



# MESAC MEMO

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April 2007

The MESAC Memo has returned after a hiatus.

## Esomeprazole Conversion to Omeprazole

The MGH Medication Education Safety and Approval Committee (MESAC) recently approved the conversion from oral esomeprazole (Nexium®) to oral omeprazole (generic) on the MGH Formulary, as of May 1. This decision was made after consultation with GI experts at the MGH. Physicians will no longer need to convert a patient from esomeprazole to omeprazole on discharge when it is deemed necessary to continue therapy. This change supports the MGH in reaching our pay for performance (P4P) initiatives in the outpatient setting without losing clinical efficacy and omeprazole saves our patients money on their prescriptions.

Oral and injectable esomeprazole (Nexium®) will be removed from the Formulary. We will continue to carry lansoprazole IV. Templates will be updated as needed.

## “High-Risk/High Alert”!

Did you know that the Joint Commission requires us to define high-risk/high-alert medications and processes to manage their use? Do you know which were selected at MGH?

Insulin aspart, argatroban, concentrated potassium, and hydromorphone are specifically defined as high-risk/high-alert agents here at MGH. A number of risk-reduction strategies currently exist. MESAC will continue to work on this issue.

Look for more information on the MESAC website shortly.

## MESAC Formulary Updates-A Compilation for 2006

February 2006 – November 2006

### February 2006

#### **Moxifloxacin Hydrochloride (Avelox®) Tablets and Injection: Approved with Restrictions**

Moxifloxacin is a quinolone antimicrobial used in the treatment of refractory mycobacterium tuberculosis and nontubercular mycobacterium with documented or suspected drug resistance. The usual dose is 400mg IV or PO daily. Due to its excellent oral bioavailability moxifloxacin will be added to the IV to PO Program. The Committee approved the addition of moxifloxacin tablets and injection to the formulary with the following restrictions: Infectious Disease approval required and restricted to patients with suspected or confirmed mycobacterial disease where toxicity or intolerance to first-line agents is suspected or shown.

#### **Moxifloxacin Hydrochloride (Vigamox®) 0.5% Ophthalmic Solution: Approved**

#### **Ofloxacin (Ocuflox®) 0.3% ophthalmic solution: Removed from formulary**

Moxifloxacin ophthalmic solution is indicated for the treatment of bacterial conjunctivitis caused by susceptible organisms. Moxifloxacin 0.5% has demonstrated enhanced spectrum and potency for gram-positive cocci and possibly atypical mycobacterial species. It has improved penetration into the anterior

segment, and reduced propensity to promote the development of resistance as compared to ofloxacin (Ocuflox®) 0.3% ophthalmic solution. The Committee approved the removal of ofloxacin ophthalmic solution and the addition of moxifloxacin ophthalmic solution to the formulary without restrictions.

**Pregabalin (Lyrica®) PO: Approved with restrictions**

Pregabalin is a structural analogue of the neurotransmitter gamma-aminobutyric acid (GABA) with analgesic, anticonvulsant, and anxiolytic activity. Pregabalin has shown efficacy in the treatment of neuropathic pain associated with diabetes mellitus and post-herpetic neuralgia. Pregabalin and gabapentin share the same mechanism of action, and comparative data are limited. The Committee approved the addition of pregabalin to the formulary with the following restriction: Restricted to patients maintained on pregabalin at home.

**UPDATE on pregabalin (April 2006):** The Committee approved the expanded use of pregabalin as continuation or initiation of therapy for partial seizures

**Rosuvastatin Calcium (Crestor®) PO: Approved**

**Lovastatin (Mevacor®) and fluvastatin (Lescol®): Removed from formulary**

Rosuvastatin is an HMG-CoA reductase inhibitor used to modify lipid and lipoprotein levels with particularly favorable effects on LDL cholesterol. Comparable drugs on formulary include atorvastatin (Lipitor®), pravastatin (Pravachol®), and simvastatin (Zocor®). The Approval Subcommittee recommended the removal of lovastatin and fluvastatin. The Committee approved the addition of rosuvastatin to the formulary without restrictions.

**March 2006**

**Abatacept (Orencia®) Injection: Restricted to the Rheumatoid Arthritis Clinic**

Abatacept is a biological response modifier that displays anti-inflammatory effects by down-regulating T cell activation. Abatacept is used in the treatment of adult patients with moderately to severely active rheumatoid arthritis. It will be considered for patients who have failed methotrexate alone or methotrexate plus a tumor necrosis factor (TNF) antagonist. The Committee approved the addition of abatacept to the formulary with the following restriction: Restricted to the Rheumatoid Arthritis Clinic.

**Aprepitant (Emend®) Capsule: Restricted to Oncology**

Aprepitant is a substance P/Neurokinin-1 receptor agonist used to augment the activity of 5HT-3 receptor antagonists, in both acute and delayed phases of chemotherapy-induced emesis. There are no other drugs with the same mechanism of action. Aprepitant is recommended for all cisplatin-containing regimens as well as ifosfamide and dacarbazine, and can also be added to other regimens for patients who experience refractory nausea and vomiting. It is given in combination with a 5HT-3 antagonist and a corticosteroid. It was recommended that aprepitant be put in the order entry dictionary as a chemotherapeutic agent. The Committee approved the addition of aprepitant to the formulary with the following restriction: Restricted to Oncology.

**Palonosetron Hydrochloride (Aloxi®): Restricted to Oncology**

Palonosetron is a selective 5HT-3 receptor antagonist used in the prevention of chemotherapy-induced nausea and vomiting. Palonosetron is used in patients who are not tolerating ondansetron or who are unable to comply with the ondansetron regimen in the outpatient setting. The long half-life of palonosetron allows it to be given as a single IV dose. It was recommended that palonosetron be added to the order entry dictionary as a chemotherapeutic agent. The Committee agreed to approve the addition of palonosetron to

the formulary pending finalization of an assessment tool, which will incorporate established criteria, and with the following restriction: Restricted to Oncology.

### **Updated Antiemetic Guidelines**

The 2006 Guidelines for Assessment and Management of Nausea and Vomiting from DFCI and Brigham and Women's Hospital were presented to the Committee for approval for incorporation into COE. These guidelines reflect how patients are currently being managed. Incorporation into COE will require the addition of two new drugs to the formulary: aprepitant (Emend) and palonosetron (Aloxi). These two medications are essential to the 2006 guidelines and are not in the 2003 guidelines, which are currently in place. The guidelines were approved by the Committee for incorporation into COE.

### **Fosphenytoin Critical Care Guidelines: Approved**

On March 29, 2006 the hospital-wide conversion from phenytoin IV to fosphenytoin IV took place, and phenytoin IV was removed from all patient care areas including the code carts. Fosphenytoin vials require refrigeration so they cannot be stored on the code carts. Fosphenytoin is not associated with the local, and sometimes severe, adverse reactions seen with IV phenytoin. However, Fosphenytoin does have a much higher acquisition cost. In anticipation of this conversion, updates have been made to POE (Physician Order Entry), Nursing Policy and Procedures Manual, and Critical Care Guidelines. Fosphenytoin IV will be used when oral phenytoin cannot be used. Fosphenytoin Critical Care IV Guidelines were presented to the Committee for final approval.

**April 2006**

### **Dexmedetomidine (Precedex®) Inj: Expanded Use**

Dexmedetomidine is a selective alpha2-adrenoceptor agonist with sedative and analgesic properties. Approval for general sedation in the Neuro ICU was deferred pending the development of a data collection tool. Once the tool has been developed it will be approved for 6-8 patients. After the first 6 patients, data will be reported back to MESAC regarding the effectiveness and safety. Dexmedetomidine was approved as a second line agent to control shivering in patients intolerant or refractory to meperidine and in patients at high risk for toxicity (seizures, renal failure). Dexmedetomidine was not approved for general sedation in the PICU. Conditional approval was granted for sedation for specific procedures in pediatric and adult patients, pending development of a patient evaluation tool by Anesthesia. It was noted that the additional uses need to be incorporated into the critical care guidelines.

### **Pregabalin (Lyrica®) PO: Modified Restrictions**

Pregabalin is a structural analogue of the neurotransmitter gamma-aminobutyric acid (GABA) with analgesic, anticonvulsant, and anxiolytic activity. Pregabalin and gabapentin share the same mechanism of action. The Committee agreed to maintain the restrictions with respect to neuropathic pain: restricted to continuation of therapy (patient is on it at home). The Committee approved the expanded use of pregabalin as continuation or initiation of therapy for partial seizures.

### **NICU (Neonatal ICU) Dosing Card Updates: Approved**

An overview of proposed changes to the updated NICU (Neonatal ICU) dosing card was presented to the Committee. Infectious Disease (ID) has recommended acyclovir 20mg/kg/dose for <35 weeks. ID consult is advised for these infants. Cefepime, Cefotaxime, and metronidazole dosing have been added. Dilute DTO (opium tincture) has been deleted and replaced with morphine solution. Caffeine Citrate dosing has been modified to 5-10mg/kg/dose. Epinephrine ETT dosing has been changed to match the NRP guidelines. Indomethacin was deleted from the neurology section. Fentanyl and morphine were removed from the section on sedatives as they are in the analgesic section. The Committee approved the updated NICU dosing card, requesting that the MESAC logo be added to the card.

## **MAY 2006**

### **Formulary Deletions: Probenecid/colchicines, ipratropium nasal solution, desoximetasone 0.25% cream, chlorpheniramine tablets and syrup, flunisolide inhaler, flurbiprofen ophthalmic solution, methazolamide tablets**

The Committee approved the removal of the following items from the formulary: probenecid/colchicine tabs, ipratropium nasal solution, desoximetasone 0.25% cream, chlorpheniramine tabs & syrup, flunisolide inhaler, flurbiprofen ophthalmic solution, and methazolamide tabs.

### **Abacavir sulfate and lamivudine (Epzicom®) PO: Not Approved for Formulary Addition**

Abacavir sulfate and lamivudine (Epzicom®) PO is a fixed-dose combination nucleoside reverse transcriptase inhibitor used in the treatment of HIV infection. Currently each of the individual components is available at MGH. The combination product abacavir sulfate and lamivudine (Epzicom®) PO was not approved for formulary addition.

### **Diltiazem hydrochloride extended release (Cardizem CD®) PO: Approved**

The Committee approved the addition of diltiazem hydrochloride extended release (Cardizem CD®) PO to the formulary without restrictions. The request was based on safety concerns and errors surrounding the use of the immediate release formulation of diltiazem.

### **Patient Controlled Analgesia (PCA) & Epidural Medication Safety Initiative: APPROVED**

The Pain Team Task Force, an interdisciplinary committee, has been working on the development and implementation of The PCA & Epidural Medication Safety Initiative. Over the past one and a half years, this group has worked to standardize and limit concentrations to be in compliance with JCAHO medication safety standards. The Pain Team Task Force has streamlined the ordering to provide seven PCA concentrations. A fentanyl PCA has been added. Safety enhancements have been added and a calculator function has been built in. Order sets have been changed to show mg/hr or mcg/hr (fentanyl only) as well as mls/hr, and the pump also calculates how many mls/hr. Unusually high or low doses will trigger a warning and a request for Pain Service consultation. Age-appropriate dosing has been added.

## **JUNE 2006**

### **Changes to the APC (Drotrecogin Alfa, Xigris®) Guidelines: Approved**

A change has been made to the APC (Drotrecogin Alfa, Xigris®) Guidelines. The APACHE II score will be calculated by the pharmacist as part of the evaluation process for a patient being considered for APC. If the patient does not meet the criteria for APC administration, the case will be brought to one of the assigned adjudicators for review.

### **Acamprosate (Campral®) PO: Approved**

Acamprosate (Campral®) is an analog of homotaurine, a GABA-ergic agonist and is used for the maintenance of alcohol abstinence. Acamprosate (Campral®) PO was approved for addition to the formulary without restrictions.

### **Guidelines for Intrathecal Chemotherapy Administration: Approved**

The Policy for Intrathecal Chemotherapy Administration was created to ensure safe administration of intrathecal therapy, and to correct the one JCAHO recommendation that we were not fully in compliance with: the recommendation for a time-out prior to administration of any chemotherapy. The policy provides

a list of drugs approved for intrathecal administration and also an intrathecal checklist that is provided with each dose that is dispensed. Intrathecal therapy is typically a physician-driven event, in contrast to standard chemotherapy where nursing provides a double-check.

**JULY 2006**

**Code Cart IV Medication Reference: Approved**

The Code Committee (a group of physicians, nurses, and pharmacists) has reviewed the contents of the code carts and has updated the adult code cart IV reference material. The biggest change to the medication reference is to atropine where the new dosing guidelines differentiate between symptomatic bradycardia and asystole during cardiac arrest. Some minor changes have been made to the contents of the code cart and to the infusion guidelines.

**Partners Drug Assessment Program Appropriate Treatment of Nausea and Emesis: Approved**

These guidelines were developed by a group of experts from a variety of institutions including Brigham and Women's Hospital, Faulkner Hospital, McLean Hospital, North Shore Medical Center, and Newton-Wellesley Hospital. The guidelines are created specifically for the Partners Organization and are intended for the non-chemotherapy patient. Three patient populations were targeted: pre-operative, post-operative, and medical inpatients who have nausea and vomiting for a variety of other reasons. Concern was raised regarding the efficacy of the 1mg ondansetron dose. It was decided that this would be monitored by the Utilization Subcommittee of MESAC.

**Eptifibatide (Integrilin®) Critical Care: Approved**

The eptifibatide (Integrilin®) critical care guidelines have been updated to include renal dosing and cautionary statements for DTIs (direct thrombin inhibitors) and fondaparinux (Arixtra®).

**Formulary Deletions: Zalcitabine (ddC, Hivid®) and Saquinavir (Fortovase®)**

Zalcitabine (ddC, Hivid®) was removed from the formulary because it is no longer recommended for the treatment of HIV. The didanosine (Videx EC®) 400mg capsule will be replaced with the 200mg and 250 mg delayed release capsule. Saquinavir (Fortovase®) has been removed because it is no longer manufactured, however we do still have saquinavir mesylate (Invirase®), a different formulation.

**Efavirenz (Sustiva®) 600mg Tablet: Not Approved**

Efavirenz is a non-nucleoside reverse transcriptase inhibitor used in the treatment of HIV infection. We currently carry 200mg and 50mg capsules. The Approval Subcommittee recommended against the addition of the 600mg tablet. The Committee concurred, and the efavirenz (Sustiva®) 600mg tablet was not approved for formulary addition.

**Hexamethylmelamine (Hexalen®) 50mg Gelcap: Approved with restrictions**

Hexamethylmelamine (Hexalen®), also known as altretamine, is used in the treatment of ovarian carcinoma, fallopian tube cancer, and primary peritoneal carcinoma. Altretamine selectively inhibits the incorporation of radioactive thymidine and uridine into DNA and RNA, inhibiting DNA and RNA synthesis. It is metabolized to reactive intermediates which covalently bind to microsomal proteins and DNA. Altretamine is approved as a single agent for the palliative treatment of patients with persistent or recurrent ovarian cancer following first line therapy with cisplatin and/or an alkylating agent. The Committee approved the addition of hexamethylmelamine (Hexalen®) 50mg gelcap with the following restriction: Restricted to Oncology.

### **MGH Conversion from Dalteparin (Fragmin®) to Enoxaparin (Lovenox®): Approved**

The proposed MGH conversion from dalteparin (Fragmin®) to enoxaparin (Lovenox®) has been endorsed by Hematology, Medicine, Surgery, and Cardiology. The two low molecular weight heparin products are considered to be therapeutically equivalent. An added benefit of this conversion is that via the Sanofi-Aventis Indigent Program, MGH will no longer incur costs by having to provide LMWH for free upon patient discharge.

### **Non-Oncology Use Templates: Approved**

Non-Oncology use templates for ordering chemotherapeutic medications for non-malignant indications have been developed by a group of POE analysts, nurses, and pharmacists. This group reviewed pre-existing non-oncology chemo orders to determine current needs. Associated orders were taken from COE, and a list of templates was created. Currently, when you select a chemotherapeutic drug in the medication look-up in POE, it will take you directly to the template.

## **SEPTEMBER 2006**

### **Anagrelide (Agrylin®) PO: Approved with Restrictions**

Anagrelide (Agrylin®) PO is used for the treatment of thrombocythemia associated with myeloproliferative disorders. It is postulated that anagrelide reduces platelet production by decreasing megakaryocyte hypermaturation, and inhibits platelet aggregation by inhibition of cyclic adenosine monophosphate (cAMP) phosphodiesterase activity with subsequent increases in cAMP levels in the platelets. This should be used with caution in liver disease and CVD. It is suggested to monitor LFTs, renal function, CBC, and BP while on therapy. The Committee approved the addition of Anagrelide (Agrylin®) PO to the formulary with the following restriction: Hematology recommendation required for initiation of therapy.

### **Dexmedetomidine (Precedex®) Critical Care Guidelines: Approved**

The Dexmedetomidine (Precedex®) Critical Care guidelines contain the key points regarding monitoring parameters and mixing, and also direct readers to the Pharmacist Evaluation Tool. The Utilization Subcommittee is currently studying dexmedetomidine usage.

### **Entecavir (Baraclude®) PO: Approved with Restrictions**

Entecavir (Baraclude®) is a nucleoside reverse transcriptase inhibitor used in the treatment of hepatitis B infection. The addition of Entecavir (Baraclude®) PO to the formulary was approved by the Committee as restricted to Infectious Disease. It is anticipated however that other specialties (e.g. Hepatology) should be able to order this medication. Due to POE constraints this could be problematic; therefore, discussion regarding specific restrictions will be continued offline.

### **ECMO, Neonate, & Pediatric CVVH Replacement Fluid Changes: Approved**

Minor changes have been made to the ECMO, Neonate, & Pediatric CVVH Replacement Fluids. Changes include an increase in sodium, a decrease in bicarbonate in another. The Committee approved the changes with no requests for changes or revisions.

### **Idursulfase (Elaprase®) Injection: Approved**

Idursulfase (Elaprase®) Injection is an enzyme used as replacement therapy in the treatment of patients with Hunter syndrome (mucopolysaccharidosis II) for improvement of walking capacity. The recommended dose is based on patient's weight and is given once weekly by intravenous infusion. There is

no recommendation for duration of treatment. The cost is substantial and can range from \$250-500K per year, therefore an insurance commitment will be required prior to dispensing and we will not routinely stock this item. Treatment will take place primarily in outpatient infusion clinics, though idursulfase will be added to POE for the rare instances that inpatient treatment is necessary. The POE Group will add idursulfase to order entry and will determine what key pieces are needed for POE instruction. The Committee approved the addition of idursulfase (Elaprase®) Injection to the formulary, restricted to patients with MPS II [Hunter disease; lysosomal storage disease] with deficiency of iduronate-2-sulfatase.

#### **Leflunomide (Arava®) PO: Approved with Restrictions**

Leflunomide (Arava®) PO is a dihydroorotate dehydrogenase inhibitor and an immune modulator with antiviral activity for cytomegalovirus and BK polyomavirus. The requested indication is for salvage therapy for CMV or BK virus infection. The Committee approved the addition of leflunomide (Arava®) PO to the formulary as salvage therapy with the following restriction: Infectious Disease approval required.

#### **Papillomavirus Recombinant Vaccine (Gardasil®) Injection: Approved**

Papillomavirus Recombinant Vaccine (Gardasil®) Injection and Zoster Vaccine (Zostavax®) Injection were discussed concurrently: see details under Zoster injection.

#### **Zoster Vaccine (Zostavax®) Injection: Approved**

The Approval Subcommittee recommended that Zoster Vaccine (Zostavax®) and Papillomavirus Recombinant Vaccine (Gardasil®) should be added and restricted to the outpatient clinics. Prescribers would defer to PCOI for outpatient guidelines. The Approval Subcommittee recommended against the addition to POE on the basis that the vaccines should not be given during an acute illness, and patients will be able to obtain the vaccines in the outpatient setting. It was agreed by the Committee that the discussion would be taken offline pending clarification of the reimbursement issues and input from a broader spectrum of stakeholders. The Committee agreed to approve Zoster Vaccine (Zostavax®) Injection and Papillomavirus Recombinant Vaccine (Gardasil®) Injection for outpatient use and to defer the decision regarding inpatient use and addition to POE.

#### **Anaphylactoid Kit: Approved**

The Latex Allergy Kit has been reconfigured into a new anaphylactoid kit that contains intravenous medications and will be stocked in each Omnicell. Previously the Latex Allergy Kit was sent to the floor for each patient who had latex listed as an allergy. The kit will now be readily available for any patient with an anaphylactoid reaction.

#### **Hepatitis B Immune Globulin (HBIG) Intravenous Critical Care Guidelines: Approved**

The Hepatitis B Immune Globulin (HBIG) Intravenous Critical Care Guidelines have been approved by the Critical Care Committee and by the Nursing Practice Committee. Hepatitis B Immune Globulin imparts passive immunization against hepatitis B by providing antibodies to hepatitis B surface antigen (anti-HBs).

#### **Revisions to the Latex Allergy Policy: Approved**

The revised Latex Allergy Policy is contained in the Clinical Policy and Procedures Manual. Items that have been updated include the patient population at risk, indication for RAS testing, additional nursing assessment questions, updated allergy wristband, and the procedure for obtaining latex equipment. Pre-treatment prophylaxis and the general guidelines for management of allergic reaction have been updated.

## OCTOBER 2006

### **Dasatinib (Sprycel®) PO: Approved with Restrictions**

Dasatinib (Sprycel®) PO is used in resistant CML and Philadelphia Chromosome positive ALL. Though imatinib is the standard of care, dasatinib is an alternative tyrosine kinase inhibitor. Major safety concerns include fluid retention, pleural effusions, QT prolongation, and myelosuppression. Expected to be an outpatient medication. Dasatinib (Sprycel®) PO was added to the formulary with the following restriction: Restricted to patients with resistant CML or intolerant to imatinib or with Philadelphia Chromosome positive ALL resistant or intolerant to imatinib.

### **Decitabine (Dacogen®) Injection: Approved**

Decitabine (Dacogen®) Injection has been added to the formulary for use in the treatment of myelodysplastic syndrome. It is a pyrimidine analog used in all subtypes of CML that has been shown to improve overall response though it does not reduce mortality or time to progression.

### **Natalizumab (Tysabri®) Injection: Approved**

Natalizumab (Tysabri®) Injection is used in the treatment of relapsing MS. It is given every 4 weeks as an intravenous infusion and will be used mainly by the ambulatory infusion clinics. Registration with the manufacturer is required for patients, physicians and pharmacies. Natalizumab was temporarily removed from the market in 2004 due to a suspected association with PML (progressive multifocal leukoencephalopathy). Verification of registration of the infusion clinic with the manufacturer will be required prior to dispensing. The Committee approved the addition of Natalizumab (Tysabri®) Inj to the formulary.

### **Rotavirus Vaccine (RotaTeq®): Approved with Restrictions**

Rotavirus Vaccine (RotaTeq®) is used to prevent rotavirus gastroenteritis in infants and children. It is given as a three-dose regimen where all doses must be given prior to week 32. It is a live vaccine so for the most part should not be given to inpatients. It does not treat the process acutely. The Committee approved the addition of rotavirus to the formulary with restriction to ambulatory practice.

## NOVEMBER 2006

### **Agalsidase Beta (Fabrazyme®) Injection: Restricted to Neurology**

Agalsidase Beta (Fabrazyme®) Injection is used in the treatment of patients with Fabry disease, a lysosomal storage disease where there is a deficiency of alpha-galactosidase A. Agalsidase beta replaces the enzyme that is deficient, correcting abnormal glycosphingolipid metabolism. Fabrazyme® has a much lower incidence of infusion-related reactions than is seen with Myozyme®. The Committee approved the addition of Agalsidase Beta (Fabrazyme®) Injection to the formulary for use at the Yawkey Center and for inpatients with the following restriction: restricted to Neurology.

### **Alglucosidase Alfa (Myozyme®) Injection: Restricted to Neurology**

Alglucosidase Alfa (Myozyme®) Injection is an enzyme replacement therapy used in the treatment of patients with GSD II [Pompe disease; lysosomal storage disease] with deficiency of acid maltase. Infusion will take place in the outpatient setting for the most part. It was noted that up to 50% of patients, for the most part pediatric, experience infusion-related reactions and 3% of those are anaphylactic. A template for ordering will be added to POE. The Committee approved the addition of Alglucosidase Alfa (Myozyme®) Injection to the formulary for use at the Yawkey Center and for inpatients with the following restriction: restricted to Neurology.

### **Hemin (Panhematin®) Injection: Restricted to Hematology and Neurology**

Hemin (Panhematin®) Injection is an enzyme inhibitor that is derived from processed red blood cells for use in the treatment of acute intermittent porphyria. There are concerns regarding the stability of this product. Guidelines that detail the proper procedures for processing and delivery of hemin are needed and are currently being developed. The Committee approved the addition of Hemin (Panhematin®) Injection to the formulary with the following restriction: restricted to Hematology and Neurology.

### **Proposed Changes to IV Guidelines**

Major changes to the MGH IV guidelines have been proposed. The intention is to have the ICU, General Care, Pediatric, and Radiology IV guidelines consolidated, electronic, and located in one spot. They will be launched from the Partners website in a manner similar to the current Critical Care guidelines and will follow the same format. Two paper copies will be maintained with all updates: one copy in the Pharmacy Department and one copy with Nursing. All changes to guidelines will be approved by MESAC. It was noted that the guidelines may deviate from approved uses however they are closely reviewed by physicians and are vetted through the Critical Care Guidelines Committee as well as Nursing Practice.

### **New Recommendations for Promethazine IV**

Recent reports have surfaced in the literature concerning inadvertent arterial administration of promethazine which resulted in tissue necrosis and ischemia. Though the number of adverse events reported is very small, it was universally felt that our practices should be changed. It was agreed that MGH guidelines would limit promethazine dosing to 12.5mg in adults, as per the ISMP Report recommendations. In addition, it is recommended to reduce the concentration by diluting each dose with 10 mls normal saline. The dose should be infused slowly over 30 seconds to one minute.