Posaconazole (Noxafil™)

Spectrum of Activity:

- Posaconazole has broad coverage against Candida, Aspergillus, dimorphic fungi, Fusarium spp., as well as Zygomycetes (e.g. mucor)

Acceptable uses

- Prophylaxis
    - AML induction, GVHD with high dose steroids (≥20mg/d prednisone)

Unacceptable uses

- Should be avoided in pregnancy

Dosing

- Prophylaxis
    - Neutropenia:
        - Suspension: 200mg three times daily
        - Tablets: 300mg twice daily on day 1 followed by 300mg daily
        - IV: 300mg twice daily on day 1 followed by 300mg daily
- Formulations
    - Suspension
        - Administer after high-fat, acidic meal (e.g. coke float)
    - Delayed Release Tablet (preferred)
        - Administer after a meal (less dependent on food than suspension)
    - Intravenous
        - Contains cyclodextrin, which may accumulate in renal dysfunction
- Therapeutic Drug Monitoring
    - Obtain trough level 5-7 days after initiation of therapy
    - Goal trough: 0.7-1.5 mcg/ml
- Dose Adjustments:
    - No dosing adjustments recommended for renal or hepatic impairment though caution is warranted for IV therapy when CrCl < 50 ml/min

Monitoring

- Adverse Reactions: Nausea, abdominal discomfort, elevated LFTs, prolonged QTc
- Labs/Tests: AST/ALT at baseline and every 1-2 weeks after, baseline ECG, renal function (IV only)
- Drug interactions: 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.

Notes:

Posaconazole is restricted to infectious disease or bone marrow transplant services.