Table e-1 Pharmacological management of MG*

`Agent	Initial dose	Maintenance dose	Onset of Action	Major Adverse Events	Monitoring	Comments
Pyridostigmine	30-60 mg tid[1, 2]	60-120 mg tid to 5x/day, adjusted based on symptoms, typically not to exceed 480 mg/day.	15-30 minutes	Stomach cramps, nausea, vomiting, diarrhea, muscle twitching and cramps, sweating, salivation, blurred vision	Use the minimal amount that produces clinical improvement; this is best achieved by using a dose that produces observable improvement after most administrations.	Can counter muscarinic adverse events with anticholinergic agents (i.e. glycopyrrolate 1 mg; hyoscyamine sulfate 0.125 mg; propantheline 15 mg) or loperamide, an opioid receptor agonist, 2-4 mg.
Prednisone	Option 1: 10-20 mg/day, increasing daily dose by 5 mg daily equivalent every week	Slow alternate day taper after treatment goal achieved for several days; taper by 5 mg/day dose	2-4 weeks	Hypertension, diabetes, weight gain, bone loss, cataracts, GI ulcers, glaucoma, neuropsychiatric symptoms, growth retardation in children,	HbA1C every few months, blood pressure checks, bone density monitoring, eye exam for glaucoma and cataracts.	Administer in single morning dose; temporary worsening is seen in up to 50% of pts starting on high doses and in some patients on lower doses; IVIg or

	until treatment goal achieved. Option 2: Start at 50-80 mg/day; this approach may require inpatient hospitaliza-tion.	equivalent per month. Taper more slowly once ≤10 mg/day dose equivalent. Continuing a low dose long-term can help to maintain the treatment goal.[3]		hypothalamic-pituitary axis suppression		PLEX may prevent steroid-induced worsening.
Azathioprine	50 mg/day	Increase by 50 mg increments every 1-2 weeks to target of 2.5-3 mg/kg/day.	2-10 months for initial response. Up to 24 months for maximum benefit.[4]	Fever, abdominal pain, nausea, vomiting, anorexia, leukopenia, hepatotoxicity, skin rash	CBC, LFTs 1-4 times in first month, then monthly to every third month	10% of patients cannot tolerate because of flu-like reaction; major drug interaction with allopurinol; TPMT enzyme testing can be performed, if available, prior to starting

						treatment to identify patients at high risk of bone marrow suppression.
Cyclosporin	100 mg bid	Increase slowly as needed to 3-6 mg/kg/day on bid schedule.	1-3 months	Hirsuitism, tremor, gum hyperplasia, hypertension , hepatotoxicity, nephrotoxicity, PRES	CBC, LFTs, BUN/Cr monthly x3, then every three months; monitor trough drug levels.	Bioequivalence differs between preparations so avoid brand switching when possible; grapefruit juice may increase blood level; high potential for drug-drug interactions.
Mycophenolate mofetil	500 mg bid	1000 to 1500 mg bid.	2-12 months[5]	Diarrhea, vomiting, leukopenia, teratogenicity (black box warning)	CBC weekly for 4 weeks, q2 weeks for 4 weeks, then monthly to every third month; REMS program when used in women of child bearing age.	Diarrhea may resolve by change to tid dosing.

Cyclophos-phamide	(1) Oral: 50 mg/day (2) IV: 500 mg/m^2 monthly	Oral: increase by 50 mg/week to maintenance dose of 2-3 mg/kg/day.	2-6 months	Alopecia, leukopenia, nausea and vomiting, skin discoloration, anorexia hemorrhagic cystitis, malignancy	CBC, BUN/Cr, electrolytes, LFTs, urinalysis every 2-4 weeks.	Intravenous pulse therapy may be less toxic because cumulative dose is lower
Tacrolimus	3-5 mg/day or 0.1 mg/kg/day	Increase dosing as needed for response following trough levels (see last column).	1-3 months	Hyperglycemia, hypertension, headache, hyperkalemia, nephrotoxicity, diarrhea, nausea, vomiting, PRES	BUN/Cr, glucose, K+; trough drug levels every few weeks initially, then less frequently	Insulin-dependent diabetes mellitus developed in 20% of post-renal transplant patients; trough levels of 8-9 ng/ml may be effective.
Methotrexate	10 mg weekly for 2 weeks[6]	Increase by 5 mg every two weeks to a maximum dose of 15-25 mg weekly.	2-6 months	Leukopenia, mouth ulceration, nausea, diarrhea, headaches, hair loss, hepatotoxicity, pulmonary fibrosis, rare nephrotoxicity, teratogenicity	CBC, LFTs monthly initially, then at least every 3 months. Monitor periodically for interstitial lung disease, a rare occurrence with	Consider folic acid 5 mg/day to reduce toxicity. Absolutely contra-indicated in pregnancy.

					doses used for immunotherapy.	
Intravenous immunoglobulin (IVIg)	2 gm/kg over 2-5 days	0.4-1 gm/kg every 4 weeks; can attempt to decrease frequency over time.	1-2 weeks	Headache, aseptic meningitis, nephrotoxicity, ischemic events, fluid overload, leukopenia, thrombocytopenia	BUN/Cr every month, decreasing to every 3rd month over time.	IgA level prior to starting treatment may be useful to identify congenital IgA deficiency, a contraindication to IVIg use; avoid in patients with recent thrombotic/ ischemic event. Use sucrose-free formulation for patients at risk of renal toxicity.

Abbreviations: BUN = blood urea nitrogen; CBC = complete blood count; Cr = Creatinine; GI = gastrointestinal; HbA1C = hemoglobin AiC; IgA = immunoglobulin A; IVIg = intravenous immunoglobulin; K^+ = potassium; LFTs = liver function tests; PLEX = plasma exchange; PRES = posterior reversible encephalopathy syndrome; REMS = risk evaluation and mitigation strategy; TPMT = thiopurine methyltransferase.

***Precise dosing varies between practitioners. This table is intended to provide guidance and should not be interpreted as a rigid directive in regard to dosing and monitoring.**

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