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

CRBPETOP Regimen

CARBOplatin-Etoposide

Disease Site

Central Nervous System
Gastrointestinal
- Colorectal
- Esophagus
- Gastric / Stomach
- Hepatobiliary / Liver / Bile Duct
- Pancreas

Genitourinary
- Bladder / Urothelial
- Prostate

Head and Neck
Lung
- Small Cell

Unknown Primary

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

For treatment of small cell carcinoma

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B - Drug Regimen

CARBOplatin	AUC 5	IV	Day 1

Adjust Carboplatin dose to AUC target (using Calvert formula) as outlined in the "Other Notes" section.

etoposide	100 mg /m²	IV	Days 1 to 3

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C - Cycle Frequency

REPEAT EVERY 21 DAYS

For a usual total of 4 to 6 cycles unless disease progression or unacceptable toxicity occurs

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D - Premedication and Supportive Measures

Antiemetic Regimen: Moderate + NK1 antagonist (Carboplatin AUC ≥ 5) (D1)
Low (D2,3)

Other Supportive Care:

Also refer to CCO Antiemetic Recommendations.

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E - Dose Modifications

Doses should be modified according to the protocol by which the patient is being treated.

Dosage with toxicity

Hematologic Toxicities: See Appendix 6 for general recommendations.

Hepatic Impairment

Bilirubin	Dose
1. If Bilirubin 1-2 x ULN	**REDUCE** Etoposide to **50%** dose
2. If Bilirubin 2-4x ULN	**REDUCE** Etoposide to **25%** dose
3. If Bilirubin > 4 x ULN	**STOP** treatment with Etoposide

Renal Impairment

Creatinine Clearance	Dose
If CrCl 15 - 40 mL/min	**REDUCE** Etoposide to **75%** dose
If CrCl < 10-15 mL/min	**OMIT** Carboplatin and **REDUCE** Etoposide to **50%** dose or **OMIT** Etoposide

As Creatinine clearance changes adjust dosage of Carboplatin (with AUC based dosing) using the Calvert Formula (see "Other Notes" section).

Dosage in the Elderly

No dose adjustment required with etoposide. Caution should be exercised and dose reduction considered with carboplatin as elderly patients may have more severe myelosuppression and neuropathy.

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F - Adverse Effects

Refer to etoposide, CARBOplatin drug monograph(s) for additional details of adverse effects

More common adverse effects	Less common adverse effects, but may be severe or life-threatening
• Nausea, vomiting • Alopecia • Myelosuppression +/- infection, bleeding • Nephrotoxicity (may be severe) • Ototoxicity • Anorexia • Diarrhea • Mucositis • Abnormal electrolytes	• Hypersensitivity • Arterial thromboembolism • Venous thromboembolism • Hemolytic uremic syndrome • Pneumonitis • Neurotoxicity, including optic nerve disorder • Radiation recall reaction, severe rash

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G - Interactions

Refer to etoposide, CARBOplatin drug monograph(s) for additional details

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H - Drug Administration and Special Precautions

Refer to etoposide, CARBOplatin drug monograph(s) for additional details

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I - Recommended Clinical Monitoring

Treating physicians may decide to monitor more or less frequently for individual patients but should always consider recommendations from the product monograph.

Recommended Clinical Monitoring

- Clinical toxicity assessment (including stomatitis, neurotoxicity, ototoxicity)
- CBC before each cycle
- Baseline and regular liver function tests
- Baseline and regular renal function tests and urinalysis, electrolytes
- Blood pressure monitoring during infusion

- Grade toxicity using the current NCI-CTCAE (Common Terminology Criteria for Adverse Events) version

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J - Administrative Information

Approximate Patient Visit	Day 1: 2 hours; Day 2-3: 1 hour
Pharmacy Workload (average time per visit)	13.782 minutes
Nursing Workload (average time per visit)	42.500 minutes

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K - References

Carboplatin and etoposide drug monographs, Cancer Care Ontario.

Lung:

Klastersky J, Sculier JP, Dabouis G, et al. A randomized trial of two platinum combinations in patients with advanced non-small cell lung cancer: a preliminary report. European Organization for the Research and Treatment of Cancer--Lung Cancer Working Party. Semin Oncol. 1990 Feb;17(1 Suppl 2):20-4.

Smith IE, Evans BD, Gore ME, et al. Carboplatin (Paraplatin; JM8) and etoposide (VP-16) as first-line combination therapy for small cell lung cancer. J Clin ONcol 1987;5:185-9.

CNS:

Franceschi E,Cavallo G, Scopece L, et al. Phase II trial of carboplatin and etoposide for patients with recurrent high-grade glioma. Br J Cancer. 2004 Sep 13; 91(6): 1038–1044.

Scopece L, Franceschi E, Cavallo G, et al. Carboplatin and etoposide (CE) chemotherapy in patients with recurrent or progressive oligodendroglial tumors. J Neurooncol 2006;79(3):299-305.

Bladder:

Mukesh M, Cook N, Hollingdale AE, et al. Small cell carcinoma of the urinary bladder: a 15-year retrospective review of treatment and survival in the Anglian Cancer Network. BJU Int 2009;103(6):747-52.

PEBC Advice Documents or Guidelines

- Systemic Therapy for Small-Cell Lung Cancer: ASCO-OH(CCO) Guideline

December 2023 Modified Disease sites section

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L - Other Notes

Calvert Formula

DOSE (mg) = target AUC X (GFR + 25)

- AUC = product of serum concentration (mg/mL) and time (min)
- GFR (glomerular filtration rate) expressed as measured Creatinine Clearance or estimated from Serum Creatinine (by Cockcroft and Gault method or Jelliffe method)

(Calvert AH, Newell DR, Gumbrell LA, et al, Carboplatin dosage: Prospective evaluation of a simple formula based on renal function. J Clin Oncol, 1989; 7: 1748-1756)

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M - Disclaimer

Regimen Abstracts

A Regimen Abstract is an abbreviated version of a Regimen Monograph and contains only top level information on usage, dosing, schedule, cycle length and special notes (if available). It is intended for healthcare providers and is to be used for informational purposes only. It is not intended to constitute or be a substitute for medical advice, and all uses of the Regimen Abstract are subject to clinical judgment. 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, and Cancer Care Ontario disclaims all liability for the use of this information, and for any claims, actions, demands or suits that arise from such use.

Information in regimen abstracts is accurate to the extent of the ST-QBP regimen master listings, and has not undergone the full review process of a regimen monograph. Full regimen monographs will be published for each ST-QBP regimen as they are developed.

Regimen Monographs

Refer to the New Drug Funding Program or Ontario Public Drug Programs 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.

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