



# FDA and ISMP Lists of Look-Alike Drug Name Sets With Recommended Tall Man Letters

The sets of look-alike drug names in the Tables below have been modified using “tall man” letters to help draw attention to the dissimilarities in their names. Several studies have shown that highlighting sections of drug names using tall man (mixed case) letters can help distinguish similar drug names,<sup>1</sup> making them less prone to mix-ups.<sup>2-3</sup> ISMP, FDA, The Joint Commission, and other safety-conscious organizations have promoted the use of tall man letters as one means of reducing confusion between similar drug names.

**Table 1** provides a list of FDA-approved established drug name sets with recommended tall man letters, which were first identified during the FDA Name Differentiation Project ([www.fda.gov/CDER/Drug/MedErrors/nameDiff.htm](http://www.fda.gov/CDER/Drug/MedErrors/nameDiff.htm)).

**Table 2** provides a list of additional drug name sets with recommendations from ISMP regarding the use and placement of tall man letters. This is not an official list approved by FDA. It is intended for voluntary use by healthcare practitioners and drug information vendors. Any product label changes by manufacturers require FDA approval.

aceto <b>HEX</b> AMIDE - aceta <b>ZOL</b> AMIDE	hydr <b>AL</b> AZINE - hydr <b>OXY</b> zine
bu <b>PRO</b> Pion - bus <b>PIR</b> one	medroxy <b>PROG</b> ESTERone methyl <b>PRED</b> ISolone methyl <b>TEST</b> OSTERone
chlorpro <b>MAZ</b> INE - chlorpro <b>PAM</b> IDE	
clomi <b>PH</b> ENE - clomi <b>PR</b> AMINE	
cyclo <b>SP</b> ORINE - cyclo <b>SER</b> INE	ni <b>CAR</b> dipine - ni <b>F</b> E <b>D</b> ipine
<b>DAUN</b> o <b>RU</b> bicin - <b>DOXO</b> rubicin	predni <b>S</b> ONE - predniso <b>L</b> ONE
dimenhy <b>DR</b> INATE - diphenhy <b>DR</b> AMINE	sulf <b>AD</b> IAZINE - sulfi <b>SOX</b> AZOLE
<b>DOB</b> UTamine - <b>DOP</b> amine	<b>TOL</b> AZamide - <b>TOL</b> BUTamide
g <li>lipi<b>Z</b>IDE - gly<b>BUR</b>IDE</li>	vin <b>BLAS</b> tine - vin <b>CRIS</b> tine

References: 1) Filik R, Purdy K, Gale A, Gerrett D. Drug name confusion: evaluating the effectiveness of capital (“Tall Man”) letters using eye movement data. *Social Science & Medicine* 2004;59(12):2597-2601. 2) Filik R, Purdy K, Gale A, Gerrett D. Labeling of medicines and patient safety: evaluating methods of reducing drug name confusion. *Human Factors* 2006;48(1):39-47. 3) Grasha A. Cognitive systems perspective on human performance in the pharmacy: implications for accuracy, effectiveness, and job satisfaction. Alexandria (VA): NACDS; 2000 Report No. 062100.

One of the difficulties with the use of tall man letters is the lack of scientific evidence regarding which name pairs would most benefit from this error-reduction strategy as well as which letters to present in uppercase. Until further evidence is available, ISMP suggests that the tall man lettering scheme provided in these Tables be followed to promote consistency.

<b>ALPRAZ</b> olam - <b>LOR</b> azepam	metro <b>NIDA</b> ZOLE - met <b>FOR</b> MIN
am <b>LOD</b> IPine - a <b>MI</b> Loride	morphine - <b>HYDR</b> omorphone
aza <b>CIT</b> Dine - aza <b>THIO</b> prine	Nex <b>IUM</b> * - Nex <b>AVAR</b> *
ce <b>FAZ</b> olin - ce <b>TRIAX</b> one	ni <b>MOD</b> ipine - ni <b>F</b> E <b>D</b> ipine
Cele <b>BREX</b> * - Cele <b>XA</b> *	Novo <b>LOG</b> * - Novo <b>LIN</b> *
chlorpro <b>MAZ</b> INE - chlordi <b>az</b> e <b>POX</b> IDE	<b>OX</b> carbapizine - car <b>BAM</b> azepine
<b>CIS</b> platin - <b>CARBO</b> platin	oxy <b>COD</b> ONE - Oxy <b>CONT</b> IN*
clonaz <b>ePAM</b> - clo <b>NID</b> ine	<b>PAR</b> oxetine - <b>FLU</b> oxetine
clonaz <b>ePAM</b> - <b>LOR</b> azepam	<b>PENT</b> obarbital - <b>PHEN</b> obarbital
clo <b>NID</b> ine - Klo <b>NO</b> PIN*	Pri <b>LOSEC</b> * - <b>PRO</b> zac*
<b>DACTIN</b> omycin - <b>DAPTO</b> mycin	<b>QU</b> Etiapine - <b>OLAN</b> zapine
e <b>PHED</b> rine - <b>EPINEPH</b> rine	qui <b>NINE</b> - qui <b>NID</b> ine
fenta <b>NYL</b> - <b>SUF</b> entanil	ri <b>TUX</b> imab in <b>FLIX</b> imab
<b>FLU</b> oxetine - <b>DUL</b> oxetine	Sand <b>IMMUNE</b> * - Sando <b>STATIN</b> *
guan <b>FAC</b> INE - guai <b>FEN</b> esin	<b>SERO</b> quel* - <b>SINE</b> quan*
Huma <b>LOG</b> * - Humu <b>LIN</b> *	Solu- <b>MEDROL</b> * - Solu- <b>CORTEF</b> *
<b>HYDR</b> ocodone - oxy <b>COD</b> ONE	<b>SUM</b> Atriptan - sita <b>GLIP</b> tin
<b>IDA</b> rubicin - <b>DOXO</b> rubicin	ti <b>ZAN</b> idine - tia <b>GAB</b> ine
<b>INV</b> anz* - <b>AVIN</b> za*	tra <b>ZOD</b> one - tra <b>MAD</b> ol
La <b>MIC</b> tal* - Lam <b>SIL</b> *	<b>TREN</b> tal - <b>TEG</b> retol*
lami <b>VUD</b> ine - lamo <b>TRI</b> gine	Zy <b>PREXA</b> * - Zy <b>TEC</b> *

\* Brand names always start with an uppercase letter. Some brand names incorporate tall man letters in initial characters and may not be readily recognized as brand names. An asterisk follows all brand names in Table 2.