Regimen Monograph

A - Regimen Name

CRBPPACL+PEMB Regimen

PACLitaxel-CARBOplatin-Pembrolizumab

Disease Site	Head and Neck Squamous Cell
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. This **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). 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.
Rationale and Uses	As first-line treatment of metastatic or unresectable recurrent head & neck squamous cell carcinoma (HNSCC)
Supplementary Public Funding	**pembrolizumab** New Drug Funding Program (Pembrolizumab - Recurrent or Metastatic

Squamous Cell Carcinoma of the Head and Neck)

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B - Drug Regimen

pembrolizumab[1]	2 mg /kg	IV (max 200mg)	Day 1
PACLitaxel	175-200 mg /m²	IV	Day 1
CARBOplatin	AUC 5-6**	IV	Day 1

[1]Dosing based on NDFP funding criteria. Refer to NDFP form for alternative pembrolizumab dosing schedule.

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

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C - Cycle Frequency

REPEAT EVERY 21 DAYS for 6 cycles unless disease progression or unacceptable toxicity occurs

Refer to PEMB(MNT) for the maintenance phase of treatment.

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D - Premedication and Supportive Measures

Antiemetic Regimen: Moderate + NK1 antagonist (Carboplatin AUC ≥ 5)

Other Supportive Care:

Also refer to CCO Antiemetic Recommendations.

Avoid the use of corticosteroids or immunosuppressants before starting pembrolizumab treatment.

Pre-medications (prophylaxis for infusion reaction):

Pembrolizumab:

- Routine pre-medication is not recommended.
- May consider antipyretic and H1-receptor antagonist in patients who experienced a grade 1-2 infusion reaction.

Paclitaxel*:

- Dexamethasone 20 mg PO 12- and 6-hours OR Dexamethasone 20 mg IV 30 minutes pre-infusion†
- Diphenhydramine 25-50 mg IV/PO 30-60 minutes pre-infusion
- Ranitidine 50 mg IV OR Famotidine 20 mg IV 30-60 minutes pre-infusion

*Consider **discontinuing** pre-medications for paclitaxel if there was no IR in the first 2 doses.

†Oral and IV dexamethasone are both effective at reducing overall IR rates. Some evidence suggests that oral dexamethasone may be more effective for reducing severe reactions; however, adverse effects and compliance remain a concern

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J - Administrative Information

Approximate Patient Visit	5-6 hours
Pharmacy Workload (average time per visit)	39.6325 minutes
Nursing Workload (average time per visit)	69.833 minutes

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K - References

Burtness B, Harrington KJ, Greil R, et al. Pembrolizumab alone or with chemotherapy versus cetuximab with chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): a randomised, open-label, phase 3 study. Lancet 2019 Nov 23;394(10212):1915-1928. doi: 10.1016/S0140-6736(19)32591-7. Epub 2019 Nov 1.

Clark JI, Hofmeister C, Choudhury A, et al. Phase II evaluation of paclitaxel in combination with carboplatin in advanced head and neck carcinoma. Cancer. 2001;92(9):2334-40.

Fountzilas G, Skarlos D, Athanassiades A, et al. Paclitaxel by three-hour infusion and carboplatin in advanced carcinoma of nasopharynx and other sites of the head and neck. A phase II study conducted by the Hellenic Cooperative Oncology Group. Ann Oncol. 1997 May;8(5):451-5.

Pivot X, Cals L, Cupissol D, et al. Phase II trial of a paclitaxel-carboplatin combination in recurrent squamous cell carcinoma of the head and neck. Oncology. 2001;60(1):66-71.

August 2022 Added pre-medication; Added information for funded alternative pembrolizumab schedule in Drug regimen 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

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Regimen Monographs

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

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