Algorithm for Actemra (Tocilizumab) in Neuromyelitis Optica and NMO Spectrum Disorders

1. The patient must have a definitive diagnosis of Neuromyelitis Optica or Neuromyelitis Optica Spectrum Disorder based on Wingerchuck’s 2006 revised criteria.
   a. Neuromyelitis Optica (Diagnosis requires absolute criteria plus at least 2 of the 3 supportive criteria)
      i. Absolute Criteria
         1. Optic Neuritis
         2. Transverse Myelitis
      ii. Supportive Criteria
         1. Brain MRI does not meet criteria for Multiple Sclerosis
         2. Seropositive NMO-IgG test (aquaporin4-IgG test)
         3. Longitudinally extensive transverse myelitis (LETM) defined as ≥3 vertebral segments.
   b. Neuromyelitis Optica Spectrum disorder is defined as
      i. Transverse myelitis, optic neuritis, or brainstem inflammation associated with positive serum AQP4-IgG.

2. The patient has a documented inadequate response, or inability to tolerate an appropriate trial, with at least one of the following agents:
   a. Mycophenolate x 6 mo or Azathioprine x 6 mo or Rituximab x 4 weeks

3. The patient fits into a Poor Prognosis category and therefore Tocilizumab may be used first line as prescribed by the treating neurologist. Poor prognosis category as defined as:
   a. Devastating relapse at onset
   b. Early high relapse rate
   c. High lesion activity/lesion load on Cervical/Thoracic MRI at first attack
   d. Rapid onset of disability (eg. Physical, activities of daily living, visual impairment)

4. The medication must be prescribed by a neurologist for use in the outpatient setting only

5. Tocilizumab should NOT be used if patient concurrently taking any of the following: adalimumab, alefacept, alemtuzemab, anakinra, azathioprine, cladribine, cyclophosphamide, cyclosporine, daclizumab, efalizumab, etanercept, fludarabine phosphate, infliximab, intravenous immunoglobulin leflunomide, mercaptopurine, mycophenolate mofetil, mycophenolic acid, pemetrexed, rituximab, trastuzumab, mitoxantrone
References:


