

## Sound-Alike/ Look-Alike Drugs for Ambulatory Care and Home Health

Potential Problematic Drug Names	Brand Name(s) (UPPERCASE) and Generic (lowercase)	Potential Errors and Consequences	Suggested Safety Strategies
1. Celebrex and Celexa and Cerebyx	CELEBREX (celecoxib) CELEXA (citalopram hydrobromide) CEREBYX (fosphenytoin)	Patients affected by a mix-up between these three drugs may experience a decline in mental status, lack of pain or seizure control, or other serious adverse events.	Maintain awareness of look-alike and sound-alike drug names as published by various safety agencies.
2. Clonidine and Klonopin	CATAPRES (clonidine) KLONOPIN (clonazepam)	The generic name for clonidine can easily be confused as the trade or generic name of clonazepam.	Include the purpose of medication on prescriptions. In most cases drugs that sound or look similar are used for different purposes.
3. Insulin products  Humalog and Humulin Novolog and Novolin Humulin and Novolin Humalog and Novolog Novolin 70/30 and Novolog Mix 70/30	HUMULIN (human insulin products) HUMALOG (insulin lispro)  NOVOLIN (human insulin products) NOVOLOG (human insulin aspart)  NOVOLIN 70/30 (70% isophane insulin [NPH] and 30% insulin injection [regular]) NOVOLOG MIX 70/30 (70% insulin aspart protamine suspension and 30% insulin aspart)	Similar names, strengths and concentration ratios of some products (e.g., 70/30) have contributed to medication errors. Mix-ups have also occurred between the 100 unit/mL and 500 units/mL insulin concentrations.	Alert patients to the potential for mix-ups, especially with known problematic drug names. Advise patients to insist on pharmacy counseling when picking up prescriptions, and to verify that the medication and directions match what the prescriber has told them.  Encourage patients to question nurses about medications that are unfamiliar or look or sound different than expected.
4. Lorazepam and Alprazolam Xanax and Zantac	ATIVAN (lorazepam) XANAX (alprazolam) ZANTAC (ranitidine hydrochloride)	Name similarity has the potential for mix-ups of these agents with totally different indications and potencies. A mix-up, especially in the elderly, would likely cause excessive sedation and increase fall risk.	Store products with look or sound-alike names in different locations, including in patient homes.
5. Metformin and Metronidazole	GLUCOPHAGE (metformin) FLAGYL (metronidazole)	Potentially serious mix-ups between metronidazole and metformin have been linked to look-alike packaging (both bulk bottles and unit-dose packages). Metformin is contraindicated in certain clinical situations where use might contribute to lactic acidosis. Administration of intravenous iodinated contrast media during radiological procedures has been associated with acute renal dysfunction.	Ask patient to verify the correct medication by asking them the purpose of the medication.
6. Oxycontin Roxicodone MSIR	OXYCONTIN (oxycodone hydrochloride) ROXICODONE (oxycodone hydrochloride) MSIR (morphine sulfate)	Accidental selection of the wrong concentration and prescribing/labeling the product contributes to errors.	
7. Prilosec and Prozac	PRILOSEC (omeprazole) PROZAC (fluoxetine hydrochloride)	Name similarity has resulted in frequent mix-ups. Double check Separate storage	

## Sound-Alike/ Look-Alike Drugs for Ambulatory Care and Home Health

Potential Problematic Drug Names	Brand Name(s) (UPPERCASE) and Generic (lowercase)	Potential Errors and Consequences	Suggested Safety Strategies
8. Topamax and Toprol XL	TOPAMAX (topiramate) TOPROL-XL (metoprolol)	Error is likely attributable to the similarity in names with the "X" in XL of the beta-blocker, Toprol XL, looking like the ending of Topamax, an anticonvulsant. In addition, available dosage strengths (25, 50, 100, 200) are identical, adding to likelihood of mix-up. Imprint on the Topamax tablet is "TOP" on one side and 25 mg strength has "25" on the other, risking confusion with Toprol XL 25 mg. Patients needing Topamax may develop seizures and/or have adverse effects with Toprol XL. Patients needing a beta-blocker may have worsened disease symptoms without treatment.	<p>Maintain awareness of look-alike and sound-alike drug names as published by various safety agencies.</p> <p>Include the purpose of medication on prescriptions. In most cases drugs that sound or look similar are used for different purposes.</p> <p>Alert patients to the potential for mix-ups, especially with known problematic drug names. Advise patients to insist on pharmacy counseling when picking up prescriptions, and to verify that the medication and directions match what the prescriber has told them.</p>
9. Zyprexa and Zyrtec	ZYPREXA (olanzapine) ZYRTEC (cetirizine)	Name similarity has resulted in frequent mix-ups between Zyrtec, an antihistamine, and Zyprexa, an antipsychotic. Patients who receive Zyprexa in error have reported dizziness, sometimes leading to a related injury from a fall. Patients on Zyprexa for a mental illness have relapsed when given Zyrtec in error.	<p>Encourage patients to question nurses about medications that are unfamiliar or look or sound different than expected.</p>
10. Cisplatin and Carboplatin	PLATINOL (cisplatin) PARAPLATIN (carboplatin)	Doses appropriate for carboplatin usually exceed the maximum safe dose of cisplatin. Severe toxicity and death has been associated with accidental cisplatin overdoses.	<p>Store products with look or sound-alike names in different locations, including in patient homes.</p>
11. Taxol and Taxotere	TAXOL (paclitaxel) TAXOTERE (docetaxel)	Confusion can result in serious adverse outcomes since they have different dosing recommendations and use in various types of cancer.	<p>Ask patient to verify the correct medication by asking them the purpose of the medication.</p>
12. Vinblastine and Vincristine and Vinorelbine	VELBAN (vinblastine) ONCOVIN (vincristine) NAVELBINE (vinorelbine)	Fatal errors have occurred, often due to name similarity, when patients were erroneously given Vincristine intravenously, but at the higher Vinblastine dose.	
13. Methadone Methylphenidate	DOLOPHINE (methadone hydrochloride) RITALIN (methylphenidate hydrochloride)	Similar names and some similar strengths have contributed to medication errors. This may represent significant overdose, leading to serious adverse events.	
14. Asacol and Oscal	ASACOL (mesalamine) OSCAL (calcium carbonate)	Name similarity has resulted in mix-up between two agents with different indications. May result in under treatment of ulcerative colitis or hypocalcemia or result in adverse effects of unintended agent.	
15. DTaP and Tdap		Name similarity has resulted in frequent mix-ups. Double check Separate storage	Check for age appropriateness.