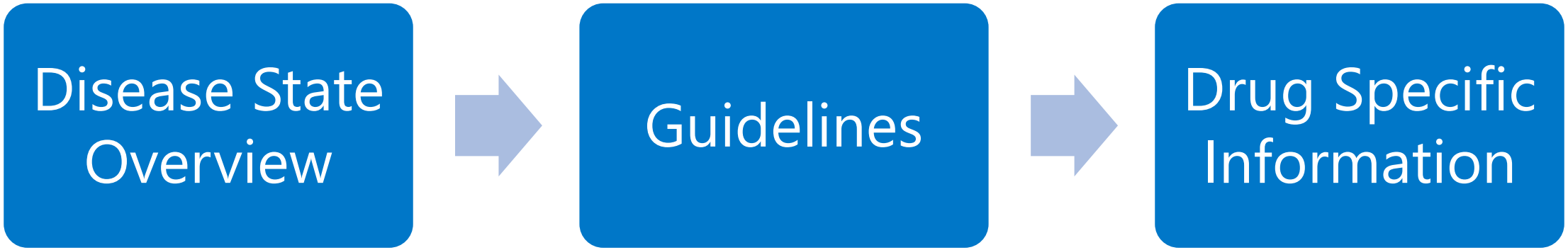
Washington State Drug Utilization Review Board Meeting

April 19, 2023

Marissa Tabile, PharmD

Washington State Health Care Authority

Clinical Topics



Oncology Agents:

Antiadrenals- Oral

Washington State Health Care Authority

Disease State Overview

- Adrenocortical carcinomas are rare aggressive tumors that may be functional or nonfunctional.
  - Forms in the adrenal cortex
  - Functional tumors secrete hormones
    - Virilization
    - Cushing syndrome
  - Non-functional tumors
    - Fever, weight loss
    - Abdominal and back pain
    - Abdominal fullness
- Increasing number of adrenocortical carcinomas are identified in asymptomatic patients as incidental findings

Disease State Overview

- Management
  - Complete surgical resection is the only potentially curative treatment.
    - Patients with potentially resectable stage I to III who are surgical candidates, surgical resection is recommended as initial therapy
  - For patients with resected adrenocortical carcinoma, adjuvant therapy is based upon risk of disease recurrence (tumor stage, completeness of resection, and proliferation rate)

Guidelines

- American Association of Clinical Endocrinologists and American Association of Endocrine Surgeons Medical Guidelines for the Management of Adrenal Incidentalomas (July 2009)
  - Open adrenalectomy by an experienced surgeon is the procedure of choice.
  - Patients should undergo en bloc resection of the involved adrenal gland and surrounding tissues. Lymphadenectomy is required as well.
  - Adjuvant mitotane treatment may be considered post-op in selected patients who have undergone a complete resection of the ACC and have poor prognostic features

Guidelines

- National Cancer Institute: Childhood adrenocortical carcinoma treatment (PDQ) (2020)
  - Aggressive surgical approach toward primary tumor and all metastatic sites is recommended if feasible.
  - Little information available about use of mitotane in children, however response rates appear to be like those seen in adults
  - Radiation therapy in pediatric patients has not been thoroughly investigated. Adrenocortical tumors are generally considered to be radioresistant.

Guidelines

- National Cancer Institute: Childhood adrenocortical carcinoma treatment (PDQ) (2019)
  - Stage I and II
    - Complete surgical removal is the treatment of choice
    - Adjuvant mitotane
  - Stage III
    - Complete surgical removal with or without regional lymph node dissection
    - Radiation therapy for patient with localized but unresectable tumors
    - Chemotherapy with mitotane
    - Chemotherapy with mitotane + streptozotocin OR mitotane + etoposide + doxorubicin + cisplatin

Guidelines

- National Comprehensive Cancer Network (NCCN)- Neuroendocrine and Adrenal Tumors (December 2022)
  - Resectable disease
    - Open adrenalectomy for suspected carcinoma
  - Unresectable or suspected metastatic disease
    - Localized
      - Resect tumor and adjacent lymph nodes
      - If high risk for local recurrence, consider radiation therapy or adjuvant mitotane therapy
    - Locoregional unresectable or metastatic disease
      - Observation with chest CT
      - Resection of primary tumor and metastases if > 90% removable, particularly if functional
      - Local therapy (radiation, thermal ablative, liver-directed)
      - Systemic therapy

Guidelines

- National Comprehensive Cancer Network (NCCN)-Neuroendocrine and Adrenal Tumors (December 2022) -- Principles of Systemic Anti-Tumor Therapy for Locoregional Unresectable/Metastatic Adrenocortical Carcinoma
  - Preferred regimens:
    - Cisplatin + etoposide ± doxorubicin ± mitotane
    - Carboplatin + etoposide ± doxorubicin ± mitotane
  - Other recommended regimens
    - Pembrolizumab ± mitotane
    - Mitotane monotherapy
  - Useful in certain circumstances
    - Streptozocin ± mitotane

Mitotane (Lysodren)

- Approved by FDA in 1970
- Drug Classification
  - Adrenal cytotoxic agent
- Indication
  - Treatment of inoperable, functional or nonfunctional, adrenal cortical carcinoma
- Dosing
  - 2g to 6g PO QD in three of four divided doses. Increase dose incrementally to achieve blood concentration of 14-40 mg/L or as tolerated
- Precautions
  - Black Box Warning: Adrenal crisis
- Availability
  - Tablet: 500 mg

Endocrine and Metabolic Agents:

Hereditary Tyrosinemia Type 1 (HT-1) Agents- Oral

Washington State Health Care Authority

Disease State Overview

- Hereditary tyrosinemia type 1 (HT1) is a severe disorder of tyrosine metabolism
- Occurs in 1 in 12,000 to 1 in 100,000 individuals of Northern European descent
- Caused by deficiency of fumarylacetoacetate hydrolase (FAH)
  - Fumarylacetoacetate (FAA) is a substrate for FAH, accumulates in FAH-deficient hepatocytes and proximal renal tubular cells causing liver and kidney damage
- Clinical symptoms typically begin before 2 years old with majority of children presenting before 6 months with evidence of acute liver failure and renal dysfunction.
- Characterized by severe, progressive liver disease and renal tubular dysfunction.
- HT1 Management
  - Nitisinone
  - Dietary restriction of protein

Guidelines

- Recommendations in the American College of Medical Genetics and Genomics
  - Diagnosis and Treatment of tyrosinemia type I: A US and Canadian consensus group review and recommendations
    - Nitisinone and dietary therapy should be initiated as soon as possible following diagnosis of HT-1. (Evidence quality B)
    - Nitisinone should be initiated at 1.0 mg/kg/day
    - Dietary therapy goal is to restrict phenylalanine and tyrosine
    - Restriction of protein intake is needed

Nitisinone (Orfadin, Nityr)

- Approved by FDA in 2002
- Drug Classification
  - 4-hydoxyphenylpyruvate dioxygenase inhibitor
- Indication
  - Treatment of adult and pediatric patients with HT-1 in combination with dietary restriction of tyrosine and phenylalanine
- Dosing
  - Adult and Pediatric: 0.5 mg/kg PO BID, increase to 0.75 mg/kg BID. May titrate to max dose of 1 mg/kg BID.
- Availability
  - Oral Capsule: 2 mg, 5 mg, 10 mg (generic and Orfadin)
  - Oral Tablet: 2 mg, 5 mg, 10 mg (Nityr)
  - Oral Suspension: 4 mg/1 mL (Orfadin)

Neuromuscular Agents:

Antimyasthenic/Cholinergic Agents

Washington State Health Care Authority

Disease State Overview

- Myasthenia gravis (MG) is an autoimmune neuromuscular disorder that causes weakness in the muscles.
  - Weakness is due to antibody-mediated immunologic attack directed at protein in the postsynaptic membrane of the neuromuscular junction.
  - Most common disorder of neuromuscular transmission
- Clinical manifestations vary from mild to severe with respiratory failure in others.
- Two clinical forms of MG:
  - Ocular- weakness limited to eyelids and extraocular muscles
  - Generalized- weakness involves variable combination of ocular, bulbar, limb, and respiratory muscles.

Disease State Overview

- Treatments
  - Symptomatic treatment- increase ACh available at the neuromuscular junction
  - Chronic immunotherapies- target underlying immune dysregulation
    - Glucocorticoids and nonsteroidal immunosuppressive and immunomodulatory agents
  - Rapid immunomodulating treatments
  - Surgical treatment (thymectomy)
- Goals of therapy are to help make patients minimally symptomatic or better while minimizing side effects from medications

Disease State Overview

- Lambert-Eaton Myasthenic Syndrome (LEMS)
  - Rare autoimmune disorder of the neuromuscular junction
  - Miscommunication between the nerve cell and the muscles leading to muscle weakness
  - Two different classes:
    - LEMS associated with small cell lung cancer
    - LEMS without cancer
  - Characterized by weakness and fatigue especially of the muscles in the legs and arms
  - Approximately 400 known cases of LEMS in the U.S.
  - LEMS is often misdiagnosed as MG but have key differences:
    - Eye muscle weakness is mild and not the only symptom
    - Severe respiratory muscle weakness is rare
    - Autonomic symptoms that affect LEMS patients are not present in myasthenia gravis
  - Treatment depends on presence of associated cancer.
    - Usually aimed at improving quality of life
    - Symptomatic treatment

Guidelines

- American Academy of Neurology- International Consensus Guidance for Management of Myasthenia Gravis (2020 Update)
  - Ophthalmoparesis or ptosis in ocular MG that does not respond to ACh agents should be treated with immunosuppressant agents
  - Corticosteroids should be used as the initial immunosuppressive agent in ocular MG. Steroid-sparing immunosuppressive agents may be needed when corticosteroids alone are ineffective
  - Rituximab should be considered an early option for patients with muscle specific kinase-Ab+ MG who do not have an adequate response to initial immunotherapy.
  - Eculizumab should be considered in treatment of severe, refractory AChR-positive generalized MG.
  - Eculizumab should be considered after unsuccessful trials of immunotherapies

Pyridostigmine Bromide (Mestinon, Regonol, Mestinon Timespan)

- First approved by the FDA in 1955 (Mestinon)
- Mechanism of Action
  - Cholinesterase inhibitor
- Indications
  - Treatment of myasthenia gravis
  - Reversal of neuromuscular blockade
- Dosing for MG
  - 600 mg PO QD, spaced throughout the day. Severe cases may require up to 1500 mg QD.
  - ER Tablets: 180-540 mg PO QD or BID.
- Availability
  - Oral Solution: 60 mg/5 mL (generic, Mestinon)
  - Tablet: 30mg and 60 mg (generic)
  - Extended release tablet: 180 mg (generic, Mestinon Timespan)
  - Injection Solution: 5 mg/1mL (Regonol)

Amifampridine (Firdapse)

- Approved by the FDA in 2018
- Drug Classification
  - Potassium Channel Blocker
- Indication
  - For the treatment of LEMS in adults and pediatric patients 6 years of age and older
- Dosing
  - 6 years or older, less than 45 kg: 5-15 mg/day PO in 3 or 4 divided doses. Max dose= 40 mg/day
  - 6 years or older, 45 kg or greater + Adults: 15-30 mg/day PO in 3 or 4 divided doses. Max dose= 80 mg/day
- Precautions
  - Seizures
- Availability
  - Oral Tablet: 10 mg

Gastrointestinal Agents:

Short Bowel Syndrome

Washington State Health Care Authority

Disease State Overview

- Short bowel syndrome (SBS) is a malabsorptive condition often caused by massive resection of the small intestine.
  - Surgical resection for Crohn's disease, malignancy, trauma, radiation, or vascular insufficiency.
- SBS is the most common cause of chronic intestinal failure.
- Affects about 3 out of 1,000,000 people per year.
- Main symptom of SBS is diarrhea. Other signs and symptoms may include bloating, cramping, fatigue, foul-smelling stool, heartburn, vomiting, and weakness.

Disease State Overview

- Management of Acute Phase
  - Characterized by high intestinal fluid losses and metabolic derangements.
  - Starts immediately after resection
  - During initial 3-4 weeks after resection, management goals are to stabilize large fluid and electrolyte losses, and maintain fluid and acid/base balance
    - IV Replacement with NS, K+, and Mg2+
    - Acid Suppression-PPI or H2RA
    - Parenteral Nutrition
    - Enteral feeding

Disease State Overview

- Management in Adaptation Phase
  - Characterized by structural and functional changes to the remaining small bowel and colon in order to increase absorption and slow gastrointestinal transit.
  - Usually lasts one to two years
  - Patients transitioned to oral feedings using stepwise approach over weeks to months
  - Fluid management- goal is to maintain urine output of at least 1L/day
    - ABX for small intestinal overgrowth
    - Ocretotide

Disease State Overview

- Intestinal Failure
  - Reduction in GI function below the minimum necessary for absorption of macronutrients, water, and electrolytes.
  - May be transient or permanent
  - SBS associated failure reverses completely in about 50% of adults within the first two years.
  - GLP-2 analogues for patients unable to be weaned from parenteral nutrition

Guidelines

- American Gastroenterological Association- Management of Short Bowel Syndrome (SBS) (published June 11, 2022) (Best Practice Advice)
  - Initial comprehensive nutritional assessment should be performed by a dietitian experienced in SBS.
    - Long term monitoring should include electrolytes, fluid balance, weight changes, serum micronutrient levels, and bone density
  - Dietary therapy should focus on maintaining compensatory hyperphagia
  - Parenteral nutrition should be initiated and adjusted to meet the patient's fluid, electrolyte, energy, protein, and micronutrient needs
  - Fluids should be given to compensate for all losses and maintain a urine output of at least 1L/day.
    - Glucose-electrolyte oral rehydration solution (ORS)

Guidelines

- American Gastroenterological Association- Management of Short Bowel Syndrome (SBS) (published June 11, 2022)
  - Antimotility and antisecretory agents (PPIs, H2RAs) are frequently necessary to control stool losses.
  - Somatostatin analog (Octreotide)- generally reserved for patients with large volume losses where fluid and electrolyte management is problematic
  - Antidiarrheals help to reduce intestinal motility but also cause a slight reduction in intestinal secretion
    - Loperamide, diphenoxylate with atropine, codeine, and tincture of opium
    - Loperamide is preferred over opiate drugs as it is not addictive.
  - Sustained and delayed release medications should be avoided in patients with SBS. Most PO medications are absorbed within the proximal jejunum and can be used in SBS patients.

Guidelines

- American Gastroenterological Association- Management of Short Bowel Syndrome (SBS) (published June 11, 2022)
  - Glucagon-like-peptide 2 should be employed only after optimizing diet and conventional treatments have been tried in patients with SBS with intestinal failure.

Teduglutide (Gattex)

- Approved by the FDA in 2012
- Drug Classification
  - Glucagon-like-peptide 2 (GLP-2) analog
- Indication
  - Treatment of adults and pediatric patients 1 year of age and older with SBS who are dependents on parenteral support
- Dosing
  - Adult and Pediatric: 0.05 mg/kg subQ QD
- Availability
  - Kit- Prefilled syringes with diluent, 5 mg vials of Gattex, dosing syringes, alcohol swabs

Hematological Agents-Misc:

Aminolevulinate Synthase 1-Directed SiRNA

Washington State Health Care Authority

Disease State Overview

- Acute hepatic porphyria (AHP) is a family of rare, genetic diseases characterized by potentially life-threatening attacks with chronic manifestations that negatively impact quality of life and daily functioning.
  - Acute intermittent porphyria (AIP)
  - Hereditary coproporphyria (HCP)
  - Variegate porphyria (VP)
  - ALA dehydratase-deficiency porphyria (ADP)
- Caused by altered activities of enzymes within the heme biosynthetic pathway
- Can cause neurovisceral manifestations (abdominal pain, motor and sensory peripheral neuropathy, neuropsychiatric) or cutaneous photosensitivity (chronic/blistering or acute/non-blistering)

Disease State Overview

- Most common presenting symptom is neuropathic abdominal pain
- Acute intermittent porphyria (AIP) is the most common of the porphyrias
- Management
  - Goal of therapy for an acute attack is to abate the attack as soon as possible and provide symptomatic and supportive treatment until the attack subsides.
  - Prevention of attacks is managed by avoiding exacerbating factors
    - Medications, smoking and alcohol, diet, treatment and prevention of infections, attention to iron stores, suppression of menstrual cycle-related attacks

Guidelines

- American Gastroenterological Association- Clinical Practice Update on Diagnosis and Management of Acute Hepatic Porphyrias: Expert Review (published January 13, 2023) (Best Practice Advice)
  - Women aged 15-50 years with unexplained, recurrent severe abdominal pain without clear etiology should be considered for screening for AHP
  - Management of acute attacked should include pain management, antiemetics, management of systemic arterial hypertension, tachycardia, hyponatremia, and hypomagnesemia if present in addition to intravenous hemin
  - Prophylactic heme therapy or givosiran should be considered in patients with recurrent attacks (four or more per year).

Guidelines

- American Porphyria Foundation- Acute Porphyrias: Emergency Room Recommendations
  - Most effective therapy for an acute attack is Hemin (Panhematin®)
  - Harmful drugs should be stopped immediately and avoided
  - IV glucose loading should be used for mild attacks
  - Hyponatremia, hypomanesemia, and electrolyte imbalances should be corrected and monitored
  - Narcotic analgesics can be used for pain
  - Phenothiazines- nausea, vomiting, or agitation
  - Beta-blockers- control tachycardia and systemic aterial hypertension in patient without hypovolemia
  - Gabapentin, benzodiazepines, and vigabatrin are considered safe to help treat seizures

Givosiran (Givlaari)

- Approved by the FDA in 2019
- Drug Classification
  - Aminolevulinate synthase 1-directed small interfering RNA
- Indication
  - Treatment of adults with acute hepatic porphyria (AHP)
- Dosing
  - 2.5 mg/kg subQ once monthly
- Availability
  - 189 mg/mL single dose vial

Ophthalmic Agents:

Nerve Growth Factors

Washington State Health Care Authority

Disease State Overview

- Neurotrophic Keratitis (NK) is a corneal degenerative disease characterized by a reduction/absence of corneal sensitivity.
- Corneal innervation by the trigeminal nerve is impaired
- Prevalence is less than 50 out of 100,000 people
- Management
  - Promote corneal healing and avoid complications
  - Depends on the disease stage
    - Stage I: Improve quality and transparency of epithelium and to avoid epithelial breakdown.
    - Stage II: Promote persistent epithelial defect healing and prevent development of a corneal ulcer.
    - Stage III: Ulcer healing and prevention of corneal perforation

Guidelines

- Clinical Ophthalmology- Diagnosis and management of neurotrophic keratitis (March 2014)
  - Treatment of NK should be based on disease severity.
  - Use of preservative-free artificial tears may help improve the corneal surface at all stages of disease severity.
  - Steroids may increase the risk of corneal melting and perforation by inhibiting stromal healing and should be used with caution
  - Topical NSAIDs should be avoided
  - In event of stromal melting, topical collagenase inhibitors (N-acetylcysteine) and systemic tetracycline or medroxyprogesterone may be considered.
  - Use of topical ABX eye drops to prevent infection in stages 2 and 3 is recommended.

Cenegermin-bkbj (Oxervate)

- Approved by FDA in 2018
- Drug Classification
  - Recombinant human nerve growth factor
- Indication
  - Treatment of neurotrophic keratitis
- Dosing
  - One drop in the affected eye(s), six times/day at 2-hour intervals for eight weeks
- Availability
  - Multiple dose vial: 0.002% (20 mcg/mL)

Vasopressors:

Misc- Oral

Washington State Health Care Authority

Disease State Overview

- Orthostatic hypotension (OH) is a reduction in systolic blood pressure of at least 20 mmHg or a reduction in diastolic blood pressure of at least 10 mmHg.
  - Usually occurs within the first three minutes of standing or head-up tilt on a tilt table
- OH that occurs when the baroreflex is impaired is called neurogenic OH.
- Management
  - Attenuate symptom burden, risk of falls, and reduce target organ damage and mortality
  - Nonpharmacologic measures for asymptomatic patients or mild OH patients
  - Medication is added for patients who do not respond to nonpharmacologic measures

Disease State Overview

- Nonpharmacological measures
  - Removal of offending medications
  - Increase in salt and water intake
  - Lifestyle modification
    - Arise slowly from supine to seated to standing
    - Limit walking in very hot or humid weather, avoid overheating
    - Raise head of the bed 30-45°
  - Dietary interventions
  - Use of compression stockings and abdominal binders

Guidelines

- American Academy of Neurology: Continuum- Management of orthostatic hypotension (2020)
  - Two strategies: expanding intravascular volume and increasing peripheral vascular resistance with other medications
  - Patients with persistent OH symptoms where nonpharmacological measures are insufficient, suggest a regimen that starts with fludrocortisone to augment volume and provide symptom relief
  - Patients with symptoms of OH unresponsive to nonpharmacologic measures such as volume augmentation, suggest short-acting vasoconstrictor agent (midodrine or droxidopa) or atomoxetine.

Droxidopa (Northera)

- Approved by FDA in 2014
- Drug Classification
  - Sympathomimetic
- Indication
  - For the treatment of orthostatic dizziness, lightheadedness, or the “feeling that you are about to black out” in adult patients with symptomatic neurogenic orthostatic hypotension caused by primary autonomic failure.
- Dosing
  - 100 mg PO TID. Titrate by 100 mg TID up to max dose of 600 mg TID
- Precautions
  - Black Box Warning: Supine Hypertension
- Availability
  - Oral Capsule: 100 mg, 200 mg, 300 mg (generic, Northera)

Midodrine

- Approved by FDA in 1996
- Drug Classification
  - Sympathomimetic
- Indication
  - Symptomatic orthostatic hypotension
- Dosing
  - 10 mg PO TID
- Precautions
  - Bradyarrhythmia
  - Black Box Warning: Supine hypertension
- Availability
  - Oral Tablet: 2.5 mg, 5 mg, 10 mg (generic)

References

- Adrenocortical carcinoma treatment (PDQ®)–health professional version. Adrenocortical Carcinoma Treatment (PDQ®)–Health Professional Version. https://www.cancer.gov/types/adrenocortical/hp/adrenocortical-treatment-pdq#_38. Accessed April 6, 2023.
- AGA clinical practice update on management of short bowel syndrome https://www.cghjournal.org/article/S1542-3565(22)00561-4/fulltext. Accessed April 6, 2023.
- Amfamprifine. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Bunya VY, Woodward MA, Rabiolo A, et al. Neurotrophic keratitis. EyeWiki. https://eyewiki.aao.org/Neurotrophic_Keratitis. Published October 29, 2022. Accessed April 6, 2023.
- Cenegermine-bkbj. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Childhood adrenocortical carcinoma treatment (PDQ®)–health professional version. Childhood Adrenocortical Carcinoma Treatment (PDQ®)–Health Professional Version. https://www.cancer.gov/types/adrenocortical/hp/child-adrenocortical-treatment-pdq#_820. Accessed April 6, 2023.
- Chinsky JM, Singh R, Ficicioglu C, et al. Diagnosis and treatment of tyrosinemia type I: A US and Canadian Consensus Group Review and recommendations. Genetics in medicine : official journal of the American College of Medical Genetics. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5729346/. Published December 2017. Accessed April 6, 2023.
- Droxidopa. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Givosiran. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Lambert-Eaton myasthenic syndrome - symptoms, causes, treatment: Nord. Lambert-Eaton Myasthenic Syndrome. https://rarediseases.org/rare-diseases/lambert-eaton-myasthenic-syndrome/. Published January 12, 2023. Accessed April 6, 2023.
- Midodrine. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Mitotane. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com

References

- Narayanaswami P, Sanders DB, Wolfe G, et al. International consensus guidance for management of Myasthenia Gravis. Neurology. https://n.neurology.org/content/96/3/114. Published January 19, 2021. Accessed April 6, 2023.
- Neuroendocrine and adrenal tumors, version 2.2021, NCCN clinical practice guidelines in oncology. Journal of the National Comprehensive Cancer Network : JNCCN. https://pubmed.ncbi.nlm.nih.gov/34340212/. Published December 21, 2022. Accessed April 6, 2023.
- Nitisinone. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Pimstone NR, Anderon KE, Freilich BL. Acute Porphyrias: Emergency room recommendations. https://www.porphyriafoundation.org/apf/assets/File/public/professionals/ERGuidelinesAcutePorphyria.pdf. Accessed April 7, 2023.
- Pyridostigmine. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Sacchetti, M., Lambiase, A. Diagnosis and management of neurotrophic keratitis. Clinical Ophthalmology 2014;8: 571-9.
- Teduglutide. Merative Micromedex. Merative. Ann Arbor, MI. Accessed April 6, 2023. http//www.micromedexsolutions.com
- Wang B, Bonkovsky HL, Lim JK, Balwani M. AGA Clinical Practice Update on Diagnosis and Management of Acute Hepatic Porphyrias: Expert Review. Clinical Practice Update. https://www.gastrojournal.org/article/S0016-5085(22)01356-7/fulltext. Published January 13, 2023. Accessed April 6, 2023.
- Zeiger MA, Thompson GB, Duh Q-Y, et al. American Association Of Clinical Endocrinologists And American Association Of Endocrine Surgeons Medical Guidelines For The Management Of Adrenal Incidentalomas. Endocrine Practice. https://www.sciencedirect.com/science/article/pii/S1530891X20428587?via%3Dihub. Published December 28, 2020. Accessed April 6, 2023.