

**PROTOCOL CODE: SCICANS**

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Weight: \_\_\_\_\_

**DOCTOR'S ORDERS**

**REMINDER: Please ensure drug allergies and previous bleomycin are documented on the Allergy & Alert Form**

**DATE:** \_\_\_\_\_ **Treatment Date:** \_\_\_\_\_

Clinical symptoms indicative of immune effector cell-associated neurotoxicity syndrome (ICANS) are headache, confusion, disorientation, speech disturbances, altered levels of consciousness, seizures and motor weakness. Symptoms may also include, but are not limited to: lethargy, aphasia, difficulty concentrating, agitation, tremor, and rarely cerebral edema.

**Patients must be closely monitored for early signs and symptoms indicative of ICANS.**

**Page the admitting or covering physician at the first signs of ICANS.**

Agent administered: _____	Time of administration: _____
Admitting Physician: Dr. _____	Contact Number: _____
Daytime Covering Physician: Dr. _____	Contact Number: _____
Overnight Covering Physician: Dr. _____	Contact Number: _____

**ICANS Management**

**All Grades:**

- Immediately stop administration of treatment medication
- Page the admitting physician or covering physician if not already done.
- Admit the patient for further monitoring if not already admitted.
- Point of care glucometer testing QID
- Seizure precautions
- Fall precautions
- Elevate head of bed 30 degrees
- Aspiration precautions - assess swallowing. Convert all medications to IV if impaired
- NPO, meds with sips
- Avoid medications that cause CNS depression
- Bedside fundoscopic evaluation
- Consider Neurology consultation
- If concurrent CRS, consider tocilizumab. See SCCRS [protocol](#).
- **LORazepam 1 mg IV Q5mins PRN for seizures, to a maximum of 4mg**

**Grade 1:**

If required:

**dexamethasone 10 mg IV**  Repeat Q6H

Monitor for ICANS symptoms including an ICE score every 12 hours until normalization using Tables 1 and 2 in protocol.

Monitor vitals Q4H for concurrent CRS.

If indicated:

CBC & Diff, platelets, sodium, potassium, chloride, bicarbonate, calcium, magnesium, phosphorus, uric acid, albumin, creatinine, ALT, alkaline phosphatase, LDH, total bilirubin, lactate, CRP, ferritin, INR, PTT, fibrinogen  
Other labs: \_\_\_\_\_

Repeat above labs Q4H and prior to discharge (if any abnormalities)

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**DOCTOR'S SIGNATURE:**

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**UC:**

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**DATE:**

**ICANS Management, continued:**

**Grade 2:**

**dexamethasone 10 mg IV every 6 hours**  
until ICANS Grade 1 or less, then taper over 3 days (order for taper to be written separately)

If required, seizure prophylaxis:

**levETIRAcetam 1500 mg PO load, then levETIRAcetam 750 mg PO BID\***

\*Refer to Protocol for suggested ongoing management of levETIRAcetam.

Neurovitals and monitor for ICANS symptoms including ICE score and ICANS assessment Q8H or more frequently if necessary, using Tables 1 and 2 in protocol.

Monitor vitals Q4H for concurrent CRS.

Draw the following labs:

CBC & Diff, platelets, sodium, potassium, chloride, bicarbonate, calcium, magnesium, phosphorus, uric acid, albumin, creatinine, ALT, alkaline phosphatase, LDH, total bilirubin, lactate, CRP, ferritin, INR, PTT, fibrinogen  
Other labs: \_\_\_\_\_

Repeat above labs Q4H and prior to discharge (if any abnormalities)

**Grade 3 and Grade 4:**

Admit the patient emergently to highest level of care. Contact ICU to discuss admission.

Steroid (select one):

**dexamethasone 10 mg IV Q6H**  
 **dexamethasone 20 mg IV Q6H**  
 **methyIPREDNISolone 1 g IV daily for  3 days or  1 day (select one)**  
until ICANS is Grade 1 or less, then taper over 3 days (order for taper to be written separately)

**levETIRAcetam 1500 mg PO, then 750 mg PO BID\***

\*Refer to Protocol for suggested ongoing management of levETIRAcetam.

If required:

**anakinra 100 mg IV Q12H**  
Or dose modification (for dose escalation or dose reduction if required i.e., for renal impairment):  
 **anakinra \_\_\_\_\_ mg IV Q \_\_\_\_\_ H**

Monitor vitals Q4H for concurrent CRS

Draw the following labs:

CBC & Diff, platelets, sodium, potassium, chloride, bicarbonate, calcium, magnesium, phosphorus, uric acid, albumin, creatinine, ALT, alkaline phosphatase, LDH, total bilirubin, lactate, CRP, ferritin, INR, PTT, fibrinogen  
Other labs: \_\_\_\_\_

Repeat above labs Q4H and prior to discharge (if any abnormalities)

**DOCTOR'S SIGNATURE:**

**SIGNATURE:**

**UC:**