

1. We would like to request a list of all HIV patients ≥ 50 years of age that had a documented fall (per ICD-10 code) between the period of September 1, 2012 to August 31, 2017.

As a control, we would like to have age and time matched patients that did not fall (nor had altered mental status).

2. We would like to request a list of all HIV patients ≥ 50 years of age that had documented Altered Mental Status (per ICD-10 code) between the period of September 1, 2012 to August 31, 2017.

As a control, we would like to have age and time matched patients that did not have altered mental status (nor falls?).

The data that we would like from these patients (**at the time of fall or altered mental status**) are:

- MRN¹
- Age (years)
- Gender
- Race/Ethnicity
- Patient taking ≥ 5 medications (yes or no)
- Charlson index²
- VACS index³
- CD4 T cell count (cells/mm³; current)
- CD4 T cell count (cells/mm³; nadir)
- HIV viral load (copies/mL)
- Duration of HIV infection (years)
- Active antiretroviral medications
- Number of medications total (non-antiretrovirals)
- Number of BEERS medications⁴
- Benzodiazepines⁵ (yes or no)
- Narcotics⁶ (yes or no)

¹ MRN: we are okay with withholding MRN while IRB approval is pending

² Charlson index (yes or no for presence of these):

- Diabetes
- Diabetes with end-organ damage
- Mild liver disease
 - Diagnosis of chronic liver disease (without diagnosis of decompensated cirrhosis)
- Moderate to severe liver disease
 - Diagnosis of chronic cirrhosis
- Any leukemia, lymphoma, or localized solid tumor
- Metastasis solid tumor
- AIDS
- Moderate to severe chronic kidney disease (CKD)
 - GFR (mL/min/1.73m²) 30-59 = moderate

- GFR <29 = severe
- CHF
- Myocardial infarction
- COPD
- Peripheral vascular disease
- CVA or TIA
- Dementia
- Hemiplegia
- Connective tissue disease
- Peptic ulcer disease

²VACS index:

- Hemoglobin (g/dL)
- FIB-4 Index (AST, platelet count, ALT)
- eGFR (mL/min)
- Hepatitis C co-infection
- Yes or no

⁵Benzodiazepines

- Alprazolam
- Clonazepam
- Diazepam
- Flurazepam
- Lorazepam
- Midazolam
- Triazolam
- Clorazepate
- Estazolam
- Quazepam
- Temazepam
- Chlordiazepoxide
- Clobazam
- Oxazepam

⁶Narcotics

- Opium
- Heroin
- Oxycodone
- Hydrocodone
- Morphine
- Hydromorphone
- Fentanyl
- Codeine
- Methadone
- Meperidine
- Oxymorphone

- Tramadol
- Carfentanil
- Buprenorphine

⁴ 2015 AGS BEERS Criteria for Potentially Inappropriate Medication Use in Older Adults

Anticholinergics
First-generation antihistamines
Brompheniramine
Carbinoxamine
Chlorpheniramine
Clemastine
Cyproheptadine
Dexbrompheniramine
Dexchlorpheniramine
Dimenhydrinate
Diphenhydramine (oral)
Doxylamine
Hydroxyzine
Meclizine
Promethazine
Triprolidine
Antiparkinsonian agents
Benzotropine (oral)
Trihexyphenidyl
Antispasmodics
Atropine (excludes ophthalmic)
Belladonna alkaloids
Clidinium-Chlordiazepoxide
Dicyclomine
Hyoscyamine
Propantheline
Scopolamine
Antithrombotics
Dipyridamole, oral short-acting (does not apply to the extended-release combination with aspirin)
Ticlopidine
Anti-infective
Nitrofurantoin
Cardiovascular
Peripheral alpha-1 blockers
Doxazosin
Prazosin
Terazosin

Central alpha blockers

Clonidine
Guanabenz
Guanfacine
Methyldopa
Reserpine (>0.1 mg/d)

Disopyramide

Dronedarone

Digoxin

Nifedipine, immediate
release

Amiodarone

Antidepressants, alone or in
combination

Amitriptyline
Amoxapine
Clomipramine
Desipramine
Doxepin >6 mg/d
Imipramine
Nortriptyline
Paroxetine
Protriptyline
Trimipramine

Antipsychotics, first- (conventional)
and second- (atypical) generation

Barbiturates

Amobarbital
Butabarbital
Butalbital
Mephobarbital
Pentobarbital
Phenobarbital
Secobarbital

Benzodiazepines

Short- and intermediate- acting
Alprazolam
Estazolam
Lorazepam
Oxazepam
Temazepam
Triazolam

Long-acting

Clorazepate

Chlordiazepoxide (alone or in combination with amitriptyline or cildinium)

Clonazepam

Diazepam

Flurazepam

Quazepam

Meprobamate

Nonbenzodiazepine, benzodiazepine receptor agonist hypnotics

Eszopiclone

Zolpidem

Zaleplon

Ergoloid mesylates

(dehydrogenated ergot alkaloids)

Isoxsuprine

Endocrine

Androgens

Methyltestosterone

Testosterone

Desiccated thyroid

Estrogens with or without progestins

Growth hormone

Insulin, sliding scale

Megestrol

Sulfonylureas, long-duration
Chlorpropamide

Glyburide

Gastrointestinal
Metoclopramide

Mineral oil, given orally

Proton-pump inhibitors

Pain medications
Meperidine

Non-cyclooxygenase-selective

NSAIDs, oral:

Aspirin >325 mg/d Diclofenac

Diffunisal

Etodolac

Fenoprofen

Ibuprofen

Ketoprofen

Meclofenamate

Mefenamic acid

Meloxicam

Nabumetone

Naproxen

Oxaprozin

Piroxicam

Sulindac

Tolmetin

Indomethacin

Ketorolac, includes parenteral

Pentazocine

Skeletal muscle relaxants

Carisoprodol

Chlorzoxazone

Cyclobenzaprine

Metaxalone

Methocarbamol

Orphenadrine

Genitourinary

Desmopressin