BC Cancer Protocol Summary for the Treatment of Locally Advanced or Metastatic Urothelial Carcinoma Using 6-Weekly Pembrolizumab

Protocol Code

Tumour Group

Contact Physician

Dr. Christian Kollmannsberger

GUAVPEM6

Genitourinary

ELIGIBILITY:

Patients must have:

- Locally advanced or metastatic urothelial carcinoma and disease progression:
 - on or after platinum-based chemotherapy, or
 - within 12 months of completing adjuvant or neoadjuvant platinum-based chemotherapy

Patients should have:

- ECOG performance status 0-2
- Adequate hepatic and renal function
- Access to a treatment centre with expertise to manage immune-mediated adverse reactions of pembrolizumab

Note: CAP approval is not required to switch between 3-weekly and 6-weekly dosing of pembrolizumab.

EXCLUSIONS:

Patients must not have:

- Prior avelumab maintenance therapy (GUBAVE)
- Prior treatment with enfortumab vedotin (GUAVEV)

CAUTIONS:

- Active autoimmune disease
- Patients with long term immunosuppressive therapy or systemic corticosteroids (requiring more than 10 mg predniSONE/day or equivalent)

TESTS:

- <u>Baseline</u>: CBC & differential, platelets, creatinine, alkaline phosphatase, ALT, total bilirubin, LDH, sodium, potassium, TSH, morning serum cortisol, chest x-ray
- <u>Before each treatment</u>: CBC & differential, platelets, creatinine, alkaline phosphatase, ALT, total bilirubin, LDH, sodium, potassium, TSH
- <u>If clinically indicated</u>: chest x-ray, morning serum cortisol, lipase, serum or urine HCG (required for woman of child bearing potential if pregnancy suspected), Free T3 and Free T4, glucose, serum ACTH levels, testosterone, estradiol, FSH, LH, ECG, C-reactive protein (CRP), creatine kinase (CK), troponin
- Weekly telephone nursing assessment for signs and symptoms of side effects while on treatment (Optional).

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Activate: 1 June 2020 Revised: 1 Mar 2023 (exclusions updated)

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PREMEDICATIONS:

- Antiemetics are not usually required.
- Antiemetic protocol for low emetogenicity (see SCNAUSEA).
- If prior infusion reactions to pembrolizumab: diphenhydrAMINE 50 mg PO, acetaminophen 325 to 975 mg PO, and hydrocortisone 25 mg IV 30 minutes prior to treatment

TREATMENT:

Drug	Dose	BC Cancer Administration Guideline
pembrolizumab	4 mg/kg	IV in 50 mL NS over 30 minutes
	(maximum 400 mg)	using a 0.2 micron in-line filter

 Repeat <u>every 6 weeks</u> until disease progression, unacceptable toxicity, or a maximum of 2 years of treatment (including doses given as GUAVPEM)

DOSE MODIFICATIONS:

No specific dose modifications. Toxicity managed by treatment delay and other measures (see <u>SCIMMUNE</u> protocol for management of immune-mediated adverse reactions to checkpoint inhibitors immunotherapy,

http://www.bccancer.bc.ca/chemotherapy-protocolssite/Documents/Supportive%20Care/SCIMMUNE_Protocol.pdf).

PRECAUTIONS:

- 1. Serious immune-mediated reactions: can be severe to fatal and usually occur during the treatment course, but may develop months after discontinuation of therapy. They may include enterocolitis, intestinal perforation or hemorrhage, hepatitis, dermatitis, neuropathy, endocrinopathy, pneumonitis, as well as toxicities in other organ systems. Early diagnosis and appropriate management are essential to minimize life-threatening complications (see <u>SCIMMUNE</u> protocol for management of immune-mediated adverse reactions to checkpoint inhibitors immunotherapy, http://www.bccancer.bc.ca/chemotherapy-protocols-site/Documents/Supportive%20Care/SCIMMUNE_Protocol.pdf).
- Infusion-related reactions: Isolated cases of severe reaction have been reported. In case of a severe reaction, pembrolizumab infusion should be discontinued and appropriate medical therapy administered. Patients with mild or moderate infusion reaction may receive pembrolizumab with close monitoring. Premedications with acetaminophen and anti-histamine may be considered if there is a history of reaction.

Call Dr. Christian Kollmannsberger or tumour group delegate at (604) 877-6000 or 1-800-663-3333 with any problems or questions regarding this treatment program.

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REFERENCES:

- 1. Herbst RS, Baas P, Kim D-W, et al. Pembrolizumab versus docetaxel for previously treated, PD-L1positive, advanced non-small cell lung cancer (KEYNOTE-010): a randomised controlled trial. The Lancet.2016;387(10027):1540-1550.
- 2. Garon EB, Rizvi NA, Hui R, et al. Pembrolizumab for the Treatment of Non-Small Cell Lung Cancer. N Engl J Med.2015;372(21):2018-2028.
- 3. Merck Canada: KEYTRUDA (pembrolizumab) product monograph. Kirkland, Quebec: 15 April 2016.
- 4. Postow M, Wolchok J. Toxicities Associated With Checkpoint Inhibitor Immunotherapy. UpToDate revised 2015. Accessed: <u>www.uptodate.com</u>, May 2016.
- 5. Weber JS, et al. Management of Adverse Events Following Treatment with Anti-Programmed Death-1 Agents. Oncologist 2016; 21:1-11.
- 6. CADTH Technology Review: Optimal Use 360 Report. Dosing and timing of immuno-oncology drugs. November 2019. Accessed online: <u>https://www.cadth.ca/</u> 25 March 2020.
- Elassaiss-Schaap J, Rossenu S, Lindauer A, et al. Using model-based "learn and confirm" to reveal the pharmacokinetics-pharmacodynamics relationship of pembrolizumab in the KEYNOTE-001 trial. CPT Pharmacometrics Syst Pharmacol. 2017 Jan;6(1):21-28. doi: 10.1002/psp4.12132. Epub 2016 Nov 8.
- Freshwater T, Kondic A, Ahamadi M, et al. Evaluation of dosing strategy for pembrolizumab for oncology indications. J Immunother Cancer 2017; 017 May 16;5:43. doi: 10.1186/s40425-017-0242-5. eCollection 2017.
- Lala M, Li M, Sinha V, et al. A six-weekly (Q6W) dosing schedule for pembrolizumab based on an exposure-response (ER) evaluation using modeling and simulation. Poster presented at: 2018 American Society of Clinical Oncology (ASCO) Annual Meeting; 2018 Jun 1-5; Chicago, IL.

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