## **Clinical Laboratory Test Update**

Effective Wednesday, August 8, 2022

## **PHENOBARBITAL**

Phenobarbital critical value will change from ≥40 ug/mL to 50 ug/mL. This change supports UCHealth system standardization and alignment with Children's Hospital Colorado. Note: The therapeutic range for Phenobarbital will remain 10.0 to 40.0 ug/mL

## LACTATE DEHYDROGENASE (LDH)

UCHealth Memorial Hospital Laboratories will convert to a new LDH assay which is now traceable to the IFCC reference method (International Federation of Clinical Chemistry and Laboratory Medicine). This will enable easy comparison to other IFCC LDH methods like that performed at University of Colorado Hospital Laboratory. This will result in an approximate 60% negative bias from previous results on the old LDH assay on the Vitros platform.

Consequently, the new LDH assay has new reference intervals. These updated ranges are in alignment with Children's Hospital Colorado, that also uses the Ortho Vitros platform. See below. All ordering remains the same.

LDH Reference Range Changes					
Previous Reference Ranges			New Reference Ranges		
Age	Male U/L	Female U/L	Age	Male U/L	Female U/L
0-30D:	550-2100	580-2000	0 - 5 days	416 - 957	
1MO-3MO:	480-1220	460-1150	6 days - 3 Y	223 - 409	
4MO-6MO:	400- 1230	480-1150	4 - 6 Years	209 - 401	
7MO-12MO:	380-1200	460-1060	7 - 9 Years	187 - 334	
1Y-3Y:	500-920		10 - 11 Years	192 - 312	169 - 343
4Y-6Y:	470-900		12 - 13 Years	209 - 334	169 - 285
7Y-9Y:	420-750		14 - 15 Years	160 - 325	174 - 258
10Y-11Y:	432-700	380-700	16 - 18 Years	151 - 298	
12Y-13Y:	470-750	380-640	≥ 19 Years	139 - 275	
14Y-15Y:	360-730	390-580			
16Y-19Y:	340-670				
20Y:	313-618				

The following comment will be present on all results for 30 days.

## Comment:

As of Tuesday August 2<sup>nd</sup> all UCHealth Laboratories using the Ortho Vitros platform converted to a new LDH assay which is now traceable to the IFCC reference method. This change results in an approximate 60% negative bias from the old LDH assay. Please note new reference ranges.

For any questions about this test update, please contact: Angelina King, MLS (ASCP), Laboratory Manager, <a href="mailto:Angelina.King@uchealth.org">Angelina.King@uchealth.org</a> Issued: 8/3/2022