Hyperoxaluria Diagnostic Algorithm

**Normal Kidney Function**
- Stones or nephrocalcinosis in childhood
- Recurrent calcium oxalate stones or nephrocalcinosis in adults
- Family history of primary hyperoxaluria

Perform urine oxalate OXU / Oxalate, 24 Hour, Urine

- Urine oxalate > 0.7 mmol/1.73 m²/24 hours
- Urine oxalate/urine creatinine > normal for age*

- Confirm urine oxalate with repeat testing
- Perform HYOX / Hyperoxaluria Panel, Urine

Hyperoxaluria confirmed:
- Urine oxalate > 0.7 mmol/1.73 m²/24 hours
- Urine oxalate/urine creatinine > normal for age
- Urine glycolate, L-glycerate or 4-hydroxy-2-oxoglutarate > normal for age.

**Secondary causes present?**
- Malabsorption
- Gastrointestinal disease
- Very high oxalate and low calcium diet
- Premature infant

Perform genetic testing as indicated in the HYOX interpretive report**
- AGXTZ / AGXT Gene, Full Gene Analysis
- GRHPZ / GRHPR Gene, Full Gene Analysis
- HOGA1 gene analysis

**Homozygosity or compound heterozygosity for known mutations of AGXT, GRHPR, or HOGA1**

*Random oxalate/creatinine ratios vary significantly by age. Consult pediatric reference range tables for interpretation.*

**Interpretive report includes an overview of results and of their significance along with a recommendation for confirmatory molecular testing for either AGXT, GRHPR, or HOGA1.**