

Notification Date: October 21, 2025 Effective Date: December 2, 2025

Porphyrins, Quantitative, Random, Urine

Test ID: PQNRU

Explanation: The reference value will be updated due to a conversion to alternative units of measure (mmol/mol Cr). The test now includes porphobilinogen and aminolevulinic acid. An additional CPT code and collection requirements now apply.

Current Reference Value

Uroporphyrins, Octacarboxyl: < or =30 nmol/L

Heptacarboxylporphyrins:

< or =7 nmol/L

Hexacarboxylporphyrins:

< or =2 nmol/L

Pentacarboxyporphyrins:

< or =5 nmol/L

Copropprphyrin, Tetracboxyl:

< or =110 nmol/L

Porphobilinogen:

< or =1.3 mcmol/L

New Reference Value

Uroporphyrins, Octacarboxyl: < or 3.1 mcmol/mol creatinine

Heptacarboxylporphyrins: < or =0.9 mcmol/mol creatinine

Hexacarboxylporphyrins: < or =0.3 mcmol/mol creainine

Pentacarboxyporphyrins: < or =1.2 mcmol/mol creatinine

Coproporphyrin, Tetra::

< or =25.0 mcmol/mol creatinine

Porphobilinogen:

< or =0.2 mmol/mol creatinine

Aminolevulinic Acid

< or = 2.3 mmol/mol creatinine

Current Genetics Information

This test is preferred test during symptomatic periods for acute intermittent porphyria, hereditary coproporphyria, and variegate porphyria. The random urine collection for this test allows for the diagnosis to be established and treatment to be initiated quickly. However, this test should only be ordered when the specimen will be received at Mayo Clinic Laboratories within 72 hours of collection. If it will be longer, PQNU / Porphyrins, Quantitative, 24 Hour, Urine should be ordered and collection guidelines must be followed.

New Genetics Information

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Testing includes porphobilinogen which is useful in the evaluation of the acute porphyrias.

This is the preferred test to begin assessment for congenital erythropoietic porphyria and porphyria cutanea tarda

Testing includes porphobilinogen and aminolevulinic acid, which are useful in the evaluation of the acute porphyrias.

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Current Specimen Required

Patient Preparation: Patient should not consume any alcohol for the 24 hours before specimen collection.

Supplies: Urine Container - Amber, 60 mL (T596)

Container/Tube: Amber, 60-mL urine container

Specimen Volume: 20 to 50 mL

Collection Instructions: Collect a random urine specimen.

New Specimen Required

Patient Preparation: Patient must not consume any alcohol for at least 24 hours before specimen collection.

Supplies: Urine Container - Amber, 60 mL (T596)

Container/Tube: Amber, 60-mL urine container

Specimen Volume: 20 to 50 mL

Collection Instructions:

- 1. Collect a random urine specimen.
- 2. No preservative necessary but pH must be above 5.0. If pH is below 5.0, specimen will be rejected.
- 3. Specimens should be protected from light and frozen immediately following collection.

Current CPT Code

84110-Porphobilinogen, quantitative 84120-Porphyrins, quantitation and fractionation

New CPT Code

84110-Porphobilinogen, quantitative 84120-Porphyrins, quantitation and fractionation 82135- ALA Delta Random Urine

Questions

Contact Melissa Tricker-Klar, Laboratory Resource Coordinator at 800-533-1710.