Itraconazole (Sporanox™)

Spectrum of Activity:

- Itraconazole has antifungal coverage against most Candida as well as endemic and dimorphic fungi
- Minimal activity against Aspergillus spp.
- Coverage gaps:
 - o Diminished activity against Candida krusei and glabrata spp.
- Acceptable uses
 - Treatment
 - Blastomycosis
 - Histoplasmosis

Unacceptable uses

- Should be avoided in pregnancy
- Caution in setting of decompensated CHF

Dosing

- Standard: 200-400mg/d
 - For life threatening infections, use loading dose of 200mg 3 times daily (600mg/d) for 3 days, followed by a maintenance dose of 200mg PO twice daily.
- Formulations
 - o Dosing is equivalent for capsules and oral solution but solution is better absorbed
 - Capsule:
 - Absorption requires acidic environment (Do not administer with H2 receptor antagonists or proton pump inhibitors)
 - Administer an acidic beverage or after a full meal
 - Solution (preferred):
 - Administer on an empty stomach without concern for acid
- Therapeutic Drug Monitoring
 - Obtain trough level 5-7 days after initiation of therapy
 - Goal trough: >0.5-1 mcg/ml (itraconazole level)
 - Troughs > 3 mcg/ml have been associated with increased toxicity
- Dose Adjustments:
 - \circ $\;$ No dosing adjustments recommended for renal or hepatic impairment

Monitoring

- Black Box Warning: negative inotropic effect may worsen or cause congestive heart failure
- <u>Adverse Reactions</u>: Nausea, abdominal discomfort, elevated LFTs, hypertension, hypokalemia, edema (use caution in heart failure), rash, prolonged QTc
- <u>Lab/Tests</u>: AST/ALT at baseline and every 1-2 weeks, baseline ECG

<u>Drug interactions</u>: As a CYP-enzyme inhibitor, itraconazole has significant drug interactions including oral anticoagulants, anti-epileptics, anti-arrhythmics, SSRIs, antipsychotics, and immunosuppressants. Concurrent treatment with vinca alkaloids should be avoided.