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Table S1: Baseline characteristic of patients with ALT>/=1000 IU/L.

| | Frequency | Percent |
|---|-----------|---------|
| Drugs for acid related disorders | 28 | 6.9 |
| Drugs for functional gastrointestinal disorders | 5 | 1.2 |
| Antiemetics and antinauseants | 2 | 0.5 |
| Drugs for constipation | 2 | 0.5 |
| Antidiarrheals, intestinal anti-inflammatory agents | 1 | 0.2 |
| Antidiabetics | 23 | 5.7 |
| Vitamins | 11 | 2.7 |
| Mineral supplements | 4 | 1 |
| Other alimentary tract and metabolism products | 3 | 0.7 |
| Antithrombotic agents | 30 | 7.4 |
| Cardiac therapy | 1 | 0.2 |
| Antihypertensives | 21 | 5.2 |
| Diuretics | 8 | 2 |
| Beta blocking agents | 16 | 4 |
| Calcium channel blockers | 7 | 1.7 |
| Agents acting on the renin-angiotensin-system | 19 | 4.7 |
| Lipid modifying agents | 19 | 4.7 |
| Antipruritic | 1 | 0.2 |
| Corticosteroids, dermatological preparations | 2 | 0.5 |
| Other dermatological preparations | 1 | 0.2 |
| Sex hormones and modulators of gynecological system | 1 | 0.2 |
| Urologicals | 12 | 3 |
| Pituitary and hypothalamic hormones | 3 | 0.7 |
| Corticosteroids for systemic use | 3 | 0.7 |
| Thyroid therapy | 9 | 2.2 |
| Antibacterial | 7 | 1.7 |
| Antivirals | 4 | 1 |
| Antineoplastic agents | 1 | 0.2 |
| Anti-inflammatory and antirheumatic products | 47 | 11.6 |
| Muscle relaxants | 2 | 0.5 |
| Antigout preparations | 4 | 1 |
| Analgesics | 15 | 3.7 |
| Antiepileptics | 10 | 2.5 |
| Psycholeptics | 12 | 3 |
| Psychoanaleptics | 19 | 4.7 |
| Nasal preparations | 5 | 1.2 |

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Table S2: Distribution of DDI relevance classes using Medscape drug-drug interaction.

| | Frequency | Percent |
|----------------|-----------|---------|
| Class 1 | 3 | 6.7 |
| Class 2 | 5 | 11.1 |
| Class 3 | 19 | 42.2 |
| Class 4 | 2 | 4.4 |
| Class 5 | 1 | 2.2 |
| Total | 30 | 66.7 |
| Missing system | 15 | 33.3 |
| Total | 45 | 100 |

Table S3: Distribution of DDIs using Epocrates online.

| | Frequency | Percent |
|----------------|-----------|---------|
| Class 1 | 1 | 2.2 |
| Class 2 | 7 | 15.6 |
| Class 3 | 22 | 48.9 |
| Total | 30 | 66.7 |
| Missing system | 15 | 33.3 |
| Total | 45 | 100 |

Table S4: Frequency of the medications involved in DDIs.

| | Frequency | Percent |
|----------------------------------|-----------|---------|
| Diazepam | 1 | 1.1 |
| Clarithromycin | 2 | 2.3 |
| Pantoprazol | 1 | 1.1 |
| Escitalopram | 1 | 1.1 |
| Allopurinol | 1 | 1.1 |
| Bisoprolol | 3 | 3.4 |
| Perindoprilamlodipine-indapamide | 1 | 1.1 |
| Torsemide | 2 | 2.3 |
| Quetiapine | 1 | 1.1 |
| Candesartan | 1 | 1.1 |
| Mephenamic acid | 2 | 2.3 |
| Paracetamol | 1 | 1.1 |
| Aspirin | 1 | 1.1 |
| Ibuprofen | 3 | 3.4 |
| Diclofenac sodium | 1 | 1.1 |
| Levothyroxine | 1 | 1.1 |
| Rivaroxaban | 1 | 1.1 |
| Ramipril | 3 | 3.4 |
| Rosuvastatin | 1 | 1.1 |
| Insulin degludec | 1 | 1.1 |
| Metformin | 3 | 3.4 |
| Irbesartanhydrochlorothiazide | 3 | 3.4 |
| Naproxen | 1 | 1.1 |
| Clopidogrel | 2 | 2.3 |
| Sacubitrilvalsartan | 2 | 2.3 |
| Mirtazapine | 4 | 4.5 |
| Amlodipine | 2 | 2.3 |

| | | |
|--|----|-----|
| Dimentindene | 1 | 1.1 |
| Amlodipine-valsartan-hydrochlorothiazide | 3 | 3.4 |
| Lisdexamphetamine dimesylate | 1 | 1.1 |
| Bupropion hydrochloride | 3 | 3.4 |
| Valsartan | 1 | 1.1 |
| Metolazone | 2 | 2.3 |
| Perindoprilamlodipine | 1 | 1.1 |
| Simvastatin | 1 | 1.1 |
| Lorazepam | 1 | 1.1 |
| Estradiol-dydrogesterone | 1 | 1.1 |
| Acemetacin | 1 | 1.1 |
| Sitagliptin | 1 | 1.1 |
| Ramipril-hydrochlorothiazide | 2 | 2.3 |
| Moxonidine | 1 | 1.1 |
| Metoprolol | 2 | 2.3 |
| Phenytoin | 1 | 1.1 |
| Telmisartan | 1 | 1.1 |
| Candesartan-hydrochlorothiazide | 1 | 1.1 |
| Venlafaxine | 1 | 1.1 |
| Nifedipine | 1 | 1.1 |
| Digoxin | 1 | 1.1 |
| Captopril | 1 | 1.1 |
| Bisoprolol-hydrochlorothiazide | 1 | 1.1 |
| Naproxen-esomeprazole | 1 | 1.1 |
| Methylphenidate | 4 | 4.5 |
| Trazodone | 4 | 4.5 |
| Phentanyl | 1 | 1.1 |
| Duloxetine | 1 | 1.1 |
| Paracetamol-dextrometorphan-Pseudoephedrine-doxylamine | 1 | 1.1 |
| Total | 88 | 100 |

Table S5: Drug-Drug Combinations mainly involved in moderate and major DDIs and their mechanism of action.

| Drug-Drug Interaction | | Severity | Mechanism of Action | Frequency (%) |
|--------------------------------|------------------|----------|---------------------|---------------|
| Drug 1 | Drug 2 | | | |
| Allopurinol | Perindopril | Moderate | UNK | 1 |
| Bisoprolol | Insulin degludec | Moderate | PD | 1 |
| Irbesartan-hydrochlorothiazide | Naproxen | Moderate | PD | 1 |
| Dimentindene | Mirtazapine | Moderate | UNK | 1 |
| Mephenamic acid | Clopidogrel | Moderate | PD | 1 |
| Rivaroxaban | Ibuprofen | Moderate | PD | 1 |
| Telmisartan | Ibuprofen | Moderate | PD | 1 |
| Clopidogrel | Rosuvastatin | Moderate | PK | 1 |
| Quetiapine | Venlafaxine | Moderate | UNK | 1 |
| Bisoprolol | Nifedipine | Moderate | PD | 1 |

| | | | | |
|--|-------------------|-----------------|-------|---|
| Amlodipine-valsartan-hydrochlorothiazide | Digoxin | Moderate | PD+PK | 1 |
| Paracetamol-dextrometorphan-pseudoephedrine-doxylamine | Captopril | Moderate | PD | 1 |
| Ramipril | Spironolactone | Moderate | PD | 1 |
| Amlodipine-valsartan-hydrochlorothiazide | Ramipril | Moderate | PD | 1 |
| Bupropion hydrochloride | Methylphenidate | Moderate | PD | 1 |
| Bupropion hydrochloride | Trazodone | Moderate | UNK | 1 |
| Bisoprolol-hydrochlorothiazide | Naproxen | Moderate | PD+PK | 1 |
| Amlodipine-valsartan-hydrochlorothiazide | Mephenamic acid | Moderate | PD | 1 |
| Lorazepam | Fentanyl | Moderate | PD | 1 |
| Valsartan | Metolazone | Moderate | UNK | 1 |
| Metoprolol | Amlodipine | Moderate | UNK | 1 |
| Metformin | Metolazone | Moderate | PD | 1 |
| Duloxetine | Mirtazapine | Moderate | UNK | 1 |
| Diclofenac sodium | Aspirin | Moderate | PD | 1 |
| Candesartan-hydrochlorothiazide | Ibuprofen | Moderate | PD | 1 |
| Bupropion- hydrochloride | Lisdexamphetamine | Major | UNK | 1 |
| Trazodone | Methylphenidate | Major | PD | 2 |
| Methylphenidate | Trazodone | Major | PD | 1 |
| Clarithromycin | Diazepam | Contraindicated | PK | 1 |
| Clarithromycin | Escitalopram | Contraindicated | PD | 1 |
| Sacubitril-valsartan | Ramipril | Contraindicated | PD | 1 |
| Diclofenac sodium | Aspirin | Moderate | PD | 1 |

Table S6: Distribution of duplicate therapies based on the intention of the duplicate therapy.

| | Frequency | Percent |
|----------------------|-----------|---------|
| Unwanted | 11 | 33.3 |
| Potentially unwanted | 15 | 45.5 |
| Wanted | 7 | 21.2 |
| Total | 33 | 100 |

Table S7: Cross tabulation of Duplicate Therapy and DDI variables.

| | | Is a duplicate therapy present | | Total |
|-------|----------------|--------------------------------|------|-------|
| | | Yes | No | |
| Yes | Count | 18 | 16 | 34 |
| | Expected count | 11.2 | 22.8 | 34 |
| No | Count | 15 | 51 | 66 |
| | Expected count | 21.8 | 44.2 | 66 |
| Total | Count | 33 | 67 | 100 |
| | Expected count | 33.0 | 67 | 34 |

Table S8: Logistic regression model of predictors of duplicate therapy.

| Covariate | OR (Exp(B)) | 95% Confidence Interval | P-value |
|--------------------------------|-------------|-------------------------|---------|
| The total number of medication | 1.795 | (1.178, 2.737) | 0.07 |
| Is there a DDI present? | 2.261 | (0.850, 6.016) | 0.102 |