

BC Cancer Protocol Summary for the Treatment of Unresectable or Metastatic Melanoma Using 4-Weekly Nivolumab

Protocol Code

SMAVNIV4

Tumour Group

Skin and Melanoma

Contact Physician

Dr. Vanessa Bernstein

ELIGIBILITY:

Patients must have:

- Unresectable or metastatic melanoma in patients who are previously untreated, regardless of BRAF V600 mutation status, and
- No prior systemic therapy for advanced disease with the exception of BRAF and/or MEK inhibitors for BRAF mutant metastatic melanoma

Notes:

- Patients who received prior adjuvant immunotherapy are eligible if there was a disease-free interval of 6 months or greater
- In the advanced setting, patients are eligible to receive pembrolizumab, nivolumab, [nivolumab-relatlimab](#), or [combination ipilimumab with nivolumab](#), but not sequential use of these agents. [Switching for intolerance is permitted.](#)
- CAP approval not required to switch between SMAVNIV and SMAVNIV4

Patients should have:

- Adequate hepatic and renal function, and
- Access to a treatment centre with expertise to manage immune-mediated adverse reactions of nivolumab

EXCLUSIONS:

Patients must not have:

- Active central nervous system metastases (unless asymptomatic and/or stable)
- Relapsed on or within 6 months of completing adjuvant anti-PD1 therapy

CAUTIONS:

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

TESTS:

- Baseline: CBC & Diff, creatinine, alkaline phosphatase, ALT, total bilirubin, LDH, sodium, potassium, TSH, morning serum cortisol, [creatinine kinase](#), appropriate imaging
- Baseline, if clinically indicated: [BNP](#), [troponin](#), [ECG](#), [echocardiogram](#)
- Before each treatment: CBC & Diff, creatinine, alkaline phosphatase, ALT, total bilirubin, LDH, sodium, potassium, TSH, [creatinine kinase](#)
- If clinically indicated: 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, serum ACTH levels, testosterone, estradiol, FSH, LH, [troponin](#), [ECG](#)
- Weekly telephone nursing assessment for signs and symptoms of side effects while on treatment (Optional).

PREMEDICATIONS:

- Antiemetics are not usually required.
- Antiemetic protocol for low emetogenicity (see SCNAUSEA).
- If prior infusion reactions to nivolumab: 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
nivolumab	6 mg/kg (maximum 480 mg)	IV in 50 to 100 mL NS over 30 minutes using a 0.2 micron in-line filter

- Repeat **every 4 weeks** until disease [clinical](#) progression or unacceptable toxicity

DOSE MODIFICATIONS:

No specific dose modifications. Toxicity managed by treatment delay and other measures (see [SCIMMUNE](#) protocol for management of immune-mediated adverse reactions to checkpoint inhibitors immunotherapy).

PRECAUTIONS:

- **Serious immune-mediated reactions**: these can be severe to fatal and usually occur during the treatment course. They may include enterocolitis, intestinal perforation or hemorrhage, hepatitis, dermatitis, neuropathy, endocrinopathy, as well as toxicities in other organ systems. Early diagnosis and appropriate management are essential to minimize life-threatening complications (**see [SCIMMUNE](#) protocol for management of immune-mediated adverse reactions to checkpoint inhibitors immunotherapy**).

- **Infusion-related reactions:** isolated cases of severe reaction have been reported. In case of a severe reaction, nivolumab infusion should be discontinued and appropriate medical therapy administered. Patients with mild or moderate infusion reaction may receive nivolumab with close monitoring. Premedications with acetaminophen and anti-histamine may be considered if there is a history of reaction.

Call Dr. Vanessa Bernstein or tumour group delegate at 250-519-5500 or 1-800-670-3322 with any problems or questions regarding this treatment program.

References:

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3. Topalian S, et al. Survival, durable tumor remission, and long-term safety in patients with advanced melanoma receiving nivolumab. *J Clin Oncol* 2014;32:1020-30.
4. Weber J, et al. Nivolumab versus chemotherapy in patients with advanced melanoma who progressed after anti-CTLA-4 treatment (CheckMate 037): a randomised, controlled, open-label, phase 3 trial. *Lancet Oncol* 2015;16:75-84.
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7. Weber JS, et al. Management of adverse events following treatment with anti-programmed death-1 agents. *Oncologist* 2016;21:1-11.
8. Waterhouse D, Horn L, Reynolds C, et al. Safety profile of nivolumab administered as 30-min infusion: analysis of data from CheckMate 153. *Cancer Chemother Pharmacol* 2018;81:679-86.
9. Zhao X, Suryawanshi S, Hruska M, et al. Assessment of nivolumab benefit-risk profile of a 240-mg flat dose relative to a 3-mg/kg dosing regimen in patients with advanced tumors. *Ann Oncol* 2017;28(8):2002-8.
10. Zhao X, Ivaturi V, Gopalakrishnan M, et al. Abstract CT101: A model-based exposure-response (ER) assessment of a nivolumab (NIVO) 4-weekly (Q4W) dosing schedule across multiple tumor types. *Cancer Res* 2017;77(13 suppl):DOI: 10.1158/1538-7445.AM2017-CT101.