Top 25 Drugs for Dysautonomias			
Drug Name/Class	Affects	Recommended Dosing	Notes
For Chronic Orthostatic Intolerance			
Midodrine (Proamatine®) Class: alpha-adrenergic agonist	Primarily works as a vasoconstrictor to increase blood pressure and reduce blood pooling when standing.	10mg PO TID	Caution: can cause supine hypertension. (Caution: avoid lying down within 4 hours after dose). One of the few FDA approved drugs for nOH.
Fludrocortisone (Florinef®) Class: Mineralocorticoid	Increases blood volume and blood pressure by increasing fluid reabsorption in the kidneys	0.1-0.3 mg PO daily	Monitor plasma electrolyte levels, especially potassium.
Desmopressin (dDAVP®) Class: antidiuretic peptide	Increase blood volume via fluid reabsorption and mild vasoconstrictive effects. Can also reduce frequency and urgency of urination.	0.1-0.2 mg PO TID	Only recommended for occasional use; monitor plasma sodium levels.
Droxidopa (Northera®) Class: alpha-beta-adrenergic agonist	Increases blood pressure via sympathetic stimulation.	100 – 600 mg PO TID	One of the few FDA approved drugs for nOH.
Propranolol (Ineral®) Class: Nonselective Beta blocker	Decreases heart rate and blood pressure via sympathetic inhibition.	10-20 mg PO QID	Caution: can worsen OI if BP response > HR response. Add. caution in patients with concomitant MCAS as this drug can cause mast cell degranulation.
Pyridostigmine (Mestinon®) Class: acetylcholinesterase inhibitor	Increases blood pressure and muscle strength.	30-60 mg PO TID	Caution: may increase gastrointestinal mobility
Ivabradine (Corlanor®) Class: HCN channel blocker	Reduces heart rate.	5.0-7.5 mg PO BID	Useful in patients with a predisposition to hypotension.
IV Saline /Sodium chloride solution	Increases blood volume.	1-3 L Over 1-3 hours	**<u>Non-sustainable therapy:</u>** recurrent IV access will eventually lead to damage of venous structures and port placement as an alternative increases the risk of infection. Recommended only as a "rescue" therapy for acute exacerbations.
For other Dysautonomia Symptoms and Co-Morbidities			

Clonidine (Catapres®) or Methyldopa (generic) **Guanfacine** (Intuniv®) Class: central alpha-2 adrenergic agonist	Decrease blood pressure and hyperadrenergic response. Decreasing hyperadrenergic response can lead to improvement in symptoms like insomnia, anxiety, panic attacks and shakiness/tremors.	0.05-0.20 mg PO BID	May be associated with rebound tachycardia and hypertension Recommend start at bedtime.
Clonazepam (Klonopin®) Class: benzodiazepine	Anxiolytic. Can also reduce BP.	0.25 - 0.5 mg PO BID-TID PRN	Recommend starting with a low dose at bedtime.
Sertraline (Zoloft®) Class: selective serotonin reuptake inhibitor	Antidepressant and anxiolytic.	50-200 mg PO qd Start 50 mg PO qd, may increase by 25-50 mg/day q wk	Caution: initial increase in suicidality risk in children, teens and young adults
Duloxetine Class: selective serotonin and norepinephrine reuptake inhibitor	Antidepressant and anxiolytic. Effective agent in treating neuropathic pain and in treating fibromyalgia.	60 mg PO qd	Caution: initial increase in suicidality risk in children, teens and young adults
Amphetamines and dextroamphetamine mixed salts (Adderall®) Class: Stimulant	Increases alertness and cognitive function. Indirect vasoconstrictor secondary to sympathetic stimulation.	Dosage will depend on the specific stimulant chosen.	Reduces appetite. Use with caution as it can be addictive. Monitor for worsening tachycardia.
Atomoxetine (Strattera®) Class: selective norepinephringe reuptake inhibitor	Increases attention and reduces brain fog by increasing sympathetic activation.	80 mg PO daily	Effective in controlled settings but not yet examined in a formal clinical trial with long-term follow-up. Monitor for worsening tachycardia.
Amitriptyline (Elavil®) Class: tricyclic antidepressant	Antidepressant and anxiolytic. Effective agent in treating neuropathic pain and in treating fibromyalgia.	25 – 100 mg PO qhs Start 25 mg PO qhs and titrate slowly.	
Cetirizine (Zyrtec®) Class: H1 antihistamine	Helps with co-existing MCAS by reducing histamine release and inflammation.	5 – 10 mg PO qd PRN	Caution: when starting treatment in patients with MCAS, start with ONE drug at a time and slowly add the additional drugs over time.

Cimetidine Class: H2 antihistamine	Helps with co-existing MCAS by reducing histamine release and inflammation. Treats GERD.	1600 mg/day PO divided BID-QID	Caution: when starting treatment in patients with MCAS, start with ONE drug at a time and slowly add the additional drugs over time.
Cromolyn Class: Mast Cell Stabilizer	Helps with co-existing MCAS. Reduces histamine release from mast cells. Can noticeably improve gut inflammation symptoms like bloating, early satiety and abdominal pain.	200 mg PO QID	Caution: when starting treatment in patients with MCAS, start with ONE drug at a time and slowly add the additional drugs over time.
Montelukast Class: Leukotriene inhibitors	Helps with co-existing MCAS. Reduces histamine release from mast cells. Can noticeably improve gut inflammation symptoms like bloating, early satiety and abdominal pain.	10 mg PO qd	Caution: when starting treatment in patients with MCAS, start with ONE drug at a time and slowly add the additional drugs over time.
Bethanechol (Urecholine®) Class: Parasympathomimetic	Treats urinary retention. Increases salivation and gut motility.	10 – 50 mg PO TID-QID	
Gabapentin Class: Anticonvulsant	Effective in treating neuropathic pain	300 – 1200 mg PO TID	May cause drowsiness or confusion
Pregabalin (Lyrica) Class: Anticonvulsant	Effective in treating neuropathic pain	50-100 mg PO TID	May cause drowsiness or confusion
Tramadol Class: partial opioid agonist and SNRI	Effective for chronic pain and neuropathic pain	50 – 100 mg PO q4-6h PRN	
Cyclobenzaprine (Flexeril) Class: Muscle relaxant	Can be utilized to treat muscle spasms in EDS patients. Can also be used to treat fibromyalgia.	Immediate-5-10 mg PO TID ER- 15 mg PO qd	Caution: can exacerbate OI and hypotension