#### Regimen Monograph

 Regimen Name
 Drug Regimen
 Cycle Frequency
 Premedication and Supportive Measures
 Dose Modifications
 Adverse

 Effects
 Interactions
 Drug Administration and Special Precautions
 Recommended Clinical Monitoring
 Administrative

 Information
 References
 Other Notes
 Disclaimer

## A - Regimen Name

## **FLTM Regimen**

**Flutamide** 

**Disease Site** Genitourinary - Prostate

**Intent** Palliative

Regimen Category

#### **Evidence-Informed:**

Regimen is considered appropriate as part of the standard care of patients; meaningfully improves outcomes (survival, quality of life), tolerability or costs compared to alternatives (recommended by the Disease Site Team and national consensus body e.g. pan-Canadian Oncology Drug Review, pCODR). Recommendation is based on an appropriately conducted phase III clinical trial relevant to the Canadian context OR (where phase III trials are not feasible) an appropriately sized phase II trial. Regimens where one or more drugs are not approved by Health Canada for any indication will be identified under Rationale and Use.

# Rationale and Uses

- Metastatic prostate cancer (Stage D2) in conjunction with LHRH agonist or orchiectomy
- Stage B<sub>2</sub> or C prostate cancer prior to or during external beam radiotherapy in combination with LHRH agonist

**Supplementary flutamide Public Funding** ODB - Ger

**ling** ODB - General Benefit (ODB Formulary)

back to top

## **B** - Drug Regimen

<u>flutamide</u> 250 mg PO Every 8 hours (TID)

(Outpatient prescription in 250 mg tablets)

Flutamide should be used in combination with orchiectomy or with an LHRH agonist. Start simultaneously / 24 hours prior to LHRH agonist. If patient is receiving external beam radiation, start flutamide 8 weeks prior to radiation and continue throughout radiation treatment.

## back to top

## C - Cycle Frequency

#### **CONTINUOUS TREATMENT**

Until disease progression or unacceptable toxicity

## back to top

## **D** - Premedication and Supportive Measures

Antiemetic Regimen: Not applicable

## back to top

#### E - Dose Modifications

Doses should be modified according to the protocol by which the patient is being treated. The following recommendations have been adapted from clinical trials or product monographs and could be considered.

#### **Dosage with toxicity**

Dosage in myelosuppression: No adjustment required

#### **Hepatic Impairment**

Discontinue flutamide if jaundice or liver transaminases  $\geq 2-3 \times ULN$ .

## **Renal Impairment**

No adjustment required; slightly prolonged half-life in patients with CrCl < 29 mL/min. Not significantly removed by hemodialysis.

## back to top

## F - Adverse Effects

Refer to <u>flutamide</u> drug monograph(s) for additional details of adverse effects. The following table contains adverse effects reported in combination use with a LHRH agonist.

Most Common Side Effects	Less Common Side Effects, but may be Severe or Life-Threatening
<ul> <li>Androgen deprivation symptoms</li> <li>Diarrhea</li> <li>Nausea/vomiting</li> </ul>	<ul> <li>Cardiotoxicity</li> <li>Arterial thromboembolism</li> <li>Prolonged QT</li> <li>Venous thromboembolism</li> <li>Osteopenia/Osteoporosis</li> <li>Rash</li> <li>Hemolysis</li> <li>↑ LFTs</li> <li>Secondary malignancies</li> <li>Pneumonitis</li> <li>Autoimmune - lupus-like syndrome</li> </ul>

## back to top

#### **G** - Interactions

Refer to **flutamide** drug monograph(s) for additional details

## back to top

## **H - Drug Administration and Special Precautions**

Refer to <u>flutamide</u> drug monograph(s) for additional details

#### back to top

## I - Recommended Clinical Monitoring

#### Recommended Clinical Monitoring

- Blood glucose, HgA1c; in diabetic patients or patients at risk of hyperglycemia; regular
- ECG and electrolyte for patients at risk of QT prolongation
- Liver function tests; baseline, monthly for the first 4 months, then periodically and as clinically indicated
- Clinical evaluation for symptoms of hypogonadism, gynecomastia, osteoporosis, hyperglycemia, cardiovascular and GI effects; regular
- Grade toxicity using the current <u>NCI-CTCAE</u> (Common Terminology Criteria for <u>Adverse Events</u>) <u>version</u>

#### Suggested Clinical Monitoring

- INR, in patients on anticoagulants; regular
- Methemoglobin concentrations in at risk patients (e.g. G6PD deficiency, hemoglobin M disease)

#### back to top

#### J - Administrative Information

Outpatient prescription for home administration

#### back to top

#### K - References

Crawford ED, Eisenberger MA, McLeod DG, et al. A controlled trial of leuprolide with and without flutamide in prostatic carcinoma. N Engl J Med 1989;321(7):419-24.

Denis LJ, Carneiro de Moura JL, Bono J, et al. Goserelin acetate and flutamide versus bilateral orchiectomy: A phase III EORTC trial (30853). Urology 1993;42(2):119-29.

Eisenberger MA, Blumenstein BA, Crawford ED,, et al. Bilateral orchiectomy with or without flutamide for metastatic prostate cancer. N Engl J Med 1998;339(15):1036-42.

### October 2016 Replaced regimen category with evidence-informed

## back to top

#### M - Disclaimer

Refer to the <u>New Drug Funding Program</u> or <u>Ontario Public Drug Programs</u> websites for the most up-to-date public funding information.

The information set out in the drug monographs, regimen monographs, appendices and symptom management information (for health professionals) contained in the Drug Formulary (the "Formulary") is intended for healthcare providers and is to be used for informational purposes only. The information is not intended to cover all possible uses, directions, precautions, drug interactions or adverse effects of a particular drug, nor should it be construed to indicate that use of a particular drug is safe, appropriate or effective for a given condition. The information in the Formulary is not intended to constitute or be a substitute for medical advice and should not be relied upon in any such regard. All uses of the Formulary are subject to clinical judgment and actual prescribing patterns may not follow the information provided in the Formulary.

The format and content of the drug monographs, regimen monographs, appendices and symptom management information contained in the Formulary will change as they are reviewed and revised on a periodic basis. The date of last revision will be visible on each page of the monograph and regimen. Since standards of usage are constantly evolving, it is advised that the Formulary not be used as the sole source of information. It is strongly recommended that original references or product monograph be consulted prior to using a chemotherapy regimen for the first time.

Some Formulary documents, such as the medication information sheets, regimen information sheets and symptom management information (for patients), are intended for patients. Patients should always consult with their healthcare provider if they have questions regarding any information set out in the Formulary documents.

While care has been taken in the preparation of the information contained in the Formulary, such information is provided on an "as-is" basis, without any representation, warranty, or condition, whether express, or implied, statutory or otherwise, as to the information's quality, accuracy, currency, completeness, or reliability.

CCO and the Formulary's content providers shall have no liability, whether direct, indirect, consequential, contingent, special, or incidental, related to or arising from the information in the Formulary or its use thereof, whether based on breach of contract or tort (including negligence), and even if advised of the possibility thereof. Anyone using the information in the Formulary does so at his or her own risk, and by using such information, agrees to indemnify CCO and its content providers from any and all liability, loss, damages, costs and expenses (including legal fees and expenses) arising from such person's use of the information in the Formulary.

back to top