USE OF PREFERRED MEDICATIONS (THERAPEUTIC INTERCHANGE)

**Purpose:**
To optimize patient care within the framework of cost containment and treatment efficacy.

**Policy:**
Pharmacists are permitted to convert medication orders to an approved equivalent as determined by the Pharmacy and Therapeutics Committee and approved by the Clinical Board. Medication and dose conversion will follow approved protocols. These protocols will be reviewed and revised as needed to ensure the achievement of the desired therapeutic outcomes and economic advantages.

**Procedure**
- Medication conversions shall be automatic.
- Pharmacists shall perform the conversion at the time of order entry. Orders shall be written according to Clinical Board protocol and shall contain the pharmacist’s signature.
- The pharmacist shall evaluate all new orders as to the need for dosage adjustment in patients with decreased renal function, and the physician contacted if dosage reductions should be considered.
- Use of alternative medications must be approved by the Associate Dean for Clinical Affairs or his designee.

1. **Low Molecular Weight Heparin Equivalency and Conversion Protocol**

<table>
<thead>
<tr>
<th>Indication</th>
<th>Patient Type</th>
<th>enoxaparin dose (Lovenox)</th>
<th>change to dalteparin (Fragmin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVT/PE prophylaxis</td>
<td>Surgical High Risk (abdominal, pelvis, &amp; lower extremity)</td>
<td>40mg SQ QD</td>
<td>5000u SQ QD</td>
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<tr>
<td></td>
<td></td>
<td>30mg SQ Q 12h</td>
<td>5000u SQ QD</td>
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<tr>
<td></td>
<td>Surgical Moderate Risk</td>
<td>30mg SQ QD</td>
<td>change to heparin QD</td>
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<tr>
<td></td>
<td></td>
<td>30mg SQ BID</td>
<td>5000u SQ BID</td>
</tr>
<tr>
<td></td>
<td>Orthopedic surgery</td>
<td>30mg SQ Q 12h</td>
<td>5000u SQ QD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40mg SQ QD</td>
<td>5000u SQ QD</td>
</tr>
<tr>
<td></td>
<td>Medical OR dalteparin</td>
<td>30mg SQ BID</td>
<td>change to heparin QD</td>
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<tr>
<td></td>
<td></td>
<td>2500u SQ QD</td>
<td>5000u SQ BID</td>
</tr>
</tbody>
</table>
DVT/PE treatment
All patients
1mg/kg SQ Q 12h
200u/kg SQ QD
(max 18,000u/day)

Acute Coronary Syndrome Treatment
All patients
1mg/kg SQ q 12h
120u/kg SQ 12h
(max 10,000u SQ q12h)

2. ACE Inhibitors –
Lisinopril and Captoril will be the only available formulary agents. Therapeutic interchange will be based upon lisinopril 1 mg = benazepril 1 mg = quinapril 1 mg = moexipril 0.75 mg = ramipril 0.25 mg = trandolapril 0.1 mg = fosinopril 1 mg; enalapril total mgs/24 hours = lisinopril totals mgs once daily

3. Alpha-1 Adrenergic Blockers –
Terazosin 2.5 mg = prazosin 1 mg bid = doxazosin (Cardura) 2 mg
(exception – prazosin use for PTSD)

4. Analgesics –
Hydrocodone/APAP 10/500 = Hydrocodone/APAP 10/325; Oxycodone/APAP 5/325 (Percocet-5®) to equivalent dose based upon oxycodone content

5. Anesthetics/Sedatives –
Lidocaine 2.5%/Prilocaine 2.5% (EMLA®) topical = Lidocaine 4% (LMX®) topical
Propofol (Diprivan) for injection = Propofol for injection

6. Antiepileptics –
Phenobarbital 100 mg = Phenobarbital 97.2 mg

7. Angiotensin Receptor Blockers –
Losartan will be the only formulary agent. Therapeutic interchange will be based upon irbesartan 150 mg = candesartan 16 mg = telmisartan 40 mg = valsartan 80 mg; losartan 1 mg = valsartan 1.6mg
Exception: Doses of valsartan greater than or equal to 360mg will not be substituted.

8. Anticholinergics –
Chlordiazepoxide/clindinium bromide (Librax®) capsules = L-hyoscyamine sulfate (Levsin®) 0.125

9. Antihistamines –
Hydroxyzine pamoate (Vistaril®) = Hydroxyzine HCl (Atarax®)
Desloratidine (Clarinex®) 5 mg = Loratidine 10 mg

10. Anti-infective Agents –
Fluoroquinolones – Moxifloxacin 200mg/400mg (all forms) = Levofloxacin 250mg/500mg
Carbapenems – Imipenem/cilastin injection will be the only formulary agent. Dosing should be individualized to each patient.
11. **Antidepressants** –
   Bupropion (Zyban) 150 mg tablet BID = Bupropion (Wellbutrin SR) 150 mg SR tablet BID = Bupropion (Wellbutrin XL) total dose of bupropion per day.
   Paroxetine (Paxil CR®) 25 mg = Paroxetine (Paxil®) 20 mg

12. **Antiplatelet agents** -
   Aspirin 81 mg = Aspirin enteric coated 81 mg

13. **Beta Blockers**-
   Metoprolol long-acting (Toprol XL) 1 mg daily = Metoprolol 0.5 mg bid
   Carvedilol extended release (Coreg CR®) 10 mg capsule daily = Carvedilol (Coreg®) 3.125 mg oral tablet bid

14. **Calcium Channel Blockers (long-acting oral)** –
   a. Amlodipine/Felodipine – Felodipine 1 mg = Amlodipine 1mg
   b. Nifedipine – GITS (Procardia XL) 1 mg = Nifedipine wax matrix (Adalat CC) 1 mg
   c. Nisoldipine (Sular) 4 mg = Amlodipine 1 mg

15. **Calcium Supplements** –
   a. Calcium carbonate 500 mg tablet = calcium carbonate 650 mg tablet
   b. Calcium citrate 950 mg tablet = calcium carbonate 650 mg tablet

16. **Combination products** –
   May be interchanged with individual products

17. **Diuretics** –
   Torsemide (Demadex®) 1 mg = Furosemide 2 mg

18. **H2 Antagonists (all forms)** –
   ranitidine 150 mg = nizatidine 150 mg = famotidine 20 mg

19. **Inhaled Anticholinergics/Beta Agonists** –
   Albuterol HHN q4h & Ipratropium HHN q6h = DuoNeb® HHN q4h,
   Albuterol HHN q6h & Ipratropium HHN q6h = DuoNeb® HHN q6h

20. **Iron Supplements** –
   Ferrous sulfate 300 mg = Ferrous sulfate 325 mg

21. **Magnesium oxide agents** –
   400 mg = 420 mg

22. **Oral Hypoglycemic Agents** -
   Glyburide: 1.5mg PresTab = 2.5mg gliburide regular release tablet
   3 mg Pres Tab = 5 mg gliburide regular release tablet
   Glipizide Extended Release: Equals equivalent total daily doses of glipizide regular release dosage in 2 equal doses
23. **Proton Pump Inhibitors** –
   Omeprazole 40 mg = esomeprazole 20 mg = lansoprazole 30 mg = rabeprazole 20 mg = Pantoprazole 40 mg
   (exclusion for pediatrics – lansoprazole (Prevacid®) oral tablet/granules/liquid for pantoprazole (Protonix®) oral doses less than 40 mg with a 1mg to 1mg interchange equivalency with maximum single doses of 30mg and 40mg respectively)

24. **Renal Replacement Oral Vitamins** –
   All formulations = Vitamin B & C tablet (currently Nephplex)

25. **Sedatives/Hypnotics** –
   Zolpidem CR (Ambien CR®) 6.25 mg = Zolpidem 5 mg

26. **Statins** –
   fluvastatin 20 mg = lovastatin 20 mg = pravastatin 20 mg = simvastatin 20 mg = atorvastatin 10 mg = rosuvastatin 10 mg

27. **Stool Softener** –
   Docusate sodium (Colace) 100mg/10mL = docusate calcium (Surfak) 240 mg = docusate sodium (Colace) 100mg

28. **Advair (fluticasone/salmeterol)** -
   a. Advair 100/50 = fluticasone 44 mcg (2 puffs) + salmeterol 50 mcg = Advair HFA 44/21 (2 puffs)
   b. Advair 250/50 = fluticasone 110 mcg (2 puffs) + salmeterol 50 mcg = Advair HFA 115/21 (2 puffs)
   c. Advair 500/50 = fluticasone 220 mcg (2 puffs) + salmeterol 50 mcg = Advair HFA 230/21 (2 puffs)