

# STANDARDS OF MEASUREMENT IN OUR LABORATORY

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All of our patients have laboratory work-ups as part of their visit assessment. This helps assure the physician, and the patient, that a thorough analysis is being done each visit to determine if changes have arisen. Even short intervals may show changes. For example a white cell count may elevate within hours of the appearance of a sore throat. The laboratory values of an acute hepatitis infection can be elevated before symptoms are apparent and will change daily. The changes due to a blood cancer may occur in a week's time.

We found that a deviation of 15% or more gives a good estimate of the low level and the high level results for a test. If the levels exceed the designated extremes the physician will discuss the possible reasons for the results. Laboratory tests are the best means of documenting trends. A probable "trend" is a value that is 1. above or below <> ranges set in Highlights page, 2. according to the average column there, if 3. the level has been found on at least two consecutive visits on the 6 part summary. A trend is present if there are 3 consecutive values.

We have compiled all the tests done or ordered in the last 20 years. Many of the tests listed on the following pages were done by our own laboratory. The tests performed by an outside laboratory are identified by a period (.) after the test name on the listing. We currently use two outside laboratories.

In-house test results and/or ranges follow those of the test manufacturer and the regulatory recommendations. Our laboratory is certified by COLA, a regulatory board acting on behalf of the federal government, which reviews our eligibility for continued certification every two years in accordance with the regulations of the U.S. Clinical Laboratory Improvement Amendments (CLIA). We have maintained continuous certification since 1993, the first year it was required.

We perform a geometric mean for the results for each of the tests done either in our laboratory or from an outside laboratory.

Where appropriate, a footnote is referenced. Footnotes are contained in the Notes section.

Test Name	Laboratory Average	15% Below Lab Avg.	15% Above Lab Avg.	Units*	Test Rationale
.....Infectious Disease					
RPR	NEG	0	0	Qualitative	Tests for syphilis.[1]
RPR TITER	1.00	0	0	Ratio	Ratio to negative Syphilis test.
FLUORESCENT TREP AB .	NEG	0	0		Confirms prior Syphilis
MANTOUX TB .	NEG	0	0	Visual	Test for tuberculosis
AFB STAIN .	NEG	0	0	Culture	Confirms tuberculosis
AFB-CULT .	NEG	0	0	Culture	Growth confirms Tuberculosis
AFB-ID .	NEG	0	0	Culture	TB type identification
CHLAMYDIA-RNA .	NEG	0	0	Qualitative	Test for Chlamydia
NEISSERIA-RNA .	NEG	0	0	Qualitative	Test for Gonorrhea
CHLAMYDIA FROM PAP .	NEG	0	0	Qualitative	Test for Chlamydia
NEISSERIA FROM PAP .	NEG	0	0	Qualitative	Test for Gonorrhea
MYCOPLASMA PNEUMONIAE	NEG	NEG	POS	Qualitative	Detects current infection.
LYME WB IGG .	NEG	NEG	POS	Western Blot	Borrelia burgdorferi past antibodies
LYME WB IGM .	NEG	NEG	POS	Western Blot	Borrelia burgdorferi present antibodies
CULTURE: RECTAL CHLAMYDIA .	NEG	NEG	POS	Culture	Test for rectal Chlamydia.
CULT: RECTAL GC .	NEG	NEG	POS	Culture	Infective GI organisms.
CULT: CLOSTRIDIUM DIF .	NEG	NEG	POS	Culture	Detects Clostridium Difficile
BLOOD CULTURE AEROBIC .	NEG	NEG	POS	Qualitative	Identifies organisms that need O2 to grow.
BLOOD CULTURE ANAEROBIC .	NEG	NEG	POS	Qualitative	Identifies Organisms that don't need O2
.....HIV					
EIA HIV ANTIBODY .	NEG	NEG	POS		Tests for HIV
HIV-1 WESTERN BLOT .	NEG	NEG	POS	Qualitative	HIV Confirmation
WB GP160 .	NEG	NEG	POS	Qualitative	with GP120 & P24 confirms HIV
WB GP120 .	NEG	NEG	POS	Qualitative	with GP120 & P31 confirms HIV
WB GP41 .	NEG	NEG	POS	Qualitative	with P31 or P24 confirms HIV
WB P55 .	NEG	NEG	POS	Qualitative	HIV Component
WB P24 .	NEG	NEG	POS	Qualitative	with GP120 & GP160 OR GP41 confirms HIV
WB P31 .	NEG	NEG	POS	Qualitative	with GP41 confirms HIV
WB P65 .	NEG	NEG	POS	Qualitative	HIV Component
WB P51 .	NEG	NEG	POS	Qualitative	HIV component
WB P18 .	NEG	NEG	POS	Qualitative	HIV Component
HIV-RNA PCR .	0	0	0.01	1000's/mL	Counts # HIV-1 virus in blood
EIA HIV-2 ANTIBODY .	NEG	NEG	POS		Tests for HIV-2
HIV-2 WB .	NEG	NEG	POS	Qualitative	Identifies HIV-2 presence
HIV RESISTANCE .	NEG	NEG	POS	Detection	Detects viral mutations.
HIV PHENOTYPE .	NEG	NEG	POS	Detection	Identifies HIV mutations
HLA-B 5701 .	NEG	NEG	POS	Detection	Confirms allergy to Abacavir
TROFILE .	NEG	NEG	POS	Qualitative	Presence of CCR5 and CXCR4 genes
HIV INTEGRASE .	NEG	NEG	POS	Qualitative	Resistance to Raltegravir.
.....Viral Disease					
IMMUNOBLOT .	NEG	NEG	POS	Western Blot	HIV Western Blot
UNIGOLD HIV AB	NEG	NEG	POS	Qualitative	Rapid HIV Antibody detection
ORAQUICK HIV AB	NEG	NEG	POS	Qualitative	Rapid HIV Antibody detection
P24-ANTIGEN .	NEG	NEG	POS		Marker for level of viral load.
HTLV 1&2 .	NEG	NEG	POS		Presence of retroviruses 1 & 2
MONONUCLEOSIS	NEG	NEG	POS	Qualitative	Tests for Mononucleosis virus presence.
EBV EARLY ANTIGEN IGG .	10.5	8.90	11.0	u/mL	Epstein-Barr antigen previously present[7]
EBV NUCLEAR ANTIGEN IGG .	20.0	18.0	22.0	u/mL	Epstein-Barr antigen previously present [7]
EBV IGG VCA .	20.0	17.9	22.0	u/mL	Past Epstein Barr virus previously present [7]
EBV IGM VCA .	40.0	36.0	44.0	u/mL	Epstein-Barr viral capsid antigen [7]
CYTOMEGALO VIRUS IgG .	1.40	0	1.72	IV	Test for past infection

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.....Viral Disease					
CYTOMEGALO VIRUS IgM .	0.46	0	30.0	IV	Antibody test for current infection[2]
HSV 1&2 IGM .	0.71	0	0.81	IV	Antibody test for Herpes virus presence.
HERPES 1 IGG .	NEG	0.90	1.10		Antibody for past HSV infection (oral) [7]
HERPES 2 IGG .	NEG	0.90	1.10		Antibody for past HSV infection (genital) [7]
VARICELLA IgG .	NEG	0	POS	ISR	Level of Herpes Zoster past antibodies
VARICELLA IgM .	0.43	0	0.91	ISR	Level of Herpes Zoster present antibodies
CULT: HSV-SKIN .	NEG	NEG	POS	Culture	Confirms HSV skin.
CULT: HSV-VAGINAL .	NEG	NEG	POS	Culture	Confirms HSV Vaginal
INFLUENZA A	Unknown	NEG	POS	NEG/POS	Tests for Influenza Type A (possible H1N1).
INFLUENZA B		NEG	POS	NEG/POS	Tests for Influenza Type B.
2009 INFLUENZA (H1N1) .		NEG	POS		Test for exposure to H1N1 virus
INFLUENZA A RNA .		NEG	POS		Part of H1N1 detection tests.
.....Fungal Disease					
TOXOPLASMOVIS IGG .	0.23	0	6.40	IU/mL	Past Toxoplasmosis infection. [7]
TOXOPLASMOVIS IGM .	7.45	0	0.90	IU/mL	Present Toxoplasmosis infection
CRYPTOCOCCUS ANTIGEN .	NEG	0	0	Visual	Present Cryptococcal Infection
.....Nutrition					
CHOLESTEROL	172	145	196	mg/dL	Hi=Heart disease/fat diets.
TRIGLYCERIDES	118	0	130	mg/dL	Hi=Fat diet/heart disease.
HDL CHOLESTEROL	51.7	44.7	60.5	IU/L	Lo=suggests heart disease risk if low.
VITAMIN D OH-25 .	24.3	18.8	25.4	ng/mL	Food/Sun ray absorption capability.
.....Metabolic System					
URIC ACID	5.40	0	6.21	mg/dL	Hi=gout/metabolic disorder/rich diet
CALCIUM	9.39	8.92	10.7	mg/dL	Lo=Deficiency/Vitamin D? [3]
CORRECTED CALCIUM~	9.10	7.74	10.4	calculated	Calcium correction due to Albumin.
EST. CA ION~	5.50	4.68	6.33	calculated	Estimates circulating calcium
PHOSPHORUS	3.39	2.85	3.86	mg/dL	Low in kidney disease.
POTASSIUM	4.18	3.53	4.78	meq	Deficiency & Prescription need.
SODIUM	141	119	162	mmol/L	Lo=Deficiency/High=Dietary excess.
CHLORIDE	107	88.8	120	mmol/L	Lo=Deficiency (goes with Sodium).
CARBONATE (CO2)	26.0	24.6	33.2	meq/L	Lung defects
MAGNESIUM	1.84	1.50	2.03	mg/dL	May show nutritional deficiency.
.....Endocrine System					
GLUCOSE	100	84.0	114	mg/dL	Blood sugar content.
URINE-GLUCOSE	NEG	0	1000	mg/dL	Tests sugar/diabetes
FASTING GLUCOSE TOLERANCE		65.0	110	mg/dL	Obtains Fasting Glucose baseline.
GLUCOSE-30 MINUTES		100	140	mg/dL	Measures initial increase after glucose beverage.
GLUCOSE-60 MINUTES		120	140	mg/dL	Impaired 140-200 / Diabetic @30 mins +200
GLUCOSE-90 MINUTES		70.0	120	mg/dL	Diabetic +200 w/1 intervening value +200
GLUCOSE-120 MINUTES		70.0	110	mg/dL	Assess rate of drop in glucose. Diabetic +180
HEMOGLOBIN A1C	5.78	0	6.64	%	Blood sugar over last 2-3 months. [4]
INSULIN .	3.95	3.40	7.30	UIU/mL	Insulin level in blood.
C-PEPTIDE .	2.24	2.74	3.70	ng/mL	Marker for insulin & beta cell level.
PTH INTACT .	31.8	31.2	42.2	pg/mL	Calcium metabolism.Vit.D.relations
TOTAL T4 .	8.69	5.69	7.69	ug/mL	High Thyroxine with hyperthyroid function
TOTAL T3 .	0.06	1.17	1.58	ng/mL	High Triiodothyronine with hyperthyroid
THYROID FREE T4 .	1.19	1.07	1.44	ng/dL	Circulating Thyroid T4 hormone
MICROSOMAL AB (TPO) .	14.3	12.2	14.6	IU/mL	Thyroiditis
ANTI-THYROGLOBULIN .	21.6	18.0	26.8	IU/mL	Thyroiditis
THYROID STIM. HORMONE	1.53	0	1.76	IU/mL	Monitors Hypothyroid status [5]
TESTOSTERONE (TOTAL)	469	399	539	ng/mL	Level in blood.
TESTOSTERONE (FREE) .	7.16	6.12	8.28	calculated	Calculated amount not active.
TeBINDING GLOBULIN .	24.4	21.7	29.4	nmol/L	Lo/High-Ovarian/Testicular problem
CORTISOL .	13.7	8.48	11.5	mcg/dL	Adrenal gland function.
LEUTINIZING HORMONE .	4.00	3.27	4.43	mIU/mL	Pituitary/Menopausal Disorder
FOLLICLE STIM HORMONE .	4.45	4.19	5.67	mIU/mL	Pituitary/Menopausal Disorder
PROLACTIN .	6.70	5.84	7.90	ng/mL	Pituitary Disorder
ESTRADIOL .	53.6	34.8	47.1	pg/mL	Endocrine Disorder
.....Immune System					
TOTAL PROTEIN .	7.35	6.25	8.50	g/dL	Amount in blood
ALBUMIN .	4.26	3.62	4.89	g/dL	Transports medicines. Stabilizes blood volume.
ALPHA-1-GLOBULIN .	0.30	0.26	0.35	g/dL	High in inflammation. Low in COPD/emphysema.
ALPHA-2-GLOBULIN .	0.71	0.60	0.82	g/dL	High in hepatitis/diabetes/G.I.disease
BETA 1 FRACTIONATION .	0.84	0.58	0.97	g/dL	Binds iron/fats/infections C4-5/IgA) (Late=C3&IgAG

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.....Immune System					
GAMMA-GLOBULIN .	1.14	0.97	1.31	g/dL	High in infection/inflammation. Early=DEMA/FB/C1
TOTAL GLOBULIN .	3.05	2.59	3.51	g/dL	Component of protein.
A/G RATIO .	1.39	1.18	1.59	ratio	Albumin/Globulin content of Protein.
M-SPIKE .	0	0	1.16		Sometimes a cancer marker.Protein. [7]
IMG-G	1064	876	1185	mg/dL	Hi w/chronic inflammation/infection.
IMG-A	205	179	242	mg/dL	Fights infection of specific systems
IMG-M	93.4	80.5	109	mg/dL	Hi in recent infection/inflammation.
IgG 1 .	590	490	1140	mg/dL	Hi suggests B cell/TH42 response [7]
IgG 2 .	273	150	640	mg/dL	Hi suggests B cell/TH41 response [7]
IgG 3 .	30.4	20.0	110	mg/dL	Hi suggests TH41 response [7]
IgG 4 .	37.7	8.00	140	mg/dL	Hi suggests B cell/TH41 response. [7]
IgE	204	0	204	IU/mL	High in allergic states
C3 COMPLEMENT	120	107	144	mg/dL	Low=Skin disorders/High=Infections
C4 COMPLEMENT	31.3	25.0	33.8	mg/dL	Low with immune complex problem.
BETA-2 MICROGLOBULIN .	1.85	0	2.14	mg/L	Hi=kidney/immune problem
CD4 .%	25.6	22.7	30.8	%	Low in immune deficiency or HIV.
CD4 (HELPER) CELLS~	462	400	541	cells/uL	CD4s (T4s) are 'Director' cells. [6]
CD8 SUPPRESSOR CELLS~	770	615	833	cells/uL	CD8s (T8s 0 are Suppressor cells)
CD4/CD8 RATIO~	0.60	0.55	0.75	Ratio	Proportion of CD4 (T4) to CD8 (T8) cells.
CD8. % .	42.7	35.0	47.3	%	Fight inflammation caused by viruses or Older T cells.
MATURE T CELL%~	74.8	63.4	85.7	%	
MATURE T CELLS .	1348	1114	1508	cells/uL	CD4s+CD8s+T killer cells.
B CELL % .	10.4	8.73	11.8	%	Hi suggests B cell/TH41 response producing cells
B CELL COUNT~	188	154	208	cells/uL	Number of B cells
EST. N.K. CELLS %~	21.3	18.5	25.1	%	Natural Killer Cells
CARCINOEMBRYONIC AG .	1.24	0	1.29	ng/mL	May detect tumors
MEASLES .	3.63	3.88	5.25	IV	Test for immunity to measles.
MUMPS AB .	2.24	3.84	5.20	IV	Test for immunity to mumps
RUBELLA .	38.8	0	10.0	IU/mL	Test for immunity to rubella
G6PD .	14.6	7.00	20.0	U/g Hb	Hemolytic & allergic responses.
.....Blood System					
RETICULOCYTE COUNT .	1.19	0.79	1.06	count	Immature red blood cells
RED BLOOD CELLS	4.52	3.93	5.32	10 <sup>6</sup> /mm <sup>3</sup>	Low levels indicate anemia.
HEMATOCRIT	40.4	34.8	47.1	%	Ratio of red cells to fluid.
HEMOGLOBIN	13.6	11.8	16.0	g/dL	Reflects oxygen in blood.
WHITE BLOOD CELLS	5893	5025	6799	10 <sup>3</sup> /mm <sup>3</sup>	These respond to infection.
NEUTROPHIL %	54.6	46.1	62.3	%	These respond to bacteria.
NEUTROPHILS (ABS)~	3220	2723	3683	count	Number of cells
MONONUCLEAR (ABS)~	2674	2302	3114	count	# Cells with nucleus of mononuclear or white cells
MONONUCLEAR %~	45.4	38.9	52.7	%	% Cells with nucleus of mononuclear or white cells
EOSINOPHIL %	2.50	0	2.85	%	First allergic response.
BASOPHIL %	0.66	0	0.81	%	White cell baseophilic granules
MONOCYTES %	6.99	0	7.95	%	Become macrophagic scavengers.
ATYPICAL LYMP%	1.19	0	1.66	%	% of Cells with defects
TOTAL LYMPHOCYTES .	1804	1494	2022	count	Number of virus fighting cells
LYMPHOCYTE %	32.2	26.6	36.0	%	Percentage of total lymphocytes.
LYMPHOCYTE SUBSET	1899	1632	2208	count	Lymphocytes measured at this office.
PLATELETS	222	196	265	10 <sup>9</sup> /L	Lo=Bleeding. Hi=Clotting.
SERUM IRON	71.0	56.7	76.7	mcg/dL	Low = anemia. Hi = hemolysis
IRON BINDING CAPACITY	307	244	331	estimated	Low = chronic Dx. Hi = Low iron.
IRON BINDING RATIO~	0.23	0.20	0.27	estimated	Relationship of active to inactive iron.
TRANSFERRIN	251	207	279	mg/dL	/Controls & blocks iron entry.
FERRITIN .	76.0	54.4	73.6	ng/mL	Permits Iron storage / Acute phase reactant.
RBC FOLIC ACID .	18.0	15.6	21.1	ng/mL	Nutritional/hematologic Disorder cause
VITAMIN B12 RIA .	560	480	649	pg/mL	Lo level=Severe anemia
PROTHROMBIN TIME .	14.4	13.0	17.6	seconds	Monitors extrinsic clotting path. inc. VII/Warfari
PROTHROMBIN INR .	1.40	1.31	1.78	IU	Pt. PT/mean normal PT [Thrombosis=2.0-3.0]
PART. THROMB. TIME .	31.3	27.9	37.7	seconds	Monitors intrinsic clotting path. except VII/Hepar
.....Psychologic					
LITHIUM LEVEL .	0.37	0.31	0.42	mmol/L	Tests for therapeutic level of Lithium
VALPROIC ACID (DEPAKOTE) .	66.4	69.7	94.3		Tests for Therapeutic level of Depakote
.....Nervous System					

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Test Name	Laboratory Average	15% Below Lab Avg.	15% Above Lab Avg.	Units*	Test Rationale
.....Nervous System					
DILANTIN LEVEL .	5.82	2.27	3.07		Tests for Therapeutic Level of Dilantin
.....Sensory System					
.....Circulatory System					
DIGOXIN .		1.48	2.00	ng/mL	Used to monitor medication levels
LDL DIRECT	112	0	116	mg/dL	Helps evaluate cholesterol level.
ULTRA CRP	1.22	0	1.65	mg/L	Hi with heart Inflammation/heart disease.
CK-MB	NEG	NEG	POS	ng/mL	Detects Heart Attack
MYOGLOBLIN	NEG	NEG	POS	ng/dL	Detects Heart Attack
TROPONIN	NEG	NEG	POS	ng/dL	Detects Heart Attack
.....Respiratory System					
STREP ANTIBODY	NEG	NEG	POS	Qualitative	Tests for infection / antibodies
STREP ANTIGEN	NEG	NEG	POS	QUALITATIVE	Tests for active strep presence.
CULTURE - THROAT .	MIXED	0	0	QUALITATIVE	Identifies organism growth.
.....Digestive System					
H. PYLORI	0.54	NEG	POS		Ulcer causing bacteria.
SGOT(AST)	23.1	0	27.2	IU/L	Hi=Tissue inflammation.
APRI SCORE	0.41	0	1.00	(AST)Platelet index	Formula to estimate liver fibrosis
SGPT(ALT)	22.4	0	25.4	IU/L	Hi=liver malfunction.
ALKALINE PHOSPHATASE	59.1	0	70.1	IU/L	Hi=Liver/bone disorders.
TOTAL BILIRUBIN	0.73	0	0.84	IU/L	Tests for bile build up.
BILIRUBIN IN URINE	0			mg/dL	Liver or red cell problem
ALBUMIN	4.38	3.66	4.95	g/dL	Transports medicines. Stabilizes blood volume.
GGPT	26.2	0	30.1	u/L	Evaluates liver malfunction.
GLOBULIN~	2.60	1.96	2.65	g/dL	Protein in antibodies
TOTAL PROTEIN	6.69	5.59	7.56	Scale-Refractometer	High in disease states.
UROBILINOGEN	0.20	0	12.0	mg/dL	Liver/red cell problem
HEPATITIS A IGM .	NEG	NEG	POS	Qualitative	Positive IGM means active disease.
HEPATITIS A AB IGG .	NEG	NEG	POS	Qualitative	Tests for immunity
HEPATITIS B ANTIGEN .	NEG	NEG	POS	Qualitative	Test for active disease
HEPATITIS B PCR LOG .	2.01	0	0	log value	Numerical value.?????
HEPATITIS B PCR QUANT. .	0.13	301	408	IU/mL	Hepatitis B Viral Load in 1000s
HEPATITIS B SUR AB .	NEG	0	10.0	Quantitative	Value 10+=Immunity.
HEPATITIS B CORE AB .	NEG	NEG	POS	Qualitative	Type of antibody (core)
HEPATITIS C ANTIBODY .	NEG	NEG	POS	Qualitative	Presence of Hepatitis C
HEPATITIS C PCR QUANT. .	0	0	POS	IU/mL	Number of Hepatitis C antigens.
HEPATITIS Be ANTIGEN .	NEG	0	POS	Qualitative	The infectious particle of Hepatitis B
HEPATITIS Be ANTIBODY .	NEG	0	POS	Qualitative	The infectious particle of Hepatitis B ?????
HEPATITIS C GENOTYPE .	NEG	0	0	Qualitative	Genotype of Hepatitis C.
ALPHA FETOPROTEIN .	2.28	0	15.0	ng/mL	May identify liver cancer.
AMYLASE	53.4	0	58.1	IU/mL	Hi with pancreatitis or mumps.
LIPASE	59.8	0	51.8	u/L	Hi=Pancreas/gallbladder/inflammation
STOOL OCCULT BLOOD					Test for blood in stool.
OVA AND PARASITES .	0	0	0	Qualitative	GI parasite presence
O&P CRYPTOSPORIDIA .	0	0	0	Qualitative	GI parasite presence
LAMBLIA GIARDIA ANTIGEN .	0	0	0	Qualitative	GI parasite presence
CULTURE-THRUSH .	0	0	0	Culture	
TRANSGLUTAMINASE IGA .	0.75	0.11	0.63		Celiac Disease Panel
GLIADIN IGG .	2.24	2.00	4.00		Celiac Disease Panel
GLIADIN IGA .	1.01	0.90	1.20		Celiac Disease Panel
RETICULIN TITER .					Celiac Disease Panel[7]
RETICULIN IGA .					Celiac Disease Panel[7]
CULTURE-STOOL .	NEG	NEG	POS	Culture	Infective GI organisms.
.....Genito-Urinary System					
BLOOD UREA NITROGEN	13.0	0	14.8	mg/dL	Reflects kidney disorders.
CREATININE	0.94	0	1.04	mg/L	Detects kidney damage.
GLOM. FIL. RATE~	100	89.7	121	calculated	Lo=Kidney dysfunction
BLOOD IN URINE	0	0	0	mg/dL	Urinary tract bleeding.
LEUKOCYTES IN URINE	0	0	500	leu/ul	Hi=infection
PROTEIN IN URINE	0	0	500	mg/dL	Possible kidney disease
NITRITE	NEG	NEG	POS	mg/dL	Possible urinary tract infection
PH-URINE	6.02	5.12	6.92		Indicates Urine Acidity & alkalinity
KETONES IN URINE	0	NEG	+++	mg/dL	Detection of Ketones in urine.
SEDIMENT URINE	0	0	0		Cells or matter in urine.
MICROALBUMIN	31.9	0	37.8	scale 0-100	Albumin in Urine
HCG (PREGNANCY): URINE	NEG	NEG	POS	Qualitative	Determination of pregnancy.

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	Average	Lab Avg.			Lab Avg.
.....Genito-Urinary System					
HCG (PREGNANCY): BLOOD .	NEG	0	2.00	titer	Determination of pregnancy.[7]
PROSTATE SPECIFIC AG	1.09	0	1.25	ng/mL	Hi=prostatitis/prostate mass
PROSTATIC ACID PHOS	0.50	0	0.68	u/L	May detect prostatic growth.
TOTAL ACID PHOS	2.09	0	3.05	u/L	Levels from various organs.
CANCER ANTIGEN 125 .	9.60	0	30.2	U/mL	Ovarian Cancer Indicator [7]
SPECIFIC GRAVITY-URINE	1.02	0.87	1.17	Refractometer scale	Detects Dehydration
CULTURE-URETHRAL .	NEG	NEG	POS	Qualitative	Infective organisms
YEAST-URETHRAL .	NEG	NEG	POS	Qualitative	Identifies fungi
UREPLASMA2 VAGINAL .	NEG	NEG	POS	Culture	Presence of infection
UREPLASMA1 VAGINAL .	NEG	NEG	POS	Culture	Presence of infection.
UREPLASMA URETHRAL .	NEG	NEG	POS	Culture	Presence of infection
CULTURE-VAGINAL .	NEG	NEG	POS	Qualitative	Identifies infective organisms
YEAST-VAGINAL .	NEG	NEG	POS	Qualitative	Identifies infective organisms
CULTURE-URINE .	NEG	NEG	POS	Qualitative	Identifies infective organisms
PAP SMEAR .	NEG	NEG	POS	Qualitative	Detection of abnormal/cancerous cells: cervix
THINPREP PAP .	NEG	NEG	POS	Qualitative	Detection of abnormal/cancerous cells: cervix
HPV THINPREP PAP .	NEG	NEG	POS	Qualitative	Detection of HPV: cervix
NON-GYN CYTOLOGY .	NEG	NEG	POS	Qualitative	Detection of abnormal/cancerous/HPV cells: rectum
CALCULUS ANALYSIS .	NEG	0	0	Detection	Composition of kidney stones
.....Skin System					
CULTURE-WOUND .	NEG	NEG	POS	Qualitative	Identifies infective organisms.
.....Muscle & Skeleton					
LDH	128	0	143	IU/L	Hi=Organ cell inflammation.(Isoenzyme 2=normal)
CPK	116	0	130	IU/L	Hi=muscle inflammation.
R.A. ANTIBODY	NEG	NEG	POS		Tests for rheumatoid arthritis.
CULTURE-JOINT .	NEG	NEG	POS	Culture	Identifies infective organisms.

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**STANDARDS OF MEASUREMENT IN OUR LABORATORY  
FOOTNOTES AND GLOSSARY OF UNITS OF MEASUREMENT**

The Standards of Measurement in Our Laboratory was implemented in November 10, 2009 and is reviewed annually in January. Updates are made as needed throughout the year. Previous versions are maintained in the Laboratory Manual.

**Footnotes:**

<sup>[1]</sup>RPR Titer is clinically reported as 1:2, 1:4, 1:8, 1:16, etc.

For the purpose of averaging the reference values used are the 2, 4, 8, 16, etc.

<sup>[2]</sup>The outside laboratory changed the range for CMV IGM and the ranges above reflect the reported ranges of the laboratory used.

<sup>[3]</sup> Low Calcium is calculated at 5% and not the standard 15% for the purposes of clinical reporting.

<sup>[4]</sup> The low level of Hemoglobin A1C is not used.

<sup>[5]</sup> The ranges formerly reported for Thyroid Stimulating Hormone were found to be in error. Corrections to the present ranges were changed in January 2013.

<sup>[6]</sup> CD4 (Helper) cells laboratory average of 462 applies to HIV patients only. the high level for non-HIV patients is 1000.

<sup>[7]</sup> Outside lab tests for which there is not sufficient testing to develop an in-house standard. The performing laboratory values are used for reporting results.

**\*Glossary**

<b>Abbreviation</b>	<b>Definition</b>	<b>Abbreviation</b>	<b>Definition</b>
10 <sup>3</sup> /mm <sup>3</sup>	Thousand per cubic millimeter	mg/L	milligrams per Liter
10 <sup>6</sup> /Liter	Million per Liter	meq	milliequivalents.
1000's/mL	Test result is converted by 1000 per milliliter.	mmol/L	MicroMoles per Liter
Calculated	The results are calculated based on a formula.	ng/mL	nanograms per milliliter
cells/uL	The number of cells measured per microliter.	pg/mL	picograms per microliter.
Count	Actual count of specific cell types.	Percentage %	the result is reported as a percentage.
Culture	Test results reported as growth/non-growth.	Qualitative	Test results reported as non-numeric result
Detection	Test results reported as Not Detected/Detected.	Ratio	Test reports a numeric proportion of one element to another.
Estimated	Calculation of elements to arrive at the result.	Scale	Test reports results in a range, usually starting with 0 (negative).
g/dL	grams per deciliter.	seconds	time for cells to clot.
IU	International Units	titer	a ratio.
IU/L	International units per Liter	U/g Hb	Units per gram of hemoglobin.
IU/mL	International Units per milliliter	u/L	units per liter.
ISR	Immune Status Ratio	ug/mL	micrograms per milliliter.
IV	Index Value	u/mL	Units per milliliter
mcg/dL	micrograms per deciliter.	UIU/mL	microInternational Units per milliliter.
meq/L	millitequivalnts per Liter	Visual	Test reports results based on a visually observed standard.
mg/dL	Milligram per deciliter	Western Blot	Test reports results non-reactivity/reactivity of defined bands.