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**Lab Dept:** Urine/Stool

**Test Name:** HYPEROXALURIA PANEL, URINE

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***General Information***

**Lab Order Codes:** UHPU

**Synonyms:** N/A

**CPT Codes:** 82542 – Column chromatography/mass spectrophotometry; non-drug analytes, not elsewhere specified, qualitative or quantitative, each specimen

**Test Includes:** Glycolate, glycorate, oxalate, and 4-Hydroxy-2-Oxoglutarate (HOG) levels reported in mg/g creatinine.

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***Logistics***

**Test Indications:** Useful for distinguishing between primary and secondary hyperoxaluria; distinguishing between primary hyperoxaluria types 1, 2, and 3, and secondary hyperoxaluria.

**Lab Testing Sections:** Urine/Stool - Sendouts

**Referred to:** Mayo Medical Laboratories (MML Test: HYOX)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** Within 14 days

**Special Instructions:** See [Patient Preparation](#).

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***Specimen***

**Specimen Type:** Urine, See [Patient Preparation](#):

**Container:** Plastic leak-proof urine container (no preservative)

**Draw Volume:** Entire Random urine collection

**Processed Volume:** 10 mL (Absolute minimum: 1.1 mL) random urine

<b>Collection:</b>	Routine random urine collection
<b>Special Processing:</b>	Lab Staff: Remove urine aliquot from a well-mixed specimen. Place aliquot into a 10 mL urine tube. No preservative. Freeze immediately. Store and ship at frozen temperatures. Forward promptly.
<b>Patient Preparation:</b>	Fasting overnight (12-14 hours, recommended). Have patient void the first-morning specimen, then collect specimen within 2 hours of the first-morning void while the patient continues to fast. Fluids are allowed.
<b>Sample Rejection:</b>	Specimens other than urine; mislabeled or unlabeled specimens; use of any preservative

***Interpretive***

**Reference Range:**

Analyte	Age	Range (mg/g creatinine)
Glycolate	< or =17 years:	<or =75
	> or =18 years:	<or =50
Glycerate	< or =31 days:	<or =75
	31 days – 4 years:	<or =75
	5 – 10 years:	<or =55
	> or =11 years:	<or =25
Oxalate	< or=6 months:	<or=400
	7 months – 1 year:	<or=300
	2 – 6 years:	<or=150
	7 – 10 years:	<or=100
	>or=11 years:	<or =75
4-Hydroxy-2-Oxoglutarate (HOG)	All ages:	<or =10

**Interpretation:**

Increased concentrations of oxalate and glycolate indicate Type I hyperoxaluria.

Increased concentrations of oxalate and glycerate indicate Type II hyperoxaluria.

Increased concentrations of oxalate and 4-hydroxy-2-oxoglutarate indicate Type III hyperoxaluria.

Increased concentrations of oxalate with normal concentrations of glycolate, glycerate and 4-hydroxy-2-oxoglutarate indicate secondary hyperoxaluria.

**Critical Values:**

N/A

**Limitations:**

Ascorbic acid will falsely elevate oxalic acid results.

**Methodology:**

Gas chromatography – Mass spectrometry (GC-MS)

**References:**

[Mayo Medical Laboratories](#) January 2018

**Updates:**

1/15/2018: Updated reference ranges.