


1-DAY REGIONAL MEETINGS

Preventing Errors:
Look- and Sound-Alike Medications





Presented in partnership with the ICHHP Annual Meeting

Faculty

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Disclosure

Matthew Grissinger, RPh, FISMP, FASCP: Spouse's Employer—Johnson and Johnson

Learning Objectives

- Identify the types of medication errors that are the result of look-alike and sound-alike names
- Describe strategies for health-system pharmacists for reducing errors due to similarity in drug names

Technician Learning Objectives

- Identify the types of medication errors that are the result of look-alike and sound-alike names
- Describe strategies for health-system pharmacists for reducing errors due to similarity in drug names

FDA Name Differentiation Project

| Established Name | Recommended Name | Established Name | Recommended Name |
|------------------|------------------|---------------------|---------------------|
| Acetofensamide | AcetoHEXAMIDE | Hydralazine | HydrALAZINE |
| Acetazolamide | AcetaZOLAMIDE | Hydromorphone | HYDRomorphone |
| Bupropion | BuPROPion | Hydroxyzine | HydroXYZine |
| Bupropion | BuPROPion | Medroxyprogesterone | MedroxyPROGESTERone |
| Chlorpromazine | ChlorpROMAZINE | Methylprednisolone | MethylPREDNISolone |
| Chlorpromazine | ChlorpROMAZINE | Methyltestosterone | MethylTESTOSTERone |
| Clomiphene | ClomIFENE | Minoxantrone | MinoXANTRone |
| Clomiphene | ClomIFENE | Nicardipine | NICARdipine |
| Cyclosporine | CycloSPORINE | Nifedipine | NIFEdipine |
| Cytosine | CytoSERINE | Prednisone | PredNISONE |
| Doxorubicin | DAUNOrubicin | Prednisolone | PrednisOLONE |
| Doxorubicin | DOXOrubicin | Risperidone | risperIDONE |
| Dimethylmaleate | DimethylDRMATE | Ropinirole | ropiniROle |
| Diphenhydramine | DiphenyDRAMINE | Sulfadiazine | SulfADIAZINE |
| Dobutamine | DOBUtamine | Sulfisoxazole | SulfISOXAZOLE |
| Dopamine | DOFamine | Tolazamide | TOLAZamide |
| Glipizide | GLIPIZIDE | Tolbutamide | TOLBUtamide |
| Glyburide | GlyBURIDE | | |

US Food and Drug Administration. www.fda.gov/Drugs/DrugSafety/MedicationErrors/ucm164587.htm. Accessed on February 16, 2016.

Where Are Names Confused?

- Medication Orders
 - Handwritten Orders
 - Order forms, preprinted orders
 - CISplatin/CARBOplatin
 - vinCRIStine/vinBLAStine
 - DOPamine/DOBUtamine
- Order Entry Screens

Handwritten Look-Alike Names

Cisplatin 4 mg po qd
Regimone 400mg PO qd

Handwritten Look-Alike Names (continued)

Doxil 150mg bid
Tigec 210mg qd
Myzant 1 qd
Zyrufta 10.180mg qd

Electronic Order Entry

| Code | Description | Dose | Route | Schedule | Pause |
|-----------|---------------------|-------|-------|----------|-------|
| ACTO15 | ACTOS 15MG TABLET | 15 MG | PO | DAILY | Y 5 |
| ACTO30 | ACTOS 30MG TABLET | 30 MG | PO | DAILY | Y 5 |
| ACTO30 02 | ACTONEL 30MG TABLET | 30 MG | PO | Q28W | Y 5 |
| ACTO35 | ACTONEL 30MG TABLET | 25 MG | PO | Q7DAYS6 | Y 5 |
| ACTO45 | ACTOS 45MG TABLET | 45 MG | PO | DAILY | Y 5 |
| ACTOS 02 | ACTONEL 9MG TABLET | 5MG | PO | Q28W | Y 5 |

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Electronic Order Entry (continued)

Type: All Rx Search: Starts With

find: insulin Real Time SI

bl Insulin Aspart

Insulin Aspart Prot & Aspart

Insulin Detemir

Insulin Glargine

Insulin Glulisine

Insulin Isophane & Regular

Insulin Isophane Human

Insulin Lispro & Lispro Prot

Insulin Lispro (Human)

Insulin Lispro Prot & Lispro

Insulin Admin Supplies

Insulin Cartridge 3ML

Insulin Infusion Pump

Insulin Infusion Pump Suppl

Insulin Pen Needle

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Electronic Order Entry (continued)

Search: All Insulin Lispro Lispro Prot

bl Insulin Aspart

Insulin Aspart Prot & Aspart

Insulin Detemir

Insulin Glargine

Insulin Glulisine

Insulin Isophane & Regular

Insulin Isophane Human

Insulin Lispro & Lispro Prot

Insulin Lispro (Human)

Insulin Lispro Prot & Lispro

Insulin Admin Supplies

Insulin Cartridge 3ML

Insulin Infusion Pump

Insulin Infusion Pump Suppl

Insulin Pen Needle

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Which Regular Insulin?

| Ln | Drug# | Drug Name | Strength/Volume | Enter | Line # | ----- | ... |
|----|-------|------------------------|-----------------|-------|--------|-------|----------|
| | | | | | DSPN | Pack | St |
| 1 | 13928 | INSULIN-HUMULIN L | 100U=1ML | | INJ | | 10.000 |
| 2 | 46002 | INSULIN-NOVOLIN N | 100U=1ML | | INJ | | 10.000 |
| 3 | 61501 | INSULIN-HUMULIN U | 1000U=1ML | | INJ | | 10.000 |
| 4 | 64042 | PINK-INSULIN | 0.06U=1ML | | SYRG | | 25.000 |
| 5 | 64043 | BLUE-INSULIN | 0.5U=1ML | | SYRG | | 50.000 |
| 6 | 64044 | YELLOW-INSULIN | 1U=1ML | | SYRG | | 50.000 |
| 7 | 64038 | INSULIN-R DILUTED | 0.1U=1ML | | VIAL | | 10.000 |
| 8 | 97012 | INSULIN-REG HUMAN | 1U=15ML | | SYRG | | 25.000 |
| 9 | 98191 | INSULIN-NOVOLIN N | 100U=1ML | | INJ | | 10.000 |
| 10 | 98192 | INSULIN-REG HUMAN | 100U | | INJ | | 100.000 |
| 11 | 98664 | INSULIN-REG HUMAN | 100U | | INJ | | 1000.000 |
| 12 | 99669 | INSULIN-HUMULIN R (FS) | 100U | | INJ | | 100.000 |
| 13 | 99818 | INSULIN-HUMAN REG | 100U | | INJ | | 100.000 |
| 14 | 31421 | INSULIN NPH INNOLET | 1U | | INJ | | 300.000 |
| 15 | 31321 | INSULIN REG INNOLET | 1U | | INJ | | 300.000 |
| 16 | 31721 | INSULIN 70/30 INNOLET | 1U | | INJ | | 300.000 |
| 17 | 22203 | INSULIN LANTUS | 100U | | INJ | | 10.000 |
| 18 | 30631 | INSULIN-NOVOLIN 70/30 | 100U | | INJ | | 10.000 |

Enter Line# at top of screen, press ENTER.
 F1=Help F2=Restart F3=Exit F4=Prompt F5=Disp Msg F14=Send Msg
 F7=Bkwd F8=Fwd F12=Previous F13=Disp Msg

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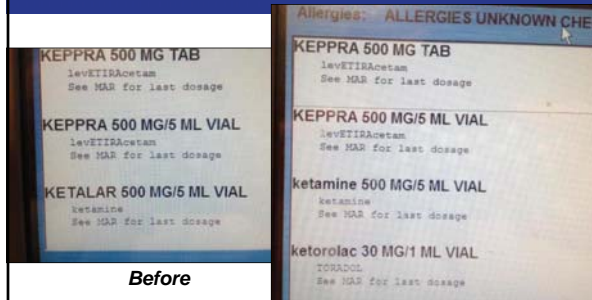
Drug Errors Involving Immediate- and Extended-Release Products

“OxyCONTIN” from CPOE system listed as.....

Medication: OXYCODONE HCL TBCR 10 MG OR
 Qty: 60 Ref: 0 Start: 3/12/12
 Route: DAW:
 Sig: 1 TABLET TWICE DAILY

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Medication Devices



Before

After

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Medication Devices (continued)

Test Patient View of MAR

| Medication Name | 2012 in PASS | 2012 in PASS | 2012 in PASS | 2012 in PASS | 2012 in PASS | 2012 in PASS | 2012 in PASS |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Medication 50 mg in 5000 200 mL IV Soln | | | | | | | |
| Drug CONTINUOUS | | | | | | | |
| Route intravenous | | | | | | | |
| Order Dose 0.5 mcg/kg/min x 70.4 kg | | | | | | | |
| Admin Amount 0.0397 mg/min | | | | | | | |
| Ordered Infusion Rate 11.1425 mL/hr | | | | | | | |
| Order Start Time 11/14/09 | | | | | | | |
| Order End Time 11/14/09 | | | | | | | |
| Make Administered Information | | | | | | | |
| Medication 50 mg in 5000 200 mL IV Soln | | | | | | | |
| Drug CONTINUOUS | | | | | | | |
| Route intravenous | | | | | | | |
| Order Dose 0.5 mcg/kg/min x 70.4 kg | | | | | | | |
| Admin Amount 0.0397 mg/min | | | | | | | |
| Ordered Infusion Rate 11.1425 mL/hr | | | | | | | |
| Order Start Time 11/14/09 | | | | | | | |
| Order End Time 11/14/09 | | | | | | | |
| Make Administered Information | | | | | | | |

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Where Are Names Confused?

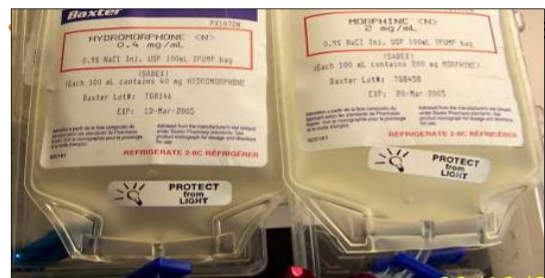
Drug Labeling and Packaging

- Pharmacy
- Manufacturer

Drug Storage

- Pharmacy
- Care Areas
 - ADCs
 - Floor Stock

Pharmacy IV Labels



Manufacturer Bulk Packaging



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Wellbutrin, Zyban, Bupropion.....SR, XL.....



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Manufacturer Unit-Dose Packaging



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Manufacturer Unit-Dose Packaging



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Manufacturer Cartons



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Manufacturer IV Solutions



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Manufacturer Vials



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Pharmacy Labeling



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Look-alike names, Packaging & Storage



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Identifying the Problem

• Need to know

- Where in the medication use process the pairs of drugs are being confused before you implement risk reduction strategies

Identifying the Problem (continued)

- Identify problematic name pairs in your organization
 - Need to know what drug name pairs are being confused before you take action
 - **Proactive**
 - Observation
 - **Concurrent**
 - Pharmacy checks
 - Cart fills
 - New orders
 - Orders vs label
 - Labels vs drug

Identifying the Problem (continued)

• Retrospective

- Error reports
 - Limited – who does the reporting?
 - Usually wrong meds given to patient or pharmacy dispensing errors caught by nursing
 - Other care areas – OR, ED, radiology
 - Doesn't usually include those that are caught in pharmacy
- Triggers
 - Opiates – morphine & HYDRomorphone
 - Insulin products

