



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.

AND

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

OR

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)

AND

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

AND

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

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References:

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