

DOWDY, GEORGE L

DOB: 10/18/1945 Age: 78 Specimen: TZ009866M
 Sex: M Fasting: Y Requisition: 0014863
 Phone: (407) 739-6491 Lab Reference ID: 88112992Q
 Patient ID: E2530029 Report Status: FINAL / SEE REPORT

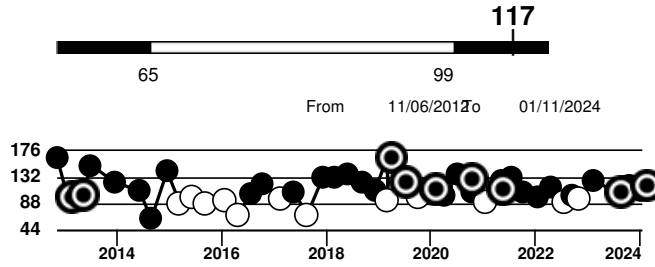
Collected: 01/10/2024 10:00 Client #: 66002344
 Received: 01/10/2024 10:04 WHITESIDE, AMAPOLA
 Reported: 01/11/2024 20:48 CENTRAL FLORIDA KIDNEY
 SPECIALISTS
 1552 BOREN DR STE 200
 OCOEE, FL 34761-4216
 Phone: (407) 905-8172
 Fax: (407) 905-8878

UPDATED INS AND MAILING ADDRESS ; FASTING: YES

▲ COMPREHENSIVE METABOLIC PANEL

▲ GLUCOSE

Reference Range: 65-99 mg/dL



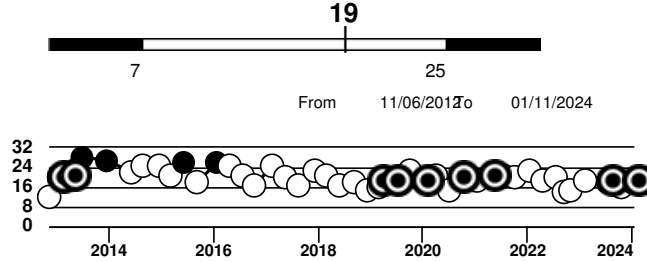
Reference range varies across results

Fasting reference interval

For someone without known diabetes, a glucose value between 100 and 125 mg/dL is consistent with prediabetes and should be confirmed with a follow-up test.

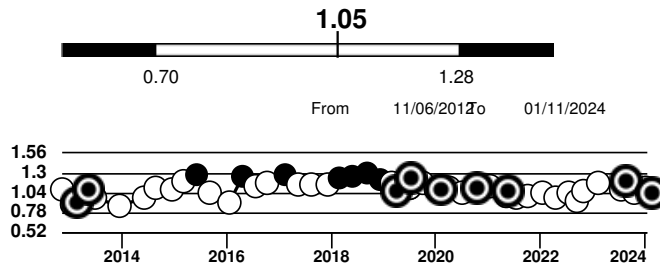
UREA NITROGEN (BUN)

Reference Range: 7-25 mg/dL



CREATININE

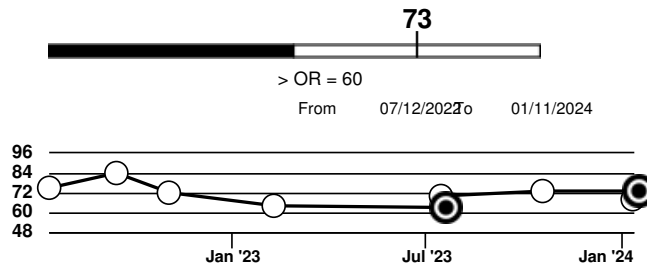
Reference Range: 0.70-1.28 mg/dL



Reference range varies across results

EGFR

Reference Range: > OR = 60 mL/min/1.73m2



BUN/CREATININE RATIO

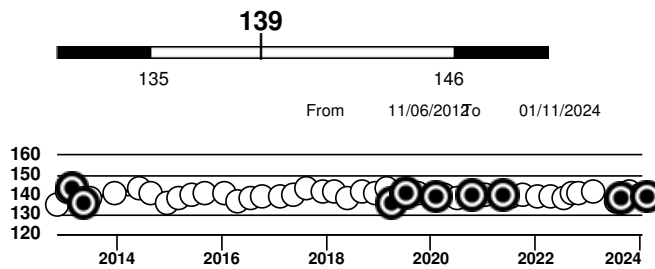
Reference Range: 6-22 (calc)

Not Reported: BUN and Creatinine are within reference range.

SEE NOTE:

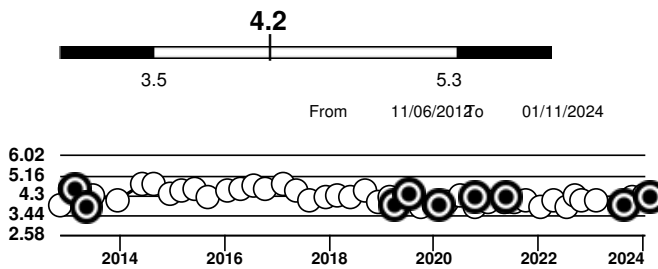
SODIUM

Reference Range: 135-146 mmol/L



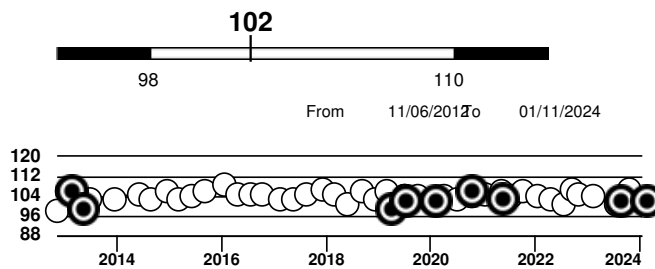
POTASSIUM

Reference Range: 3.5-5.3 mmol/L



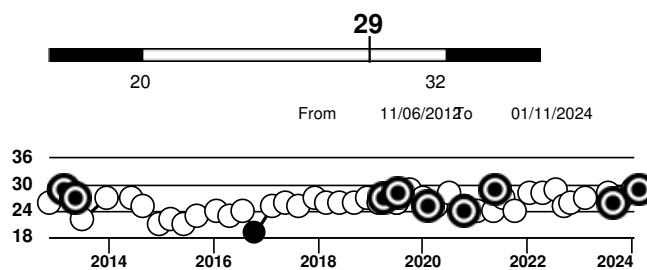
CHLORIDE

Reference Range: 98-110 mmol/L



CARBON DIOXIDE

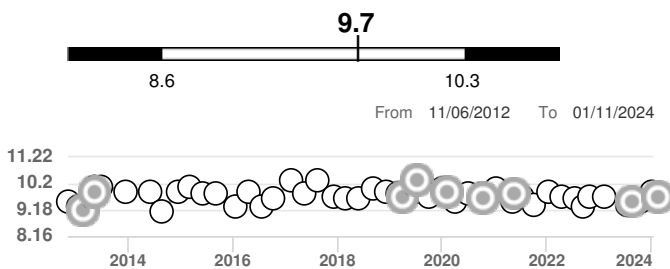
Reference Range: 20-32 mmol/L



Reference range varies across results

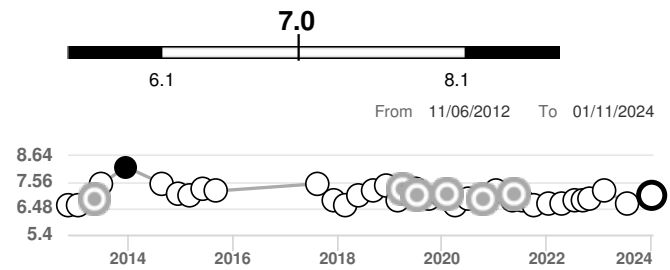
CALCIUM

Reference Range: 8.6-10.3 mg/dL



PROTEIN, TOTAL

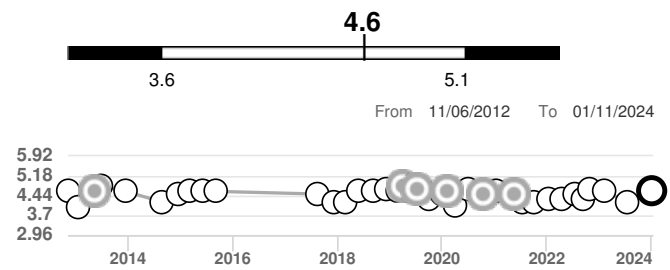
Reference Range: 6.1-8.1 g/dL



Reference range varies across results

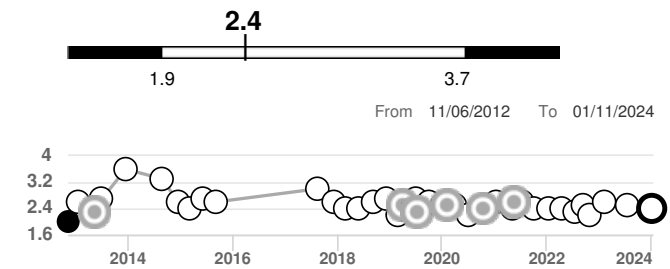
ALBUMIN

Reference Range: 3.6-5.1 g/dL



GLOBULIN

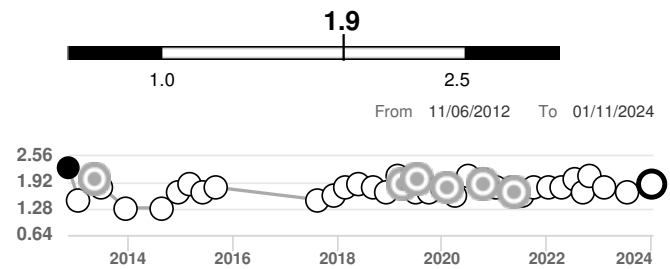
Reference Range: 1.9-3.7 g/dL (calc)



Reference range varies across results

ALBUMIN/GLOBULIN RATIO

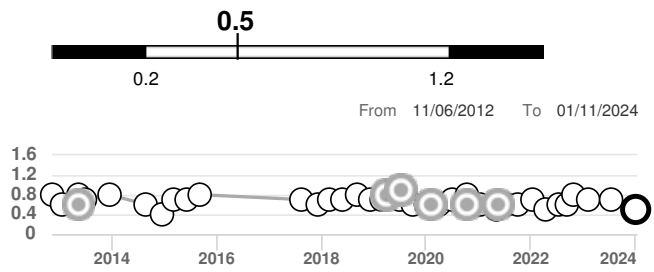
Reference Range: 1.0-2.5 (calc)



Reference range varies across results

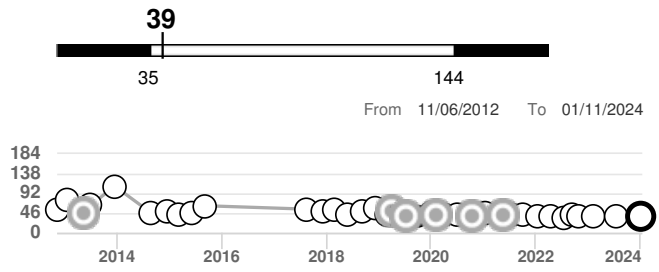
BILIRUBIN, TOTAL

Reference Range: 0.2-1.2 mg/dL



ALKALINE PHOSPHATASE

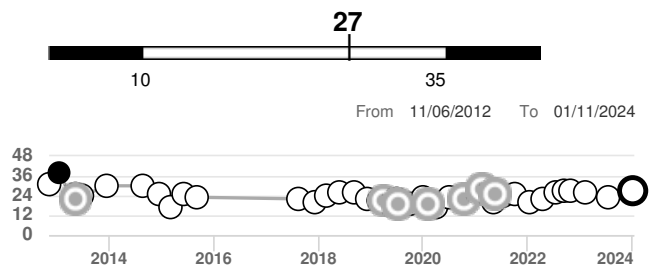
Reference Range: 35-144 U/L



Reference range varies across results

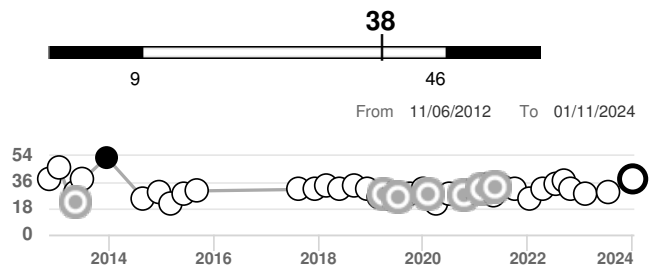
AST

Reference Range: 10-35 U/L



ALT

Reference Range: 9-46 U/L

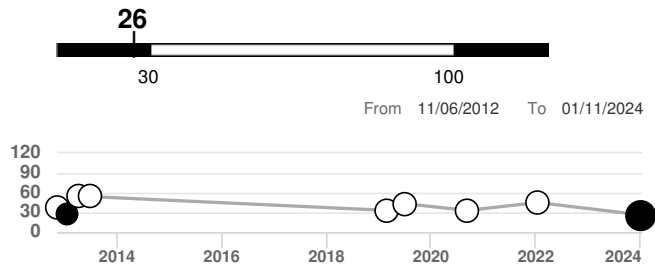


Reference range varies across results

▲ VITAMIN D,25-OH,TOTAL,IA

▲ VITAMIN D,25-OH,TOTAL,IA

Reference Range: 30-100 ng/mL



Vitamin D Status 25-OH Vitamin D:
Deficiency: <20 ng/mL
Insufficiency: 20 - 29 ng/mL
Optimal: > or = 30 ng/mL

For 25-OH Vitamin D testing on patients on D2-supplementation and patients for whom quantitation of D2 and D3 fractions is required, the QuestAssured(TM) 25-OH VIT D, (D2,D3), LC/MS/MS is recommended: order code 92888 (patients >2yrs).

COMMENT

See Note 1

Note 1

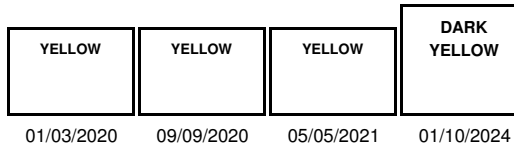
For additional information, please refer to <http://education.QuestDiagnostics.com/faq/FAQ199> (This link is being provided for informational/ educational purposes only.)

URINALYSIS, COMPLETE W/REFLEX TO CULTURE

COLOR

Reference Range: YELLOW

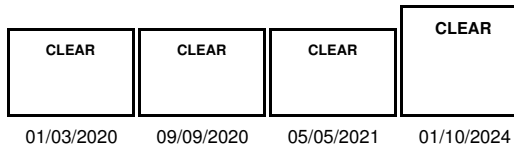
DARK YELLOW



APPEARANCE

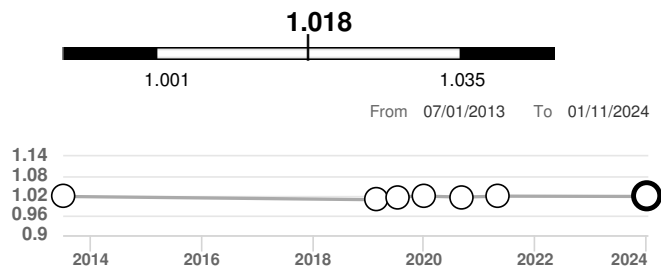
Reference Range: CLEAR

CLEAR



SPECIFIC GRAVITY

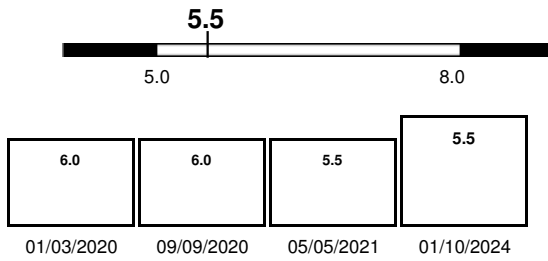
Reference Range: 1.001-1.035



Reference range varies across results

PH

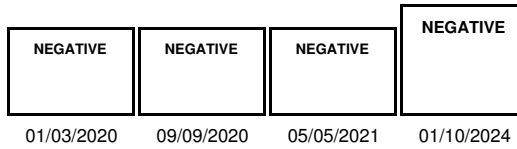
Reference Range: 5.0-8.0



GLUCOSE

Reference Range: NEGATIVE

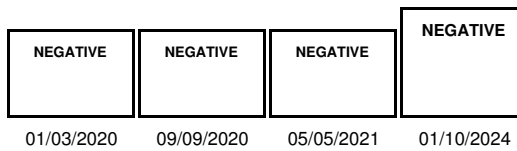
NEGATIVE



BILIRUBIN

Reference Range: NEGATIVE

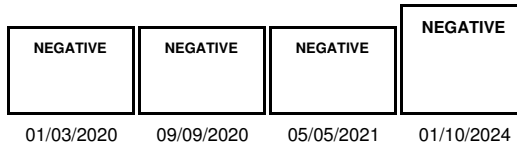
NEGATIVE



KETONES

Reference Range: NEGATIVE

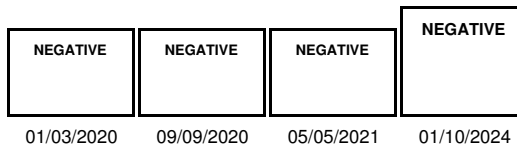
NEGATIVE



OCCULT BLOOD

Reference Range: NEGATIVE

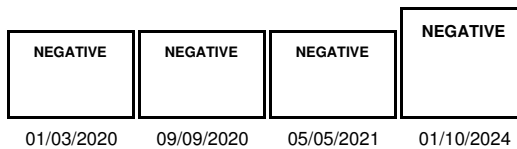
NEGATIVE



PROTEIN

Reference Range: NEGATIVE

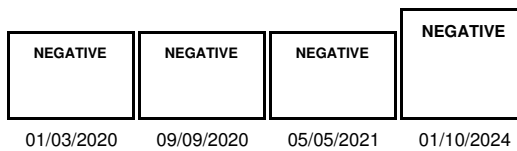
NEGATIVE



NITRITE

Reference Range: NEGATIVE

NEGATIVE



LEUKOCYTE ESTERASE

NEGATIVE

Reference Range: NEGATIVE

NEGATIVE	NEGATIVE	NEGATIVE	NEGATIVE
01/03/2020	09/09/2020	05/05/2021	01/10/2024

WBC

NONE SEEN

Reference Range: < OR = 5 /HPF

NONE SEEN	NONE SEEN	NONE SEEN	NONE SEEN
01/03/2020	09/09/2020	05/05/2021	01/10/2024

RBC

0-2

Reference Range: < OR = 2 /HPF

NONE SEEN	NONE SEEN	0-2	0-2
01/03/2020	09/09/2020	05/05/2021	01/10/2024

SQUAMOUS EPITHELIAL CELLS

NONE SEEN

Reference Range: < OR = 5 /HPF

NONE SEEN	NONE SEEN	NONE SEEN	NONE SEEN
01/03/2020	09/09/2020	05/05/2021	01/10/2024

BACTERIA

NONE SEEN

Reference Range: NONE SEEN /HPF

NONE SEEN	NONE SEEN	NONE SEEN	NONE SEEN
01/03/2020	09/09/2020	05/05/2021	01/10/2024

HYALINE CAST

NONE SEEN

Reference Range: NONE SEEN /LPF

NONE SEEN	NONE SEEN	NONE SEEN	NONE SEEN
01/03/2020	09/09/2020	05/05/2021	01/10/2024

NOTE

No Historical Data

This urine was analyzed for the presence of WBC, RBC, bacteria, casts, and other formed elements. Only those elements seen were reported.

REFLEXIVE URINE CULTURE

REFLEXIVE URINE CULTURE

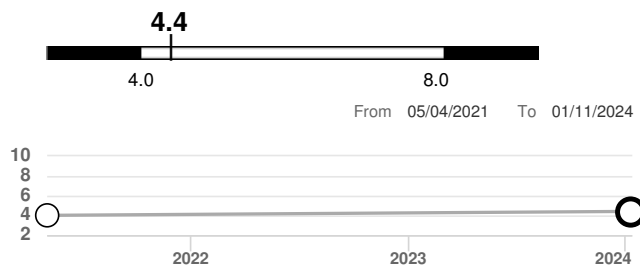
No Historical Data

NO CULTURE INDICATED

URIC ACID

URIC ACID

Reference Range: 4.0-8.0 mg/dL

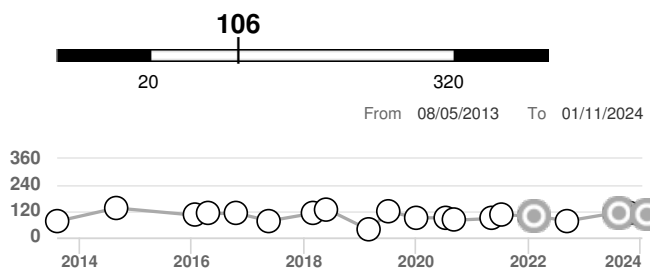


Therapeutic target for gout patients: <6.0 mg/dL

PROTEIN, TOTAL W/CREAT, RANDOM URINE

CREATININE, RANDOM URINE

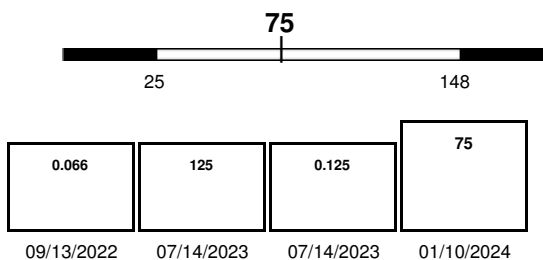
Reference Range: 20-320 mg/dL



Reference range varies across results

PROTEIN/CREATININE RATIO

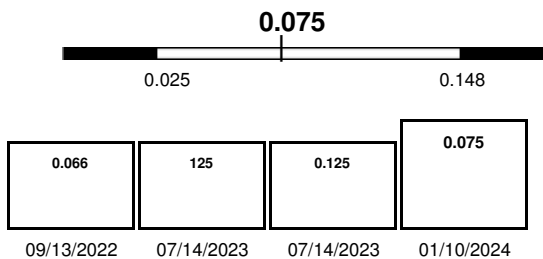
Reference Range: 25-148 mg/g creat



Reference range varies across results

PROTEIN/CREATININE RATIO

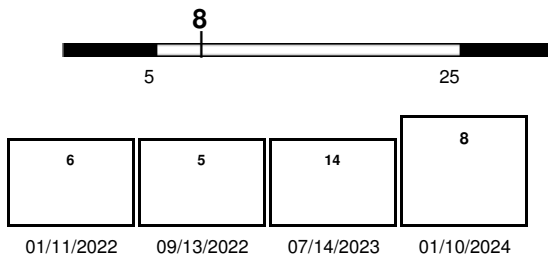
Reference Range: 0.025-0.148 mg/mg creat



Reference range varies across results

PROTEIN, TOTAL, RANDOM UR

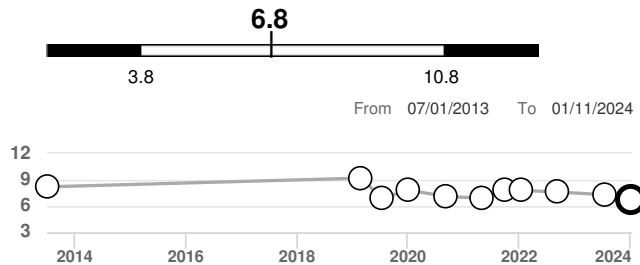
Reference Range: 5-25 mg/dL



CBC (INCLUDES DIFF/PLT)

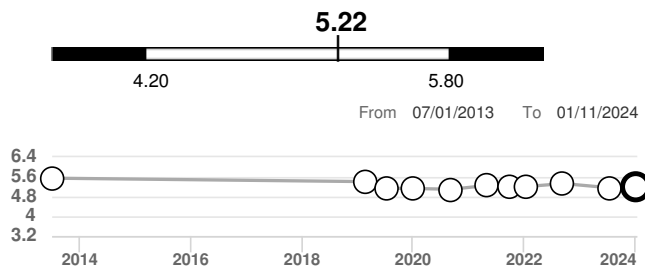
WHITE BLOOD CELL COUNT

Reference Range: 3.8-10.8 Thousand/uL



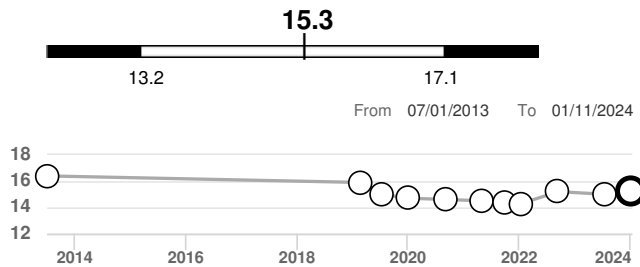
RED BLOOD CELL COUNT

Reference Range: 4.20-5.80 Million/uL



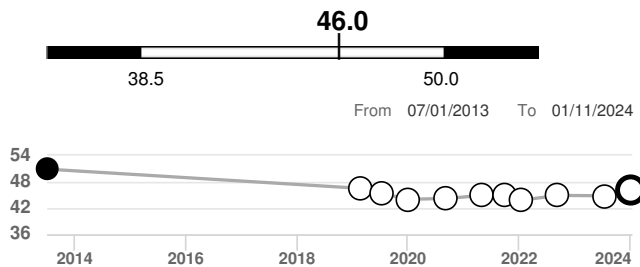
HEMOGLOBIN

Reference Range: 13.2-17.1 g/dL



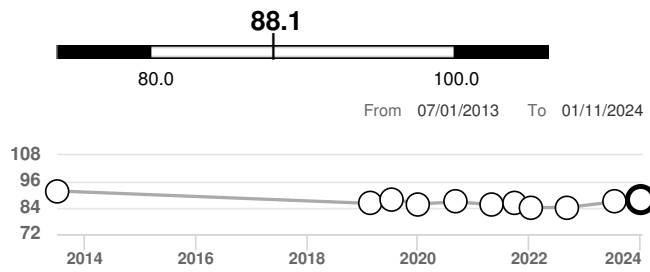
HEMATOCRIT

Reference Range: 38.5-50.0 %



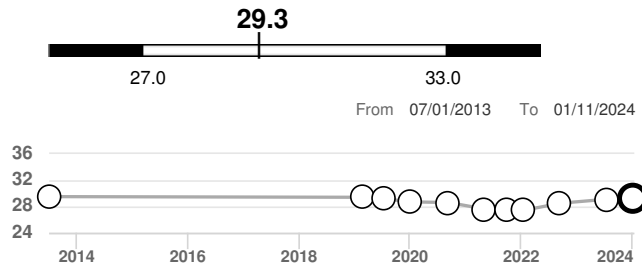
MCV

Reference Range: 80.0-100.0 fL



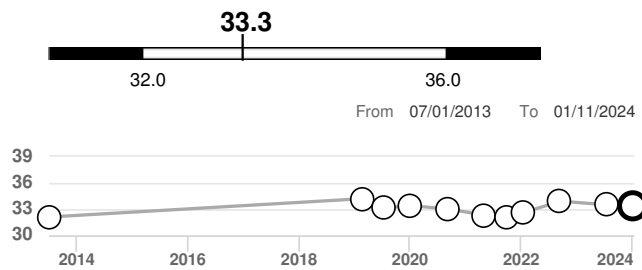
MCH

Reference Range: 27.0-33.0 pg



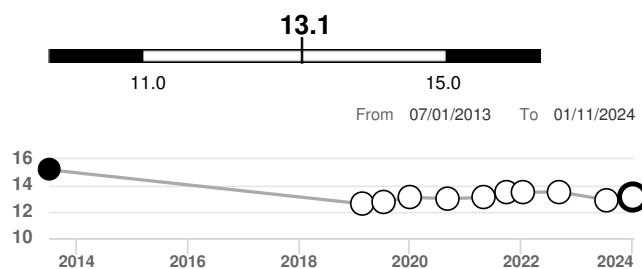
MCHC

Reference Range: 32.0-36.0 g/dL



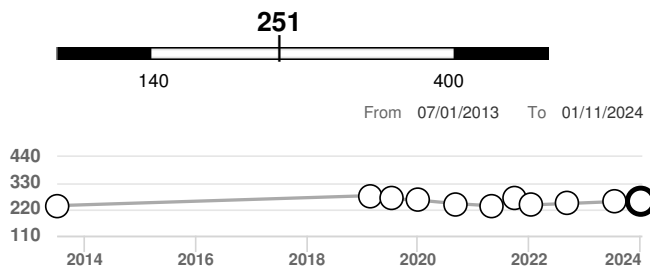
RDW

Reference Range: 11.0-15.0 %



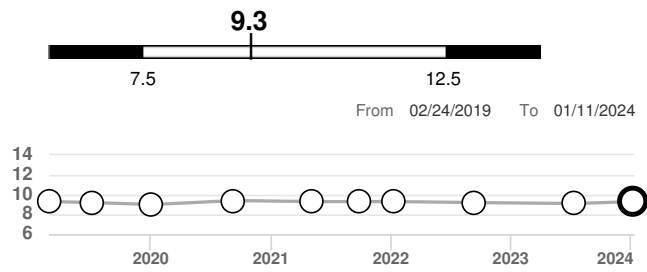
PLATELET COUNT

Reference Range: 140-400 Thousand/uL



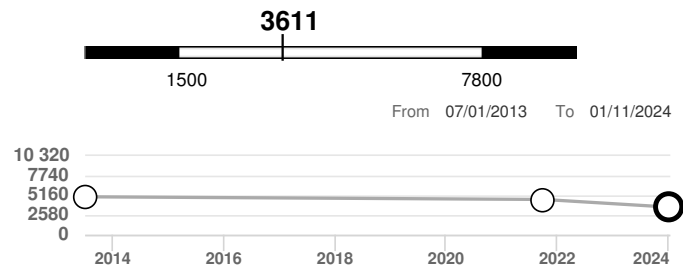
MPV

Reference Range: 7.5-12.5 fL



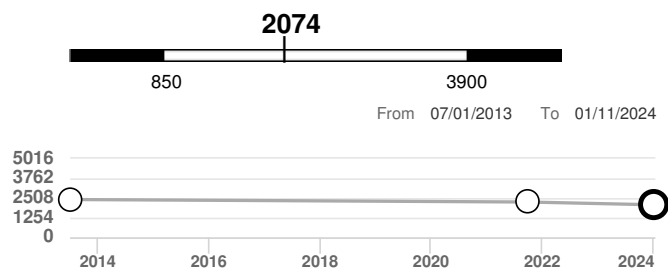
ABSOLUTE NEUTROPHILS

Reference Range: 1500-7800 cells/uL



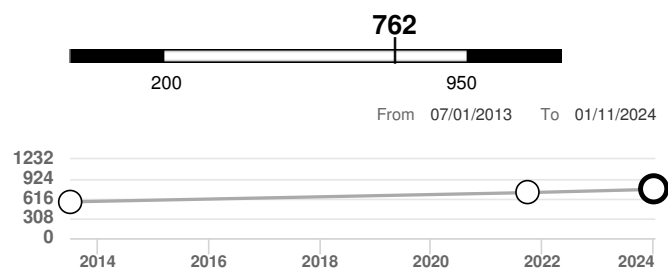
ABSOLUTE LYMPHOCYTES

Reference Range: 850-3900 cells/uL



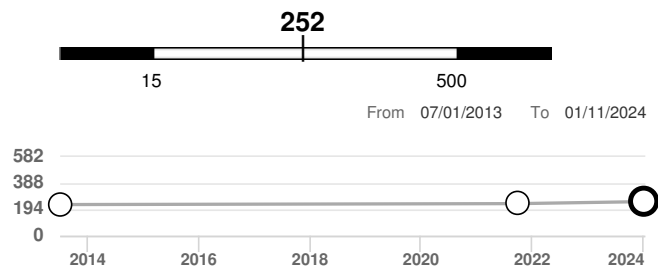
ABSOLUTE MONOCYTES

Reference Range: 200-950 cells/uL

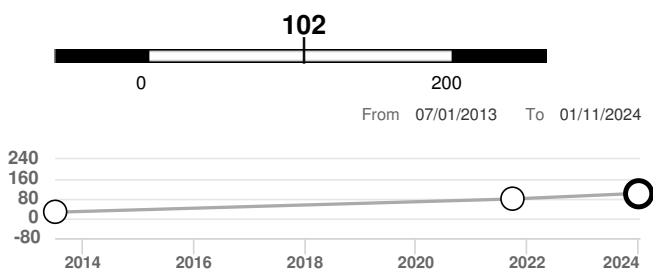


ABSOLUTE EOSINOPHILS

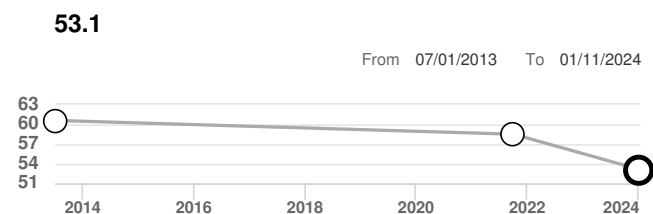
Reference Range: 15-500 cells/uL



ABSOLUTE BASOPHILS
Reference Range: 0-200 cells/uL

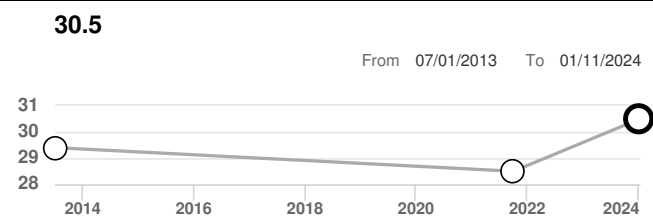


NEUTROPHILS
%



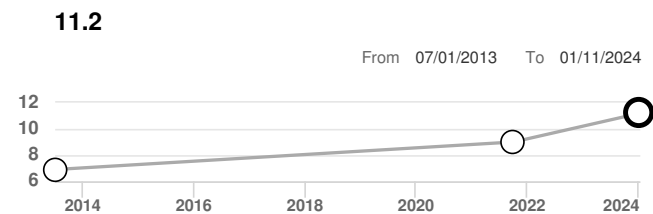
Reference range varies across results

LYMPHOCYTES
%



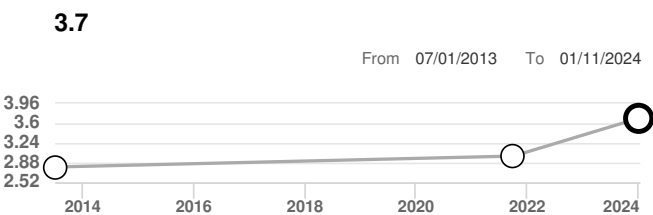
Reference range varies across results

MONOCYTES
%



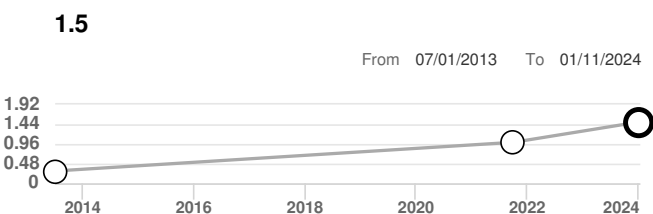
Reference range varies across results

EOSINOPHILS
%



Reference range varies across results

BASOPHILS
%





Reference range varies across results

Performing Sites

TP Quest Diagnostics-Tampa, 4225 E Fowler Ave, Tampa, FL 33617-2026 Laboratory Director: Weston H Rothrock MD

Key

 Priority Out of Range  Out of Range

Report Insights

COMPREHENSIVE METABOLIC PANEL

Comprehensive Metabolic Panel Result: What does it mean?

A CMP refers to a broad screening tool that includes 14 tests that evaluate the functioning of a person's liver and kidneys, as well as the body's fluid balance and general metabolism. The results additionally provide a general indicator of your overall health; a CMP is often ordered in your yearly physical exam.

In a CMP, levels of liver enzymes, waste products of the kidneys (BUN and creatinine), electrolytes (calcium, sodium, potassium), and glucose, among other indicators of general body function are detected. The test results of a CMP are useful to examine for conditions, such as diabetes, liver disease, and kidney disease and also to monitor present conditions, such as hypertension.

See More: <http://labtestsonline.org/understanding/analytes/cmp/tab/test#what>

Source: <http://labtestsonline.org>: <http://labtestsonline.org/understanding/analytes/cmp/tab/test#what>

VITAMIN D,25-OH,TOTAL,IA

What is vitamin D?

Vitamin D is a fat-soluble vitamin that occurs in 2 forms: vitamin D₃ and vitamin D₂. Vitamin D₃, the more common form, is made in the skin after exposure to sunlight. Vitamin D₂, on the other hand, comes mostly from food and over-the-counter supplements. It may also be used in the pharmacological treatment of vitamin D deficiency.

Vitamin D is rapidly metabolized in the liver to 25-hydroxyvitamin D (25[OH]D). This inactive form is then converted in the kidneys to the active 1,25-dihydroxyvitamin D form.

What does vitamin D do in the body?

Vitamin D helps maintain healthy levels of calcium and phosphorus by aiding in their absorption from the gut. This helps the body form and maintain strong bones. Vitamin D also modulates neuromuscular, immune, and other cellular functions. Vitamin D deficiency has been associated with a wide range of medical conditions including heart disease, hypertension, diabetes, and cancer.

Who should have 25-hydroxyvitamin D testing?

The Endocrine Society recommends screening individuals at risk for deficiency. These include those with ¹:

- Rickets
- Osteomalacia
- Osteoporosis
- Chronic kidney disease
- Hepatic failure
- Malabsorption syndromes
- Hyperparathyroidism
- Medications (anti-seizure medications, glucocorticoids, AIDS medications, antifungals, cholestyramine)

The Society also recommends screening ¹:

- African-American and Hispanic children and adults
- Pregnant and lactating women
- Older adults with history of falls
- Older adults with history of nontraumatic fractures
- Obese children and adults

The Endocrine Society also recommends monitoring patients with granuloma-forming disorders and some lymphomas by testing 25(OH)D and serum calcium. ¹ Some physicians may wish to monitor people receiving vitamin D therapy to evaluate for compliance and expected change in concentration.

How much vitamin D do people need?

To maximize bone health, the Endocrine Society suggests a dietary intake of at least 400 IU/day for **infants <1 year** and at least 600 IU/day for **children 1 year and older**. ¹ Whether these levels are enough to provide all the nonskeletal benefits of vitamin D is not known. At least 1000 IU/day may be needed to raise the blood level consistently above 30 ng/mL (cut point for vitamin D sufficiency). ¹

To maximize bone health and muscle function in **adults 19 to 70 years of age**, the Endocrine Society suggests a dietary intake of at least 600 IU/day.¹ Whether these levels are enough to provide all the nonskeletal benefits of vitamin D is not known. At least 1500–2000 IU/day may be needed to achieve a blood level of 30 ng/mL.¹

To maximize bone health and muscle function in **adults over 70 years**, the Endocrine Society suggests a dietary intake of at least 800 IU/day.¹ Whether these levels are enough to provide all the nonskeletal benefits of vitamin D is not known. At least 1500–2000 IU/day may be needed to achieve a blood level of 30 ng/mL.¹

Obese children and adults and those on certain medications may need at least 2 to 3 times the suggested dietary intake for their age group.¹ Relevant medications include anticonvulsants, glucocorticoids, AIDS medications, and antifungals such as ketoconazole.

For people who are vitamin D insufficient or deficient, supplementation or a therapeutic prescription may be needed to correct the deficiency. Refer to the Endocrine Society guidelines¹ for treatment recommendations.

What are the sources of vitamin D?

Vitamin D can be obtained from exposure to sunlight. However, sun exposure can be affected by season of the year, latitude, time of day, skin pigmentation, use of sunscreens, and age. These variables may necessitate alternative sources for some people.

One alternative source is the diet. Some foods are naturally high in vitamin D; these include oil-rich fish such as salmon, mackerel, and herring. For example, fresh farmed salmon may have approximately 100-250 IU in 3.5 ounces, whereas fresh, wild caught salmon may have approximately 600-1000 IU in a 3.5 ounce serving. Shiitake mushrooms, especially sun-dried, are also high in vitamin D. Other foods are fortified with vitamin D; these include milk and other dairy products, orange juice, and some grain products.

Multivitamin and other supplements are another alternative source.

None of these sources may be adequate for people with liver or kidney disease as they may be unable to produce sufficient amounts of the active form of vitamin D. This is because vitamin D metabolism to the active form requires the liver and kidney. These people may need supplementation with the active form (1,25-dihydroxyvitamin D).

What is the impact of seasons on vitamin D?

25(OH)D concentrations are typically at their lowest at the end of February and at their highest at the end of August. This seasonal effect is more notable in northern latitudes than in southern latitudes where the sun is out for more of the year. Thus, there may be more of a need to supplement, or to supplement with higher doses of vitamin D, in the winter months than in the summer months.

Quest Diagnostics data show that the percentage of patients who are deficient in vitamin D vary seasonally from 21% at the end of summer and 48% at the end of winter.

How common is vitamin D deficiency?

Based on a sample of patients throughout the United States, Quest Diagnostics observed that 33% of patients were deficient in vitamin D, and 60% were either deficient or suboptimal.

What does vitamin D testing measure?

Vitamin D tests generally measure the total concentration of 25(OH)D, which is the main form of vitamin D circulating in blood and the best indicator of vitamin D deficiency or excess. Vitamin D tests using liquid chromatography, tandem mass spectrometry (LC/MS/MS) may also provide the concentration of vitamin D2 and D3 which, when added together, equal the total vitamin D concentration. For detection of vitamin D deficiency, measurement of 1,25-dihydroxyvitamin D is not recommended, as levels may be misleadingly normal in patients with significant vitamin D deficiency.

Why do physicians test for vitamin D?

A physician generally will order a test to determine the level of vitamin D in a patient's body. A physician would typically evaluate the test result in connection with several other factors affecting a patient's health such as medical history, gender, and age.

What are vitamin D2 and vitamin D3?

Vitamin D2 is derived from fungal and plant sources and is commonly found in supplements, such as multivitamins, in the United States. Vitamin D2 may also be used in the pharmacological treatment of vitamin D deficiency. Vitamin D3 is derived from animal sources and is made in the skin following exposure to sunlight. The LC/MS/MS technique is able to directly quantify vitamin D2 and vitamin D3. By comparison, immunoassay-based vitamin D tests can only indirectly measure vitamin D2 and vitamin D3; therefore, only the total vitamin D is reported.

Reference

1. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Evaluation, treatment, and prevention of vitamin D deficiency: an Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2011;96:1911-1930. <https://www.endocrine.org/~media/endosociety/Files/Publications/Clinical%20Practice%20Guidelines/FINAL-Standalone-Vitamin-D-Guideline.pdf>: <https://www.endocrine.org/~media/endosociety/Files/Publications/Clinical%20Practice%20Guidelines/FINAL-Standalone-Vitamin-D-Guideline.pdf>

â This FAQ is provided for informational purposes only and is not intended as medical advice. A physician's test selection and interpretation, diagnosis, and patient management decisions should be based on his/her education, clinical expertise, and assessment of the patient.

Document FAQS.163 Version: 1

Version 1 effective 05/04/2015 to present

Version 0 effective 04/10/2015 to 05/03/2015: <http://education.questdiagnostics.com/faq/FAQ163-retired0>

Vitamin D

Vitamin D is a nutrient that is needed for health and to maintain strong bones by helping the body absorb calcium from food and supplements. Learn more about vitamin D from this fact sheet provided by the NIH's Office of Dietary Supplements.

Download the fact sheet from the NIH website: <https://ods.od.nih.gov/pdf/factsheets/VitaminD-Consumer.pdf>

Vitamin D, 25-Hydroxy

Vitamin D is a nutrient and it acts as a hormone in the body. It can come from some foods, such as salmon and fortified milk, and also supplements, but it is primarily made in the skin after sun exposure. Vitamin D regulates calcium and phosphate levels and is an important regulator of bone mass. It is also involved in actions of the immune system, muscles, and nerves. Vitamin D deficiency can cause osteoporosis (bone thinning and weakness in adults) or rickets, a childhood bone disease.

The liver is the first processor of vitamin D in the body and it metabolizes the fat-soluble vitamin to 25-hydroxyvitamin D, also known as calcifediol. 25-hydroxyvitamin D is used to assess vitamin D levels. More information on vitamin D and vitamin D deficiency can be found at Medline Plus by clicking here: <https://medlineplus.gov/ency/article/003569.htm>.

OCCULT BLOOD

Occult Blood in Urine

Gross hematuria means the urine appears red or the color of tea or cola to the naked eye, whereas occult blood (microscopic hematuria) can only be seen with a microscope.

Causes of both gross and microscopic hematuria include:

- Inflammation of the kidney, urethra, bladder, or prostate (in men)
- Abnormal structures in the urinary tract
- Inherited diseases, like polycystic kidney disease, sickle cell disease, or hemophilia
- Mineral imbalances in the urine
- Glomerulonephritis
- In some cases, no cause of hematuria may be found (idiopathic hematuria)

For more information please visit the National Kidney Foundation site by clicking here: <https://www.kidney.org/atoz/content/hematuria-adults>.

BACTERIA

Urinary Tract Infections (UTIs)

Urinary Tract Infections (UTIs) are most often caused by bacteria and are common among women. UTIs usually affect the bladder, but also can be present in other parts of the urinary system, including the kidneys. Click here:

<https://owh-wh-d9-dev.s3.amazonaws.com/s3fs-public/documents/fact-sheet-urinary-tract-infections.pdf> to read a fact sheet on UTIs from the US Department of Health & Human Services Office on Women's Health.

URINALYSIS, COMPLETE W/REFLEX TO CULTURE

Urinalysis Result: What does it mean?

A urinalysis is typically used during a routine physical or when you have symptoms of a UTI, such as abdominal pain, back pain, frequent or painful urination; as part of a pregnancy check-up, a hospital admission, or a pre-surgical work-up.

See More: <http://labtestsonline.org/understanding/analytes/urinalysis/tab/test#what>

Source: <http://www.labtestsonline.org/> <http://labtestsonline.org/understanding/analytes/urinalysis/tab/test#what>

Urinalysis Test

The purpose of a urinalysis is to screen for metabolic and kidney disorders and for urinary tract infections (UTIs). Learn more about the urinalysis test from the American Association of Clinical Chemistry's (AACC) Lab Tests Online website by clicking here:

<https://labtestsonline.org/tests/urinalysis>.

URIC ACID

Low Uric Acid

Low levels of uric acid in the blood are seen much less commonly than high levels and are seldom considered cause for concern. Although low values can be associated with some kinds of liver or kidney diseases, Fanconi syndrome, exposure to toxic compounds, and rarely as the result of an inherited metabolic defect (eg, Wilson disease), these conditions are typically identified by other tests and symptoms and not by an isolated low uric acid result.

What is Gout?

Gout, one of the most painful forms of arthritis, occurs when too much uric acid builds up in the body. Learn more from this publication provided by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS).

Download the publication from the NIAMS website : http://www.niams.nih.gov/Health_Info/Gout/gout_ff.pdf

PROTEIN, TOTAL W/CREAT, RANDOM URINE

Proteinuria

Proteinuria, also called albuminuria or urine albumin, is a condition in which urine contains an abnormal amount of protein, one of the first signs of deteriorating kidney function. Learn more about proteinuria from this publication provided by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).

Download the publication from the NIDDK website :

http://www.niddk.nih.gov/health-information/health-topics/kidney-disease/proteinuria/Documents/proteinuria_508.pdf

CBC (INCLUDES DIFF/PLT)

Complete Blood Count (CBC)

A CBC is a commonly ordered blood test that may be helpful to diagnose a variety of health conditions, such as an infection, anemia, or bleeding disorder. It is also a general indicator of overall health. A CBC test screens for many blood components, including red and white blood cells, platelets, and hemoglobin. Learn more about the various components of a CBC from this table provided by the International Waldenström's Macroglobulinemia Foundation (IWWMF). Download the table from the IWWMF website by clicking here. :

https://iwmf.com/wp-content/uploads/2020/10/bloodcharts_cbc1.pdf

Blood Test Results: CBC Explained

A complete blood count (CBC) with differential measures the essential components of the blood including white blood cells, red blood cells, and platelets. Learn more about the various components of a CBC from this table provided by the International Waldenström's Macroglobulinemia Foundation (IWWMF).

Download the table from the IWWMF website : https://iwmf.com/wp-content/uploads/2020/10/bloodcharts_cbc1.pdf

Quest Diagnostics Patient Service Centers

Use our online scheduling service to make an appointment at a Quest Diagnostics Patient Service Center.

Schedule an Appointment : <https://appointment.questdiagnostics.com/schedule-appointment/as-reason-for-visit>

Note: Data displayed only for results that meet strict identification matching. Historical result view may vary based on corrected or updated patient demographics. The reference range displayed may vary due to potential changes in laboratory testing methods. Please refer to the published reference range on each lab report.

These results have been sent to the person who ordered the tests. Your receipt of these results should not be viewed as medical advice and is not meant to replace discussion with your doctor or other healthcare professional.

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