Para-aminosalicylic acid (PAS)

**Antibiotic Class:** Synthetic structural analog of aminobenzoic acid

**Antimicrobial Spectrum:** *M. tuberculosis*

**Mechanism of Action:** Possibly alteration of iron transfer

**Pharmacodynamics:**
PAS generally is bacteriostatic at the doses that can be achieved in humans. As such, keeping the serum concentrations above the MIC for the entire dosing interval would be theoretically desirable.

**Pharmacokinetics:**
With PASER® granules, Cmax: 20-60 mg/L; Tmax: about 6 hours; Bioavailability: at least 80% with immediate release tablets; not directly measured with granules. Protein binding: estimated at 50-73%

**Adverse Effects:**
Gastrointestinal intolerance is the major problem with PAS – nausea is common and vomiting may occur. This is improved with the change from tablets to PASER® granules. Various types of malabsorption with PAS have been reported (immediate release tablets). Hepatocellular injury with initial symptoms of rash, followed by fever, anorexia and diarrhea may occur. Generally, PAS should be discontinued permanently if liver injury occurs. PAS is known to produce goiter, with or without myxedema, especially if given with ethionamide.

**Dosage:**
PO: 4000 mg granules in a packet
Usual dose: 4000 mg twice daily to 3 times daily with food or acidic beverage (fruit juice)

Disease state based dosing:
Hepatic failure: No specific recommendations, but PAS is hepatically cleared, so caution is required.

**Renal failure:** Adjustment not required for patients in hemodialysis

**Contraindications/Warnings/Precautions:** History of liver injury from PAS

**Drug Interactions:** Rare interaction with probenecid is possible.

**Pregnancy:** Although PAS has been used safely in pregnant women, a complete safety profile during pregnancy has not been established.

**Monitoring Requirements:** Toxic: baseline liver enzymes

**Brand names/Manufacturer:** PASER® granules (Jacobus)