

Patient Results Report

PATIENT

Kidney Stone, Test 2

DATE OF BIRTH

03/10/1970

GENDER


M

PHYSICIAN

Normals, Adult

Adult Normals
 Research
 150 Spring Lake Drive
 Itasca, IL 60143

Current Test Overview

| SAMPLE ID | RESULTS TURNAROUND (IN DAYS) | PATIENT COLLECTION DATE | LAB RECEIPT DATE | DATE COMPLETED | SAMPLE BARCODE |
|------------------|------------------------------------|-------------------------------|------------------------|-------------------|--|
| S26973204 | 1 | 04/30/2023 | 05/02/2023 | 05/02/2023 |  S26973204 |

No medical history was taken on this patient and will be reflected in the interpretive algorithms sections of the report. If you would like to update our records, we can rerun the interpretive paragraphs to reflect any changes made.

Sara Best, MD
Medical Director

Labcorp's computer generated comments are based upon the patient's most recent laboratory results without taking into account concurrent use of medication or dietary therapy. They are intended solely as a guide for the treating physician. Labcorp does not have a doctor-patient relationship with the individuals for whom tests are ordered, nor does it have access to a complete medical history, which is required for both a definitive diagnosis and treatment plan. Cys 24, Cys Capacity, Sulfate, and Citrate were developed and their performance characteristics determined by Labcorp. It has not been cleared or approved by the US Food and Drug Administration.



Patient Results Report

PATIENT

Kidney Stone, Test 2

DATE OF BIRTH

03/10/1970

GENDER

M

PHYSICIAN

Normals, Adult

Values larger, bolder and more towards red indicate increasing risk for kidney stone formation.

Summary Stone Risk Factors

SAMPLE ID: **S26973204**PATIENT COLLECTION DATE: **04/30/2023**

| ANALYTE | ← DECREASED RISK | INCREASING RISK FOR STONE FORMATION → |
|---------------------------|------------------|---------------------------------------|
| Urine Volume (liters/day) | | ● 2.12 |
| SS CaOx | | ● 5.18 |
| Urine Calcium (mg/day) | | ● 185 |
| Urine Oxalate (mg/day) | | ● 36 |
| Urine Citrate (mg/day) | | 323 ● |
| SS CaP | | ● 0.93 |
| 24 Hour Urine pH | ● 6.121 | |
| SS Uric Acid | ● 0.63 | |
| Urine Uric Acid (g/day) | | ● 0.836 |

Interpretation Of Laboratory Results

Urine citrate is low and has fallen (average of last two was 723 and now is 323 mg/d). Our records do not report that potassium citrate has been prescribed. Since urine citrate is low and SS CaP is not high consider adding potassium citrate. Recheck in 6 weeks to confirm citrate has risen and SS CaP is not high. Hypokalemia, urinary infection, bowel disease, and reduced kidney function are all possible causes of low urine citrate. High protein intake is not a likely cause of the low urine citrate (PCR = 1.1 g/kg/d, sulfate = 46 meq/d).

Calcium oxalate stone risk (SS CaOx) has fallen to borderline high (average of last two was 9.39 and now is 5.18). If stones are still active, further efforts at lowering supersaturation are warranted. In general, urine calcium, oxalate, citrate, and volume are the main factors responsible. The graphic display indicates which are most deviated from normal. Management suggestions are as noted above.



Patient Results Report

PATIENT

Kidney Stone, Test 2

DATE OF BIRTH

03/10/1970

GENDER

M

PHYSICIAN

Normals, Adult

Values larger, bolder and more towards red indicate increasing risk for kidney stone formation. See reverse for further details.

Stone Risk Factors / Cystine Screening: Negative (12/10/2022)

| DATE | SAMPLE ID | Vol 24 | SS CaOx | Ca 24 | Ox 24 | Cit 24 | SS CaP | pH | SS UA | UA 24 |
|-----------------|-----------|-------------|-------------|--------------------------|---------|--------------------------|-------------|-----------|-------------|------------------------------|
| 04/30/23 | S26973204 | 2.12 | 5.18 | 185 | 36 | 323 | 0.93 | 6.121 | 0.63 | 0.836 |
| 12/09/22 | S26973206 | 1.83 | 8.86 | 336 | 35 | 695 | 1.77 | 6.012 | 0.98 | 0.916 |
| 12/08/22 | S26973205 | 1.57 | 9.91 | 320 | 33 | 750 | 1.53 | 5.875 | 1.36 | 0.856 |
| REFERENCE RANGE | | 0.5 - 4L | 6 - 10 | male <250 female <200 | 20 - 40 | male >450 female >550 | 0.5 - 2 | 5.8 - 6.2 | 0 - 1 | male <0.800 female <0.750 |

Dietary Factors

| DATE | SAMPLE ID | Na 24 | K 24 | Mg 24 | P 24 | Nh4 24 | Cl 24 | Sul 24 | UUN 24 | PCR |
|-----------------|-----------|------------|----------|----------|-----------|---------|------------|-----------|--------|-----------|
| 04/30/23 | S26973204 | 187 | 42 | 79 | 1.093 | 49 | 172 | 46 | 10.95 | 1.1 |
| 12/09/22 | S26973206 | 185 | 53 | 82 | 1.152 | 42 | 174 | 46 | 12.74 | 1.2 |
| 12/08/22 | S26973205 | 207 | 36 | 69 | 1.016 | 33 | 202 | 38 | 10.33 | 1.0 |
| REFERENCE RANGE | | 50 - 150 | 20 - 100 | 30 - 120 | 0.6 - 1.2 | 15 - 60 | 70 - 250 | 20 - 80 | 6 - 14 | 0.8 - 1.4 |

Normalized Values

| DATE | SAMPLE ID | WEIGHT | Cr 24 | Cr 24/Kg | Ca 24/Kg | Ca 24/Cr 24 |
|-----------------|-----------|--------|-------|-----------------------------------|------------|------------------------------|
| 04/30/23 | S26973204 | 78.0 | 1857 | 23.8 | 2.4 | 100 |
| 12/09/22 | S26973206 | 78.0 | 2024 | 26.0 | 4.3 | 166 |
| 12/08/22 | S26973205 | 78.0 | 1916 | 24.6 | 4.1 | 167 |
| REFERENCE RANGE | | | | male 11.9-24.4 female 8.7-20.3 | <4 | male 34-196 female 51-262 |



Patient Results Report

PATIENT

Kidney Stone, Test 2

DATE OF BIRTH

03/10/1970

GENDER

M

PHYSICIAN

Normals, Adult

Stone Risk Factors / Cystine Screening

| ABBR. | ANALYTE | REFERENCE RANGE | COMMENTS |
|----------------|---------------------------|-----------------------------|--|
| Vol 24 | Urine Volume | 0.5 - 4 | L/d; Raise vol to at least 2L . |
| SS CaOx | Supersaturation CaOx | 6 - 10 | Raise urine vol and cit, lower ox and ca. |
| Ca 24 | Urine Calcium | male <250, female <200 | idiopathic hypercalciuria, consider hydrochlorothiazide 25 mg bid or chlorthalidone 12.5 - 25 mg qam, urine Na <100. |
| Ox 24 | Urine Oxalate | 20 - 40 | usually dietary; if enteric, consider cholestyramine, oral calcium 1-2 gm with meals; if >80, may be primary hyperoxauria. |
| Cit 24 | Urine Citrate | male >450, female >550 | consider K citrate 20 - 30 mEq BID; if from RTA (urine pH > 6.5) also use K citrate. |
| SS CaP | Supersaturation CaP | 0.5 - 2 | Urine usually pH > 6.5, idiopathic hypercalciuria common. |
| pH | 24 Hour Urine pH | 5.8 - 6.2 | <5.8 consider K or Na citrate 25-30 mEq BID; 6.5, RTA if citrate is low; >8, urea splitting infection. |
| SS UA | Supersaturation Uric Acid | 0 - 1 | Urine pH <6, creates UA stones. Treated with alkali. |
| UA 24 | Urine Uric Acid | male <0.800, female <0.750; | g/d; dietary; if stones are severe and low protein diet fails try allopurinol 200 mg/d. |

** Cystine Screening: positive result may be seen in patients with homozygous cystinuria and cystine stone disease, some individuals heterozygous for cystinuria without cystine stone disease, or in patients taking medications such as captopril or penicillamine.

Dietary Factors

| ABBR. | ANALYTE | REFERENCE RANGE | COMMENTS |
|---------------|------------------------|-------------------|---|
| Na 24 | Urine Sodium | mmol/d; 50 - 150 | When high raises urine Ca, and K loss from thiazide; ideal is <100. |
| K 24 | Urine Potassium | mmol/d; 20 - 100 | <20, consider bowel disease, diuretics, laxatives. |
| Mg 24 | Urine Magnesium | mg/d; 30 - 120 | Low with poor nutrition, some laxatives, malabsorption syndrome. |
| P 24 | Urine Phosphorus | g/d; 0.6 - 1.2 | Low in bowel disease, malnutrition, high with large food intake. |
| Nh4 24 | Urine Ammonium | mmol/d; 15 - 60 | High + pH>7, urea splitting infection; low + pH <5.5, renal disease, UA stones, Gout. |
| Cl 24 | Urine Chloride | mmol/d; 70 - 250 | Varies with sodium and potassium intake. |
| Sul 24 | Urine Sulfate | meq/d; 20 - 80 | When high shows high protein diet. |
| UUN 24 | Urine Urea Nitrogen | g/d; 6 - 14 | This measures urea production from diet protein. |
| PCR | Protein Catabolic Rate | g/kg/d; 0.8 - 1.4 | This measure protein intake per kg body weight. |

Normalized Urine Values

| ABBR. | ANALYTE | COMMENTS |
|--------------------|--------------------|---|
| Weight | Body Weight in Kg | Obtained from treating physician or patient. |
| Cr 24 | Urine Creatinine | mg/d; varies with body weight; check for day to day consistency of urine collection. |
| Cr 24/Kg | Creatinine/Kg | mg/kg/d; male 11.9 - 24.4, female 8.7 - 20.3; low in obesity or incomplete urine collection, high in people with large muscle mass or over-collection of urine. |
| Ca 24/Kg | Calcium/Kg | mg/kg/d; <4.00; when high, treated as if Ca 24 mg/d were high. |
| Ca 24/Cr 24 | Calcium/Creatinine | mg/g; male 34-196, female 51-262; when high, treated as if Ca 24 mg/d were high. |

