Perphenazine
Class: Antipsychotic Agent, Phenothiazine, Piperazine; Phenothiazine Derivative

**Pharmacokinetics**

**Absorption**
- **Non-genetic**
  - Formulation used
  - Route of administration
  - Concomitant medication/substances: aluminum salts may decrease perphenazine absorption
- **Genetic**
  - No clear genetic factors affecting absorption

**Distribution**
- **Non-genetic**
  - Possible: altered serum protein (>90% protein bound, primarily to alpha 1-acid glycoprotein)
- **Genetic**
  - No clear genetic factors affecting distribution

**Metabolism**
- **Non-genetic**
  - Concomitant medication/substances: CYP2D6 inducers or inhibitors
  - Age: concentrations appear to increase with age
  - Hepatic impairment: decreased metabolism
- **Genetic**
  - Genetic variation in drug metabolizing enzyme gene: CYP2D6

**Excretion**
- **Non-genetic**
  - No clear non-genetic factors affecting excretion
- **Genetic**
  - No clear genetic factors affecting excretion

**Pharmacodynamics**

**Receptors**
- **Non-genetic**
  - Concomitant medications/substances
    - Adrenergic receptor agonists or antagonists (may block or enhance effects of perphenazine)
    - Dopamine receptor agonists or antagonists (may block or enhance effects of perphenazine)
    - Dopamine transporter blockers (increased dopamine binding to receptors; may block therapeutic effects of perphenazine)
- **Genetic**
  - Genetic variation in dopamine receptor gene(s)
  - Genetic variation in alpha-1 adrenergic receptor gene

**Transporters**
- **Non-genetic**
  - No clear non-genetic factors affecting transporters
- **Genetic**
  - No clear genetic factors affecting transporters