



WESTPAC LABS

A Sonic Healthcare Company

Laboratory Updates

Client Communication

As part of our ongoing efforts to maintain the highest quality standards in laboratory medicine, WestPac Labs would like to inform you of the following improvements:

- In collaboration with the National Kidney Foundation (NKF), a new “Kidney Profile” will be offered to simplify the ordering and reporting of essential tests for assessment of chronic kidney disease. Specifically, the “Kidney Profile” provides an estimated glomerular filtration rate (eGFR) and a urine albumin to creatinine ratio (ACR). eGFR and ACR are the primary components of NKF algorithms for screening and staging of chronic kidney disease. The eGFR and ACR require paired serum and random urine specimens. To learn more please visit: <https://www.kidney.org/CKDintercept/laboratoryengagement>.
- In accordance with National Kidney Foundation Guidelines, eGFR calculations will no longer be reported for patients less than 18 years of age.
- As a result of Sonic Healthcare USA population studies and feedback from our clients, our reference range for peripheral blood white blood cell count (WBC) will be adjusted to 3.5 – 10.0 k/ul (previously 4.5 – 11.0).
- Hemoglobin A1c results will be accompanied by the calculated estimated average glucose concentration (eAG) as recommended by the American Diabetes Association and American Association of Clinical Chemistry. The previously reported mean blood glucose (MBG) calculation for will be discontinued. eAG calculations average 8.4% lower than MBG over a range of A1c values from 5.0-8.0%.
- Serum free testosterone in the “Testosterone Profile” will default to a calculated free testosterone. The Testosterone Free Direct by Enzyme Immunoassay (EIA), TC: 904 will no longer be available. Calculated free testosterone levels correlate well with reference methods and are satisfactory for most clinical situations. When a direct free testosterone measurement is clinically required (females and prepubertal males), this test should be individually ordered and will be sent to our reference laboratory for analysis by liquid chromatography-tandem mass spectrometry (LC-MS/MS), which is the gold standard method. In the event an order is received requesting the Testosterone Free Direct by EIA, a call will be placed to the provider and alternative testing options will be offered.

In order to better align with national clinical chemistry standards, the following changes will occur:

- We will discontinue calculated estimates of ionized (free) serum calcium. Importantly, direct measurement of ionized serum calcium, which is the national laboratory standard, will continue to be offered.
- Serum osmolality calculations will be discontinued as part of the basic and comprehensive metabolic profiles, as well as the renal function profile. Direct serum osmolality measurement should be ordered if needed for acid/base, electrolyte or pituitary disorder workups.
- Plasma ammonia unit of measure will be standardized to micromole/liter (umol/l). The previous unit of measure for ammonia was microgram/deciliter (ug/dl).
- Pediatric reference ranges for thyroid stimulation hormone (TSH) have been adjusted to more closely reflect biologic age stratification.
- Urine drug screen panels will discontinue testing for propoxyphene and methaqualone. The prevalence of these drugs appear nil in our patient population. Propoxyphene (Darvon, Darvocet) was withdrawn from the US market in 2010. Methaqualone (Qualude) was a common drug of abuse in the 1960s and 1970s but is now encountered very uncommonly in the US.
- We are pleased to offer Helicobacter pylori detection via the urea breath test (preferred) or the stool antigen test as recommended by the American College of Gastroenterology and College of American Pathology. Per these consensus guidelines, H. pylori serology (IgM, IgG) will be discontinued.
- Our Critical Value and Alert Value List has been updated to include an expanded microbiology section. All critical values are telephoned to clients within 60 minutes of test completion. Alert values are telephoned during business hours only. The Critical and Alert Value List is attached for your reference.

WestPac Labs greatly appreciates your business and support, as we continually improve our service. Please do not hesitate to call if we can be of any assistance to you.

Sincerely,

Ronald Rocha, MD

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Visit us online at www.westpaclab.com or call **877.527.5227** for more information.



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CRITICAL AND ALERT VALUE LIST

Department	Analyte	Units	Critical Limits	Alert Limit
Hematology	Blast %	%	>10%	
Hematology	CSF Cell Count	pmns	>5	
Hematology	HCT (<1m)	%	<21.0 or >81.0	<24.0 or >75.0
Hematology	HCT (>1m)	%	<21.0 or >63.0	<24.0 or >60.0
Hematology	HGB (<1m)	g/dL	<7.0 or >27.0	<8.0 or >25.0
Hematology	HGB (>1m)	g/dL	<7.0 or >21.0	<8.0 or >20.0
Hematology	INR	ratio	>5.0	
Hematology	Platelets	k/uL	<10 or >1500	<50 or >850
Hematology	PTT	seconds	>60.0	
Hematology	WBC (<1m)	k/uL	>40.0	<2.0
Hematology	WBC (>1m)	k/uL	>40.0	<2.0
Chemistry	Albumin (<18y)	g/dL		<1.7 or >6.8
Chemistry	ALT	U/L		>500
Chemistry	Amylase	U/L		>700
Chemistry	AST	U/L		>500
Chemistry	BUN	mg/dL		>80
Chemistry	Calcium	mg/dL	<6.6 or >13.0	
Chemistry	Chloride	meq/L		<80 or >120
Chemistry	CK-MB	ng/mL	F >4.31; M >7.71	
Chemistry	CO2	mEq/L		<10 or >40
Chemistry	CPK	U/L		>600
Chemistry	Creatinine	mg/dL		>5.0
Chemistry	Glucose Fasting	mg/mL	<45 or >400	
Chemistry	Glucose Random	mg/mL	<45 or >500	>400
Chemistry	Iron	ug/dL		>350
Chemistry	Magnesium	mg/dL		<1.2 or >5.0
Chemistry	pO2	mmhg	<40	
Chemistry	pCO2	mmhg	<20 or >70	
Chemistry	pH	units	<7.20 or >7.60	
Chemistry	Phosphorus	mg/dL		<1.0 or >9.0
Chemistry	Potassium	mEq/L	<3.0 or >6.1	
Chemistry	Sodium	mEq/L	<120 or >155	
Chemistry	Total bilirubin (<1m)	mg/dL		>18.0
Chemistry	Total protein	g/dL		<3.2 or >9.5
Chemistry	Troponin I	ng/mL	>0.2	
Chemistry	Troponin T	ug/mL	>0.01	
Chemistry	TSH (<18y)	mIU/L		>40
Chemistry	Uric Acid	mg/dL		>13.0
Toxicology/TDM	Carbamazepine (Tegretol)	ug/mL		>20.0
Toxicology/TDM	Digoxin	ng/mL		>2.5
Toxicology/TDM	Lithium	meq/L		>1.5
Toxicology/TDM	Phenobarbital	ug/mL		>60.0
Toxicology/TDM	Phenytoin	ug/mL		> 20
Toxicology/TDM	Theophylline	ug/mL		>20
Toxicology/TDM	Valproic Acid	ugm/mL		>200
Toxicology/TDM	Vancomycin	ugm/mL		Trough >20; Peak >44.0

<u>Department</u>	<u>Analyte</u>	<u>Units</u>	<u>Critical Limits</u>	<u>Alert Limit</u>
Microbiology	Ascites Gram Stain or Culture			Positive
Microbiology	Blood Culture		Positive	
Microbiology	C.Difficile			Positive
Microbiology	Clinically Significant Fungi: Zygomycetes, Coccidioides, Histoplasma, Blastomyces, Cryptococcus, Pneumocystis			Positive
Microbiology	Clostridium in Wounds			Positive
Microbiology	CRE: E.Coli, K.pneumoniae, K.oxytoca			Positive
Microbiology	CSF Gram Stain or Culture		Positive	
Microbiology	ESBL: E.Coli, K.pneumoniae, K.oxytoca			Positive
Microbiology	MRSA			Positive
Microbiology	Multi-Drug Resistant: Pseudomonas aeruginosa, Acinetobacter spp.			Positive
Microbiology	<i>Mycobacterium species (any type)</i>			Positive
Microbiology	Neiseria gonorrhoeae (GC) (<i>any detection method</i>)			Positive
Microbiology	Ocular and Bone Marrow Cultures or Gram stain			Positive
Microbiology	Pleural Fluid Culture or Gram Stain			Positive
Microbiology	Rapid Influenza A/B assays			Positive
Microbiology	RSV			Positive
Microbiology	Stool Culture			Positive
Microbiology	Synovial Fluid Culture or Gram stain			Positive
Microbiology	Vancomycin Resistant: Enterococcus faecalis, Enterococcus faecium (<i>excluding Resp Sources: Sputum, Nasal, Throat</i>)			Positive



Measles IgG Assay

Client Communication

Date: August 27, 2019

WestPac Labs has partnered with our instrument manufacturer, DiaSorin, to adjust the cut-off zones for our Measles IgG assay which uses the chemiluminescent immunoassay method. The intent is to better-align with World Health Organization (WHO) international standards. The new reference range reflects a downward shift, and is as follows:

Measles IgG Reference Range Update		
Old Reference Range	→	NEW Reference Range
Negative/Non-Immune < 25 AU/mL	→	Negative/Non-Immune ... < 13.5 AU/mL
Equivocal.....25-30 AU/mL	→	Equivocal..... 13.5-16.5 AU/mL
Positive..... > 30 AU/mL	→	Positive..... > 16.5 AU/mL

It is expected that laboratories tracking their populations will see increased positivity and decreased negativity with the implementation of these new cut-offs.

If you have any questions, please feel free to reach out to us.

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