#### Regimen Monograph

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# A - Regimen Name

# **VEIP Regimen**

VinBLAStine-Ifosfamide-PLATINOL ® (CISplatin)

**Disease Site** Genitourinary - Testis

(Salvage Therapy)

**Intent** Curative

# 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

First or second line treatment of testicular cancer with curative intent

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B - Drug Regimen			
CISplatin (Round to nearest 1 mg)	20 mg /m²	IV	Daily for 5 days - start on day 1
<u>ifosfamide</u>	1200 mg /m²	IV	Daily for 5 days - start

(Round to nearest 25 mg; on day 1 maximum dose = 1.75 g)

vinBLAStine 0.11 mg /kg IV Days 1 to 2

(Round to nearest 0.1 mg)

(Continued on next page)

mesna 240 mg /m² IV Days 1 to 5,

(Round to nearest 10 mg) immediately before

THEN ifosfamide

mesna 240 mg /m<sup>2</sup> IV Days 1 to 5, at 4 and

(Round to nearest 10 mg) 8 hours after

May substitute doses at 4 and 8 hours post-ifosfamide with: ifosfamide

mesna 480 mg /m<sup>2</sup> PO Days 1 to 5, at 4 and

(Round to nearest 10 mg) 8 hours after ifosfamide

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# C - Cycle Frequency

#### **REPEAT EVERY 21 DAYS**

For a usual total of 3 to 4 cycles

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

Antiemetic Regimen: High

Febrile Neutropenia High

Risk:

#### **Other Supportive Care:**

• Fertility counselling and sperm bank should be routinely offered.

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#### **E - Dose Modifications**

Doses should be modified according to the protocol by which the patient is being treated. The following recommendations are in use at some centres.

As dose modification of VIP treatment may compromise its efficacy, it is recommended that modification of this regimen be done only after discussion with a medical oncologist experienced in the treatment of testicular cancer.

#### **Dosage with toxicity**

<u>Hematologic Toxicities:</u> Primary prophylaxis with G-CSF at dose 5–10mcg/kg SC x 10 days, starting on Day 6 is recommended, because of the extreme myelosuppressive effect of the regimen, especially when given as second-line.

#### **Hepatic Impairment**

Dosage modification should be individualized.

## **Renal Impairment**

Dosage modification should be individualized.

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#### F - Adverse Effects

Refer to <u>CISplatin</u>, <u>ifosfamide</u>, <u>vinBLAStine</u>, <u>mesna</u> drug monograph(s) for additional details of adverse effects

Most Common Side Effects	Less Common Side Effects, but may be Severe or Life Threatening
<ul> <li>Nausea and vomiting</li> <li>Nephrotoxicity (may be severe)</li> <li>Electrolyte abnormalities</li> <li>Neurotoxicity and ototoxicity (may be severe)</li> <li>Myelosuppression ± infection /</li> </ul>	<ul> <li>Arrhythmia</li> <li>Cardiotoxicity</li> <li>Arterial thromboembolism</li> <li>Venous thromboembolism</li> <li>Hypersensitivity</li> <li>↑ LFTs</li> </ul>

- bleeding (may be severe)
- Hyperuricemia
- Alopecia
- Encephalopathy, neuropathy (may be severe)
- Hemorrhagic cystitis (may be severe)
- Pancreatitis
- Pneumonitis
- SIADH
- Rhabdomyolysis
- Secondary malignancy
- Hemolysis / hemolytic uremic syndrome / disseminated intravascular coagulation
- Vasculitis
- Seizures
- Raynaud's

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#### **G** - Interactions

Refer to CISplatin, ifosfamide, vinBLAStine, mesna drug monograph(s) for additional details

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

Refer to CISplatin, ifosfamide, vinBLAStine, mesna drug monograph(s) for additional details

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#### I - Recommended Clinical Monitoring

#### Recommended Clinical Monitoring

- Clinical toxicity assessment (including local toxicity, neurotoxicity, ototoxicity, cystitis).
- CBC before each cycle. Interim counts should be done in first cycle and repeated if dose modifications necessary.
- Baseline and regular liver and renal function tests (including electrolytes and magnesium), and urinalysis.
- Grade toxicity using the current <u>NCI-CTCAE</u> (Common Terminology Criteria for <u>Adverse Events</u>) <u>version</u>

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#### J - Administrative Information

Pharmacy Workload (average time per visit) 37.437 minutes

Nursing Workload (average time per visit) 55.667 minutes

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#### K - References

Loehrer PJ Sr, Lauer R, Roth BJ, et al. Salvage therapy in recurrent germ cell cancer: ifosfamide and cisplatin plus either vinblastine or etoposide. Ann Intern Med, 1988; 109: 540-546.

April 2016 Replaced regimen category with evidence-informed

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#### 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.

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