BC Cancer Protocol Summary for Adjuvant Treatment of Resected Non-Small Cell Lung Cancer using Atezolizumab

Protocol Code	*ULUAJATZ*
Tumour Group	*Lung*
Contact Physician	*Dr. Sophie Sun*

ELIGIBILITY:

Patients must have:

- Non-small cell lung cancer (NSCLC),
- Fully resected,
- Per American Joint Committee on Cancer (AJCC) 8th edition:
  - Stage IIB to IIIA with primary tumour larger than 5 cm or nodal involvement, or
  - Stage IIIB with primary tumour larger than 7 cm or invading diaphragm, and with nodal involvement
- Received prior platinum-based chemotherapy without progression,
- Start date within 12 weeks of completion of platinum-based chemotherapy, (LUAJNP, LUAJPC, or LUAJPP)
- PD-L1 Tumour Proportion Score (TPS) 50% or greater,
- No EGFR or ALK mutation, and
- BC Cancer “Compassionate Access Program” request approval prior to treatment

Patients should have:

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

Notes:

- Patients may have subsequent checkpoint inhibitors provided the last dose of atezolizumab was greater than 6 months prior, and no progression occurred during treatment

EXCLUSIONS:

Patients must not have:

- Combination treatment. This protocol is monotherapy only
- Prior neoadjuvant nivolumab (i.e., prior treatment with LUAJNIVPC or LUAJNIVPP)

CAUTIONS:

- Active, known or suspected autoimmune disease
- Myasthenia gravis or Guillain-Barré syndrome
- Patients with long term immunosuppressive therapy or systemic corticosteroids (requiring more than 10 mg predniSONE/day or equivalent)

TESTS:

- Baseline: CBC & Diff, platelets, creatinine, alkaline phosphatase, ALT, total bilirubin, LDH, sodium, potassium, TSH, morning serum cortisol, chest x-ray
- Before each treatment: CBC & Diff, platelets, creatinine, alkaline phosphatase, ALT, total bilirubin, LDH, sodium, potassium, calcium, TSH
- If clinically indicated: chest x-ray, morning serum cortisol, lipase, random glucose, serum or urine HCG (required for women of child bearing potential if pregnancy suspected), free T3 and free T4, serum ACTH levels, testosterone, estradiol, FSH, LH, 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 atezolizumab: 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
atezolizumab	1680 mg	IV in 250 mL NS over 1 hour*

* subsequent infusions may be given over 30 minutes if the first infusion is well-tolerated

- Repeat **every 4 weeks** for a maximum of 12 cycles or 1 year of treatment, unless disease progression or unacceptable toxicity.

DOSE MODIFICATIONS:

No specific dose modifications. Toxicity managed by treatment delay and other measures (see SCIMMUNE for management of immune-mediated adverse reactions to checkpoint inhibitor immunotherapy, http://www.bccancer.bc.ca/chemotherapy-protocols-site/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. 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 SCIMMUNE for management of immune-mediated adverse reactions to checkpoint inhibitor immunotherapy, http://www.bccancer.bc.ca/chemotherapy-protocols-site/Documents/Supportive%20Care/SCIMMUNE_Protocol.pdf).
2. **Infusion-related reactions:** isolated cases of severe infusion reactions have been reported. Discontinue atezolizumab for severe reactions (Grade 3 or 4). Patients with mild or moderate infusion reactions may receive atezolizumab with close monitoring and use of premedication.
3. **Infections:** severe infections have been reported. Treat with antibiotics for suspected or confirmed bacterial infections. Hold atezolizumab for Grade 3 or 4 infections. Permanently discontinue for any grade of meningitis or encephalitis.

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

REFERENCES:

1. Felip E, Altorki N, Zhou C, et al; IMpower010 Investigators. Adjuvant atezolizumab after adjuvant chemotherapy in resected stage IB-IIIA non-small-cell lung cancer (IMpower010): a randomised, multicentre, open-label, phase 3 trial. Lancet. 2021 Oct 9;398(10308):1344-1357.
2. Atezolizumab (Tecentriq) CADTH Reimbursement Recommendation. Canadian Journal of Health Technologies 2022;2(9):1-18.