Medication Audit Criteria and Guidelines

Duloxetine (Cymbalta®)

PEFC Approved: August 2019

Indications

- Anxiety Disorders
- Chronic Musculoskeletal Pain
- Depressive Disorders
- Diabetic Peripheral Neuropathic Pain (DPNP)
- Fibromyalgia

Black Box Warning

- Increased risk of suicidal thinking and behavior in children, adolescents and young adults (≤ 24 years) taking antidepressants. Monitor for worsening and emergence of suicidal thoughts and behaviors

Contraindications

Absolute

- Chronic liver disease or cirrhosis
- Duloxetine initiation in a patient who is being treated with MAOIs such as linezolid or intravenous methylene blue (increased risk of serotonin syndrome)
- Duloxetine within 14 days of stopping an MAOI intended to treat psychiatric disorders
- Heavy alcohol use

- History of anaphylactic reaction or similarly severe significant hypersensitivity to the medication prescribed
- Monoamine Oxidase Inhibitors (MAOIs)—MAOIs intended to treat psychiatric disorders with duloxetine or within 5 days of stopping treatment with duloxetine (increased risk of serotonin syndrome)
- Renal impairment, severe (GFR < 30 mL/min)
- Uncontrolled narrow-angle glaucoma

Relative

- Pregnancy/nursing mothers

Precautions

- Abnormal bleeding
- Alcohol use
- Bipolar disorder in the absence of a mood stabilizer
- Diagnosis of a seizure disorder or history of seizures
- Discontinuation syndrome
- Glucose control in diabetes
- Hepatic function impairment
- Hypertension
- Orthostatic hypotension, falls and syncope
- Renal function impairment
- Suicidal thoughts and behaviors in children, adolescents, and young adults (≤ 24 years)
- Tachycardia
- Urinary hesitation and retention; conditions that slow gastric emptying

Adverse Reactions

Side Effects Which Require Medical Attention

- Elevated liver enzymes
- Hypersensitivity reaction (rash)
- Hypertension or hypotension
- Increased suicidality
- Seizure
- Serotonin syndrome
- Severe GI distress
- Sexual dysfunction
- Tachycardia
- Withdrawal symptoms

Pregnancy and Breastfeeding

- See relative contraindication
- Review product-specific labeling. Consider risks/benefits in reviewing medication-specific labeling.

Drug Interactions of Major Significance

- Alcohol
- Drugs that interfere with hemostasis (NSAIDs, aspirin, warfarin)
- MAOIs
- Potent CYP1A2 inhibitors should be avoided (fluvoxamine, ciprofloxacin)
- Serotonergic drugs (SSRIs, SNRIs, triptans, TCAs, fentanyl, lithium, tramadol, tryptophan, buspirone, amphetamines, St. John's wort)
- Thioridazine

See Table A: Cytochrome P450 Drug Metabolism/Inhibition

Duloxetine:

Substrate of 1A2 and 2D6

Inhibitor of 2D6 (moderate)

Special Populations

- FDA approved for generalized anxiety disorder in children ≥ 7 years old
- Geriatric: lower initial dosing
- Renal impairment: avoid with GFR < 30 mL/min
- Hepatic impairment: avoid use in patients with chronic liver disease or cirrhosis

Patient Monitoring Parameters

- Height and weight – baseline, monthly and as clinically indicated (children, adolescents)
- Hepatic function—baseline and as clinically indicated
- Measure blood pressure before starting treatment and periodically throughout treatment
- Monitor for emergence of suicidal ideation or behavior
- Pregnancy test—baseline and as clinically indicated
- Sodium level in high-risk patients (e.g., older than 65 years, previous history of antidepressant-induced hyponatremia, low body weight, concomitant use of thiazides or other hyponatremia-inducing agents, experiencing symptoms of hyponatremia), baseline, 4 weeks and as clinically indicated

Dosing

- See HHSC Psychiatric Drug Formulary for dosage guidelines.
- Exceptions to maximum dosage must be justified as per medication rule.