

Review created for:

Alice Carroll

Feb 17, 2022

Generated by:

Christopher Robin

Patient Details:

Alice Carroll

PHN:

DOB: 12/14/1940

Age: 81

Sex: Female

Height: 65in

(last updated: 12/13/2021)

Weight: 165lbs

(last updated: 12/13/2021)

Cirrhosis: No

(last updated: 12/13/2021)

Elevated liver enzymes: No

(last updated: 12/13/2021)

Hepatic Impairment Scale (Child-Pugh):
Mild liver disease (Child Pugh A)

(last updated: 12/13/2021)

Hepatitis: No

(last updated: 12/13/2021)

On hemodialysis: No

(last updated: 12/13/2021)

On peritoneal dialysis: No

(last updated: 12/13/2021)

Serum Creatinine:

eGFR (mL/min): 45




(last updated: 12/13/2021)

Note to Physician:

Dear Dr. Patrick,
I saw Ms. Carroll for a scheduled medication review today. Overall she is doing well. Please see my notes below regarding her current codeine and lorazepam prescriptions. Thank you.

Report Message Categories




The following review message categories are included in this report:

-  Pharmacogenetic Information
-  Warnings and Adjustments
-  Deprescribing Opportunities

Known Allergies and Reactions

No known medication allergies (last updated Feb 17, 2022)



General Review Messages

-  Benzodiazepines taken in combination with opioids are associated with an increased risk of overdose. Avoid this combination.
-  This medication list includes one or more medications that cause QTc prolongation and/or torsades de pointes (TdP). See the individual medication warnings for risk categorization. All identified medications should be avoided in those with congenital long QT due to high risk of TdP.
-  Increased risk of falls and fractures due to use of 3 or more central nervous system (CNS) active drugs. Consider minimizing the number of CNS-active drugs.

Recommended Actions**Acute Pain****Codeine sulfate 30 mg Oral Tablet****Switch**

Consider switching to OTC acetaminophen.





Current dose: 1 tablet every 4 to 6 hours

-  Risk of drug accumulation and toxicity due to kidney impairment (eGFR <50 mL/min). A lower than standard dose of Codeine may be required. Review dosing and monitoring plans with patient and relevant health care providers.
-  Risk of drug accumulation and toxicity with Codeine use due to CYP2D6 ultra-rapid metabolizer status. Assess the safety and necessity of continuing this medication.

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-  Regularly conduct risk-benefit analysis
Opioids increase risk of cognitive impairment, respiratory depression, dependency, immunosuppression, suppression of sex hormones, and constipation. Patients should be regularly assessed to balance risks and benefits of opioid therapy, with a goal of using the lowest effective dose, including discontinuation if appropriate.
-  CNS-active medication
-  Monitor sodium level closely when starting or changing dosages.
This medication may cause or worsen hyponatremia or syndrome of inappropriate antidiuretic hormone (SIADH). Monitor sodium level closely when starting or changing dosages.
-  If used regularly, should be taken with a laxative
Opioids that are used regularly (as opposed to on an as-needed basis) increase the risk of severe constipation, and a regular laxative may be needed to prevent this.




Insomnia

Ativan 1 mg Oral Tablet

Deprescribe

Consider discontinuing - can discuss tapering and discontinue options with patient.

Current dose: 1 tablet every day at bedtime

-  Increased risk of falls with Lorazepam use due to CYP2C9 poor metabolizer status.
-  Alternative agents have superior risk/benefit profile
All benzodiazepines increase risk of cognitive impairment, delirium, falls, fractures, and motor vehicle crashes in older adults. May be appropriate for some conditions, but consider alternative treatment strategies if possible. Tapering may be required if discontinuing.
-  CNS-active medication



No Recommended Actions

Chronic Pain - Neuropathic Pain

Amitriptyline HCl 10 mg Oral Tablet

No Change




Current dose: 2 tablets three times daily

-  Risk of drug accumulation and toxicity due to liver disease. Lower than standard dose of Amitriptyline may be required. Review dosing and monitoring plans with patient and relevant health care providers.
-  Risk of reduced response with Amitriptyline use due to CYP2D6 ultra-rapid metabolizer status. Assess the effectiveness of this medication.

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-  Conditional risk of Torsades de Pointes
Amitriptyline is associated with TdP but only under certain conditions (e.g. excessive dose, hypokalemia, drug interactions) OR by creating conditions that facilitate or induce TdP (e.g. inhibiting metabolism of a QTc prolonging drug or causing electrolyte disturbance). It also poses a high risk of TdP for patients with congenital long QT syndrome.
-  CNS-active medication
-  Monitor sodium level closely when starting or changing dosages.
This medication may cause or worsen hyponatremia or syndrome of inappropriate antidiuretic hormone (SIADH). Monitor sodium level closely when starting or changing dosages.

Gastroesophageal Reflux Disease

Protonix 40 mg Delayed Release Oral Granules

No Change

Current dose: 1 capsule once daily

-  Lower than standard maintenance doses of Pantoprazole may be effective due to CYP2C19 poor metabolizer status. Review dosing and monitoring plans with patient and relevant health care providers.
-  Discontinue if no longer needed, or consider an alternative drug for long term treatment.
Long-term use of proton pump inhibitors (PPI) is associated with clostridium difficile infection, osteoporosis, and hypomagnesaemia. May be appropriate when used for long term use in Barrett's esophagus, gastro-protection with chronic NSAID use, severe esophagitis, or documented history of bleeding GI ulcer. Discontinue if no longer needed.
-  Conditional risk of Torsades de Pointes
Pantoprazole is associated with TdP but only under certain conditions (e.g. excessive dose, hypokalemia, drug interactions) OR by creating conditions that facilitate or induce TdP (e.g. inhibiting metabolism of a QTc prolonging drug or causing electrolyte disturbance). It also poses a high risk of TdP for patients with congenital long QT syndrome.

Conditions Without Medications

Bipolar 1 Disorder

Chronic Pain - Low Back Pain

Depression

Osteoporosis

Important Review Limitations

Medication review warnings, adjustments, and contraindications are based on kidney function, liver function, pharmacogenetics, age, and weight. Kidney impairment stratification is based on eGFR (if product monographs categorize kidney impairment by CrCl, this has been directly converted to eGFR which may not be accurate for all patients). For full dosage information and preferred medication treatment options for each condition, use the TreatGx precision prescribing software.