MEMO

Thunder Bay Regional Health Sciences Centre

To: Infectious Diseases, Critical Care Physicians, COVID-19 Unit Physicians, All Prescribers, Nursing, Pharmacy

From: Carina Desramaux - Pharmacy Manager

Date: April 5, 2021

RE: Tocilizumab critical supply and single dose

The TBRHSC has a very limited supply of tocilizumab for the treatment of moderately to critically ill COVID-19 pneumonia. There is currently a paucity of data supporting the administration of a second dose (a second dose was only administered in 29% of participants in clinical trials [1,2]), and routine second dosing will exacerbate drug shortages [3]. Many facilities in Ontario have gone to using one dose to ensure sufficient supply at their facility. Due to rising COVID-19 cases in Ontario, the province is anticipating tocilizumab stock depletion before the end of April. Given these circumstances, TBRHSC is emphasizing following hospital criteria for using **one dose (single dose)** of tocilizumab for COVID-19 treatment.

Pharmacy will continue to communicate supply daily to Infectious Diseases and Critical Care physicians.

Ordering of tocilizumab for COVID-19 treatment is **restricted to Infectious Diseases (primary) and Critical Care physicians**.

Two (2) Physicians are required to agree on tocilizumab treatment for that patient prior to initiation of therapy.
Infectious Disease Physician must be one of the approvers when available.
When not available two Critical Care Physicians may order.
Treatment will be **delayed** until second approval received and documented.

The dose of IV tocilizumab may be determined by a weight-based dose banding:

- 800 mg if weight >90 kg;
- 600 mg if weight >65 kg and ≤90 kg;
- 400 mg if weight >40 kg and ≤65 kg;
- 8mg/kg if weight ≤40 kg

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COVID-19 treatment with tocilizumab is recommended for moderately to critically ill patients who are **on optimal concomitant steroid therapy** according to the following eligibility criteria (based on Provincial COVID-19 Guidelines):

Critically ill:

- Hospitalized patients requiring ventilatory and/or circulatory support including high-flow nasal cannula, higher concentrations of oxygen by mask, CPAP, non-invasive ventilation, or invasive mechanical ventilation; **AND** are on optimal dexamethasone therapy; **AND** are within 14 days of hospital admission

Moderately ill:

- Hospitalized patients requiring low-flow supplemental oxygen with a C-reactive protein level of at least 75 mg/L **AND** have evidence of disease progression (i.e. increasing oxygen or ventilatory requirements) despite 24-48 hours of optimal dexamethasone therapy; **AND** are within 14 days of hospital admission.

Tocilizumab Exclusion Criteria for COVID-19 Treatment:

- Known hypersensitivity to Tocilizumab
- Non-COVID confirmed co-existing infection such as latent or active TB, fungal infections, Hepatitis B, etc.
- Baseline AST or ALT greater than 5 x ULN
- Baseline platelets less than 50
- ANC less than 2
- Pre-existing condition requiring ongoing pharmacological immunosuppression
- Admitted for more than 14 days with COVID-19 signs and symptoms (or greater than 14 days of new COVID-19 diagnosis if nosocomially acquired)

Please note that these recommendations are based on the Ontario COVID-19 Drugs and Biologics Clinical Practice Guidelines Working Group (on behalf of the Ontario COVID-19 Science Advisory Table) and the Ontario ICU Medication Task Force and are based on best available data to date and may change as additional data becomes available.

Please refer to the tocilizumab parenteral manual for additional information.

Please contact pharmacy if any questions.

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Thank you
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References:

1. REMAP-CAP Trial: https://www.nejm.org/doi/full/10.1056/NEJMoa2100433
2. RECOVERY Trial: https://www.medrxiv.org/content/10.1101/2021.02.11.21249258v1.full-text
3. ON COVID-19 Science Advisory Table Tocilizumab Brief: https://covid19-sciencetable.ca/wp-content/uploads/2021/03/Science-Brief_Tocilizumab_20210302_version1.1_published-2.pdf