

NORTHWELL HEALTH Plainview Hospital		Patient Care Services	
POLICY TITLE: Look-Alike / Sound-Alike (LASA) Medications			
Prepared by: Jonathan Falsetta, PharmD, BCPS Assistant Director, Clinical Pharmacy Services Dennis Karagannis, MS, RPh Director of Pharmacy System P&T Committee	Approval Date: June 2016 Effective Date: June 2016	Last Revised/Reviewed: June 2016 May 2015 January 2014 November 2013 December 2012	Page 1 of 4

GENERAL STATEMENT OF PURPOSE

- **“Look-Alike / Sound-Alike” (LASA)** medications refer to names of different drugs that have orthographic similarities and/or similar phonetics (i.e. similar when written or spoken). These similarities increase the risk of an error occurring in the medication administration process to include such areas as: ordering, transcription, dispensing, and/or the administration phase.
- Tall Man Lettering: term that describes a method for differentiating the unique letter characters of similar drug names known to have been confused with one another.
- The Joint Commission (TJC) Medication Management (MM) standards require institutions to address the safe use of LASA medications by developing a list of such medications and taking proactive steps to prevent errors involving the interchange of these agents.

POLICY

- Identify and review a list of LASA drugs specific to Northwell Health. This list will be used to ensure that safeguards are put in place to prevent medication errors and protect the patient.

SCOPE

This policy applies to faculty and students of the Hofstra Northwell Health School of Medicine (“School of Medicine”) conducting work or research on behalf of the School of Medicine or at any Northwell Health facility; and all members of the Northwell Health workforce including, but not limited to, employees, medical staff, volunteers, students, physician office staff, and other persons performing work for or conducting research at or on behalf of the North Shore – LIJ Health System.

PROCEDURE/GUIDELINES

- Northwell Health will develop standard lists of Look-alike/Sound-alike medications. These medication pairs, comprised of Appendixes A and B attached, are identified using Tall man lettering and shall include recommendations from the Food and Drug Administration (FDA), Institute for Safe Medication Practices (ISMP), and those developed internally by the Northwell Health.
 - Requests to add or remove agents from this list will be directed to the System P&T Committee.
 - The ultimate decision to modify this policy shall lie with the System P&T Committee

membership.

- The tall man lettering for these medication pairs should appear on pharmacy computer drug selection screens, computer-generated pharmacy labels, shelf labels, automated dispensing cabinet screens, computer-generated medication administration records (MARs), preprinted order forms, and smart pump drug libraries whenever possible.
- The System P&T Committee has agreed to assign certain LASA pairs (Appendix A) with more comprehensive medication safety strategies as listed below:
 - Due to differing medication management processes at each Health System site and the implementation of various technology solutions, the exact procedure for managing LASA designated medications shall be determined by local P&T Committees. Recommended strategies may include, but are not limited to:
 - Electronic Health Record –to include “Look- Alike/Sound-Alike” warnings.
 - Pharmacy Storage – do not store LASA medications alphabetically by name but rather store them out of order, or in a different location; place label stating “Look-Alike / Sound-Alike” on medication bins of LASA agents.
 - Automated Dispensing Cabinets – a “Look-Alike / Sound-Alike” alert should appear when loading and removing LASA medications from the cabinet.
 - Formulary Management – consider LASA names and similar labeling of generic products when determining the Formulary determination of products.
- Plainview/Syosset Hospitals put into place all of the above strategies to prevent medication occurrences associated with Look-Alike/Sound-Alike.

LOOK-ALIKE / SOUND-ALIKE (LASA) MEDICATIONS

<i>CONFUSED DRUG NAMES</i>	<i>POTENTIAL ERRORS</i>
CISplatin (Platinol [®]) CARBOplatin (Paraplatin [®])	<ul style="list-style-type: none"> Similarity in medication names can lead to confusion between these two agents. Doses appropriate for CARBOplatin usually exceed the maximum safe dose of CISplatin. Severe toxicity and death has been associated with accidental CISplatin overdoses.
PACLitaxel (Taxol [®]) DOCEtaxel (Taxotere [®])	<ul style="list-style-type: none"> Confusion between these two agents can result in serious adverse outcomes since they have different dosing recommendations and use in various types of cancer.
VinBLASStine (Velban [®]) VinCRISStine (Oncovin [®])	<ul style="list-style-type: none"> Due to name similarity, fatal errors have occurred when patients were erroneously given vinCRISTINE intravenously, but at the higher vinBLASTINE dose.
HYDROmorphine Injection (Dilaudid [®]) morphine Injection (Astramorph [®] , Duramorph [®] , Infumorph [®])	<ul style="list-style-type: none"> Some providers have mistakenly assumed that HYDROmorphine is the generic equivalent of morphine. These products are NOT interchangeable. Fatal errors have occurred when HYDROmorphine was confused with morphine. Based on equianalgesic dose conversion, this may represent a significant overdose, thus leading to serious adverse events.
hydrALAZINE (Apresoline [®]) hydrOXYzine (Atarax [®] , Vistaril [®])	<ul style="list-style-type: none"> Patients affected by a mix-up between these agents may experience serious adverse events.
CeleXA[®] (Citalopram) CeleBREX[®] (Celecoxib) CereBYX[®] (Fosphenytoin)	<ul style="list-style-type: none"> Similar spelling of these brand name drugs can lead to confusion, which in turn can lead to error. 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.
HumuLIN[®] R U-100 (Regular insulin human) HumuLIN[®] R U-500 (Regular insulin human) HumuLIN[®] N NPH (human insulin isophane) HumuLIN[®] 70/30 (70% human insulin isophane, 30% human insulin) HumaLOG[®] (Insulin lispro) HumaLOG[®] Mix 75/25 (75% insulin lispro protamine, 25% insulin lispro) HumaLOG[®] Mix 50/50 (50% insulin lispro protamine, 50% insulin lispro)	<ul style="list-style-type: none"> Similar names, strengths and concentration ratios have been shown to contribute to medication errors. This confusion can be especially problematic with illegible handwriting.
clONIDine (Catapres [®]) KlonoPIN[®] (Clonazepam)	<ul style="list-style-type: none"> The generic name for clonidine has been confused as the trade or generic name for clonazepam.
Concentrated Morphine Sulfate Oral Solution [20 mg / mL] (Roxanol [®]) Conventional Morphine Sulfate Oral Solution [10 mg / mL, 20 mg / mL]	<ul style="list-style-type: none"> Concentrated forms of oral morphine solution (20 mg / mL) have often been confused with the standard concentration (listed as 10 mg / 5 mL or 20mg / 5 mL), leading to serious errors. Accidental selection of the wrong concentration, and prescribing / labeling the product by volume, not milligrams, contributes to these errors, some of which have been fatal.
OxyCODONE (Roxicodone [®]) OxyCONTIN[®] (Oxycodone ER)	<ul style="list-style-type: none"> Name similarity has resulted in frequent medication mix-ups.

ALBUTerol - ATENolol	lamiVUDine - lamoTRIgine
ALPRAZolam - LORazepam	levOCARNitine - levETIRAcetam
amiKACIN - AmiCAR	levoFLOXacin – levOCARNitine--LEVOleucovorin
amLODIPine – aMILoride- AtoMOXetine	medroxyPROGESTERone - methylPREDNISolone - methylTESTOSTERone
ARIPiprazole - RABEprazole	metroNIDAZOLE - metFORMIN
azaCITIDine - azaTHIOprine	MitoMYcin - MitoXANtrone
BACTROban - BACItracin	NexIUM - NexAVAR
buDESONide - buMETANide	niCARDipine - NIFEdipine
BUpivacaine - MEpivacaine	niMODipine - NIFEdipine - niCARDipine
buPROPion - busPIRone	NovoLOG - NovoLIN
BUpivacaine - MEpivacaine	OXcarbapazine - carBAMazepine
ceFAZolin – cefTRIAxone – cefTAZidime -	PARoxetine - FLUoxetine
cefoTETan - cefOXitin	PENTobarbital - PHENobarbital
chlorproMAZINE - chlordiazePOXIDE	PRALAtrexate - PEMEtrexed
chlorproMAZINE - chlorproPAMIDE	predniSONE - prednisoLONE
Clobazam - clonazePAM	PriLOSEC - PROzac
clomiPHENE - clomiPRAMINE	QUETiapine - OLANZapine
clonazePAM – cloNIDine - cloZAPine	quinine - quiNIDine
cycloSPORINE - cycloSERINE	risperiDONE - rOPINIRole - RisperDAL
DACTINomycin - DAPTOmycin	riTUXimab - inFLIXimab
DAPTAcel - ADAcel	romiPLOstim - romiDEPsin
DAUNOrubicin - DOXOrubicin	SandIMMUNE - SandoSTATIN
DepaKENE - DepaKOTE - DepaCON	SEROquel - SINEquan
DEPO-Medrol - Solu-MEDROL	Solu-MEDROL - Solu-CORTEF
dimenhyDRINATE - diphenhydrAMINE	SORafenib - SUNItinib
diVALproex DR - diDANosine DR	sulfADIAZINE - sulfaSALazine
DOBUTamine - DOPamine	sulfADIAZINE - sulfiSOXAZOLE
DTap - Tdap	SUMAtriptan - sitaGLIPtin - ZOLMitriptan
ePHEDrine - EPINEPHrine	tiZANidine - tiaGABine
esOMEPRAZOLE - esMOLOL	TOLAZamide - TOLBUTamide - vinBLASStine
fentaNYL - SUFentanil	traZODone - traMADol
fluconAZOLE - fludroCORTISONE	TRENTal - TEGretol
FLUoxetine - DULOoxetine	TriCOR - TriLIPIX
fluvoxaMINE – fluPHENAZine - flavoxATE	valACYclovir - valGANciclovir
glipiZIDE - glyBURIDE	vinBLASStine - vinCRISStine
guanFACINE - guaiFENesin	VilaZODone - VinORELbine
HYDROcodone - oxyCODONE	ZyPREXA - ZyrTEC
IDarubicin - DOXOrubicin	
influenza virus vaccine - influenza virus vaccine HIGH DOSE	
LaMICtal - LamISIL	

References:

ISMP: <http://www.ismp.org/Tools/confuseddrugnames.pdf>

TJC: CAMH - MM.01.02.01, EP1

SIGNATURES: To Include Name / Title / Date	
Facility Chief Nurse Executive:	
Medical Director:	
Director of Pharmacy:	