If no response after 2 months and no major toxicity increase dose to 400 mg/m2/day. If no response after a further 2 months of treatment, discontinue.

1. **Hematological**:

| ANC ($x10^9$/L) | Dose |
|---|---|
| greater than or equal to 0.8 | 100% |
| 0.5 to less than 0.8 | 200 mg/$m^2$/day |
| less than 0.5 | **Suspend** |

2. **Hyperlipidemia**:

| Fasting triglyceride (mmol/L) | Dose |
|---|---|
| less than or equal to 3.5 | 100 % |
| 3.5 to 4.4 | 200 mg/$m^2$/day |
| greater than or equal to 4.5 | suspend until controlled |

Maintain triglyceride level below 3.4 mmol/L

3. **Hepatotoxicity**:

| AST, ALT, Bilirubin (mmol/L) | Dose Modification |
|---|---|
| Any, greater than 3x upper limit of normal range | suspend |

**PRECAUTIONS**:

1. **Hypothyroidism**: Approximately 50% of patients will develop clinical, reversible hypothyroidism requiring treatment. If it develops in a responding patient full replacement thyroxine should be administered until Bexarotene has no longer been used for three months.
2. **Hyperlipidemia**: Occurs in the majority of patients**.** If present in a responding patient, it should be controlled with either fenofibrate or atorvastatin. Gemfibrozil should not be used.
3. **Pancreatitis**: Do not treat if major risk factors for pancreatitis are present
4. **Vitamin A supplements**: Limit intake to less than or equal to 15,000 unit/day.
5. **Photosensitivity**: Minimise exposure to sunlight and artificial UV light during treatment.

**Call Dr. Jason Hart or alternate at (250) 519 5572 or 1-800-670-3322 local 5572 with any problems or questions regarding this treatment program.**

**References**:


1. Duvic M, et al. Bexarotene is effective and safe for treatment of refractory advanced-stage cutaneous T-cell lymphoma: multinational phase II-III trial results. J Clin Oncol 2001;19(9):2456-71.
2. Duvic M, et al. Phase 2 and 3 clinical trial of oral bexarotene (Targretin capsules) for the treatment of refractory or persistent early-stage cutaneous T-cell lymphoma. Arch Dermatol 2001;137(5):581-93.