Isavuconazonium sulfate (Cresemba®)

IV and PO Only **Use requires formal ID Consult**

Activity: Coverage against most strains of the following microorganisms, both in vitro and in clinical infections: *Aspergillus flavus*, *Aspergillus fumigatus*, *Aspergillus niger*, and Mucorales such as *Rhizopus oryzae* and Mucormycetes species

Criteria for Use:

- Treatment of invasive aspergillosis
- Treatment of invasive mucormycosis

Unacceptable Uses:

- Treatment for other fungal infections (*Blastomyces*, *Histoplasma*, etc.)
- Contraindicated with known hypersensitivity to isavuconazole. Caution in use in patients with hypersensitivity to other azoles
- Contraindicated in patients with familial short QT syndrome (shortens the QTc interval in a concentration-related manner)

Dosing in Adults:

- Standard dose: 372 mg IV/PO Q8H x 6 doses (48 hours; load), then 372 mg Q24H starting 12-24 hours after last loading dose
- No renal or hepatic dose adjustment
- IV must be administered via an infusion set with in-line filter (pore size 0.2-1.2 micron) and should be infused over a minimum of 1 hour
- No dose adjustment is necessary when changing from IV to PO

Monitoring:

- AST/ALT/bilirubin at baseline and every 1-2 weeks after

Considerations for Use:

- Elevated LFTs have been reported in clinical trials. Elevations generally reversible and do not require discontinuation
- May cause fetal harm when administered to a pregnant woman

Important note regarding drug interactions:

- Isavuconazole is a substrate/inhibitor of CYP3A4 and has multiple drug interactions that may affect its levels and/or those of co-administered drugs. Dose adjustment may be necessary
- Some drugs with interactions of major significance include:
  - Carbamazepine
  - Rifampin/rifabutin
  - Ritonavir
  - Sirolimus
  - Cyclosporine
  - Warfarin
  - Tacrolimus
  - Phenytoin

ALT= Alanine aminotransferase; AST= Aspartate aminotransferase; H= hour(s); ID= infectious diseases; IV= Intravenous; LFT's= Liver Function Tests; PO= by mouth; Q= every