Algorithm for Filtering Drug-Drug Interaction Alerts for

Warfarin – Selective Serotonin Reuptake Inhibitors /

Selective Norepinephrine Reuptake Inhibitors

Developed by:

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1. Identify the SSRI/ SNRI drug products (Rx Cui)
   1. Selective serotonin reuptake inhibitors or Selective norepinephrine reuptake inhibitors using RxNorm codes
      1. Citalopram: 2556
      2. Escitalopram: 321988
      3. Fluoxetine: 4493
      4. Fluvoxamine: 42355
      5. Levomilnacipran: 1433212
      6. Paroxetine: 32937
      7. Sertraline: 36437
      8. Trazodone: 10737
      9. Desvenlafaxine: 734064
      10. Duloxetine: 72625
      11. Milnacipran: 588250
      12. Venlafaxine: 39786
      13. Vilazodone: 1086769
2. Create comma delimited list of RxCUI for SSRI/SNRI.
3. Return to RxNORM CPCS and use the following query to find the clinical drugs for your drug ingredient concept set:

SELECT RXCUI,STR FROM rxnorm\_cpcs.RXNCONSO

WHERE TTY = 'SCD' and RXCUI in

(SELECT RXCUI2 FROM rxnorm\_cpcs.RXNREL

WHERE RELA = 'consists\_of' and RXCUI1 in

(SELECT RXCUI2 FROM rxnorm\_cpcs.RXNREL

WHERE RELA = 'has\_ingredient' and RXCUI1 in (**COMMA-DELIMITED LIST GOES HERE**)))

ORDER BY STR

;

Restrict to medications for human consumption

1. Identify warfarin via RxNorm: RXCUI: 11289
   1. Identify clinical drug components
   2. Remove products not available in US
   3. Identify clinical drug or pack with warfarin
2. Identify products that are systemic corticosteroids
   1. Systemic corticosteroids using RxNorm codes:
      1. Betamethasone: 1514
      2. Cortisone: 2878
      3. Dexamethasone: 3264
      4. Fludrocortisone: 4452
      5. Hydrocortisone: 5492
      6. Methylprednisolone: 6902
      7. Prednisolone: 8638
      8. Prednisone: 8640
      9. Triamcinolone: 10759
   2. Exclude topical, ophthalmic, and otic preparations. Keep oral, IM, IV formulations. Alert if on systemic corticosteroids
   3. Alert if on corticosteroids
3. Determine if patient on aldosterone antagonists
   1. Aldosterone antagonist using RxNorm codes:
      1. Eplerenone (298869)
      2. Spironolactone (9997)
   2. Alert if on aldosterone antagonist
4. Determine if patient has history of gastrointestinal bleeding
   1. ICD-9 codes:
      1. 578.0 – Hematemesis
      2. 532.00 – Acute bleeding duodenal ulcer
      3. 578.9 – Gastrointestinal hemorrhage
      4. 530.21 – Ulcer of esophagus with bleeding
      5. 530.82 – Esophageal hemorrhage
      6. 531.0 – Acute gastric ulcer with hemorrhage
      7. 531.2 – Acute gastric ulcer with hemorrhage and perforation
      8. 531.4 – Chronic gastric ulcer with hemorrhage
      9. 531.6 – Chronic or unspecified gastric ulcer with hemorrhage and perforation
      10. 532.0 – Acute duodenal ulcer with hemorrhage
      11. 532.2 - Acute duodenal ulcer with hemorrhage and perforation
      12. 532.4 – Chronic or unspecified duodenal ulcer with hemorrhage
      13. 532.6 - Chronic or unspecified duodenal ulcer with hemorrhage and perforation
      14. 533.0 – Acute peptic ulcer with hemorrhage
      15. 533.2 - Acute peptic ulcer with hemorrhage and perforation
      16. 533.4 – Chronic peptic ulcer with hemorrhage
      17. 533.6 - Chronic peptic ulcer with hemorrhage and perforation
      18. 534.0 – Acute gastrojejunal ulcer with hemorrhage
      19. 534.2 - Acute gastrojejunal ulcer with hemorrhage and perforation
      20. 534.4 – Chronic gastrojejunal ulcer with hemorrhage
      21. 534.6 - Chronic gastrojejunal ulcer with hemorrhage and perforation
   2. ICD-10 codes:
      1. K92.2 – Gastrointestinal hemorrhage, unspecified
      2. K25.0 – Acute gastric ulcer with hemorrhage
      3. K25.2 – Acute gastric ulcer with hemorrhage and perforation
      4. K25.4 – Chronic or unspecified gastric ulcer with hemorrhage
      5. K25.6 – Chronic or unspecified gastric ulcer with both hemorrhage and perforation
      6. K26.0 – Acute duodenal ulcer with hemorrhage
      7. K26.2 - Acute duodenal ulcer with hemorrhage and perforation
      8. K26.4 – Chronic duodenal ulcer with hemorrhage
      9. K26.6 – Chronic duodenal ulcer with hemorrhage and perforation
      10. K27.0 – Acute peptic ulcer, site unspecified, with hemorrhage
      11. K27.2 - Acute peptic ulcer, site unspecified, with hemorrhage and perforation
      12. K27.4 – Chronic peptic ulcer, site unspecified, with hemorrhage
      13. K27.6 – Chronic peptic ulcer, site unspecified, with hemorrhage and perforation
      14. K28.0 – Acute gastrojejunel ulcer with hemorrhage
      15. K28.2 - Acute gastrojejunel ulcer with hemorrhage and perforation
      16. K28.4 – Chronic gastrojejunel ulcer with hemorrhage
      17. K28.6 – Chronic Acute gastrojejunel ulcer with hemorrhage and perforation
      18. K29.01 – Acute gastritis with bleeding
      19. K29.31 – Chronic gastritis with bleeding
      20. K29.41 – Chronic atrophic gastritis with bleeding
      21. K29.51 – Unspecified chronic gastritis with bleeding
      22. K29.61 – Other gastritis with bleeding
      23. K29.71 – Gastritis, unspecified, with bleeding
      24. K29.81 – Duodenitis with bleeding
      25. K29.91 – Gastroduodenitis, unspecified, with bleeding
      26. K31.811 – Angiodysplasia –of stomach and duodenum with bleeding
      27. K31.82 – Dieulafoy lesion (hemorrhagic) of stomach and duodenum
   3. SNOMED CT codes
      1. 61401005 - Gastric hemorrhage
   4. Alert if history of gastrointestinal bleeding
5. Determine if the age of the patient is greater than 65 years of age.
   1. Alert if patient age is > 64 years