

TITLE: XPAND PLUS /Vitros ECiQ - Reference Ranges/ Critical Values

IDENTIFIER: S-LAB-PC-32513

EFFECTIVE: Recorded in Media Lab

APPROVED: MEDICAL DIRECTOR

Acute Care:

ENC: _____ GH: _____

ORIGINAL FORMULATION: 8/2015

LJ: _____ MER: _____

REVISED: 12/2020

Home Health: _____

REVIEWED: see respective review log

SHAS: _____

SMF: _____

SC: _____ SCMC: _____

CSC: _____ SML 12/20

KEYWORDS:

REFERENCE RANGES/CRITICAL VALUES

ANALYTE	REFERENCE RANGE	CRITICAL VALUE	DELTA
AGAP	8 - 16		
Albumin	3.3 - 5.0 g/dL		
Alk Phos	38-126 Units/L		
ALT	Male: 16 - 63 Units/L Female: 13 - 59 Units/L		0, 50
Amylase	30 - 110 Units/L		
AST	15-37 Units/L		0, 50
BHCG	0 - 5 mIU/ml: (Negative)		
	Gestational Age:	Level: (mIU/mL)	
	0.2-1 wk	5-50	
	1-2 wks	50-500	
	2-3 wks	100-5,000	
	3-4 wks	500-10,000	
	4-5 wks	1,000-50,000	
	5-6 wks	10,000-100,000	
	6-8 wks	15,000-200,000	
2-3 mos	10,000-100,000		
Bilirubin Direct	0.0-0.3 mg/dL		
BUN	7 - 21 mg/dL		
Calcium	8.4 - 10.3 mg/dL	≤7.0 or ≥12.0 mg/dL	
CK	Male: 39-308 Units/L Female: 26-192 Units/L		
Chloride	98-107 mmol/L		

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ANALYTE	REFERENCE RANGE	CRITICAL VALUE	DELTA
Creatinine	Male: 0.7–1.3 mg/dL Female: 0.5–1.0 mg/dL	<24 month >1.5 or 50% increase from previous	50% for <24 months
CO ₂	22–32 mmol/L	<10 or > 40 mmol/L	
CRP	<10.0 mg/L		
Glucose [@]	≤ 29 days: 40-90 mg/dL >29 days: 70-125 mg/dL	≤ 28 days: <40 or > 250 mg/dL > 28 days : <50 or > 500mg/dL	
K	3.5 – 5.1 mmol/L	>28 days: ≤2.7 or ≥6.0 mmol/L <28 days: <3.0 or >6.0 mmol/L	0, 0.8
Lactic Acid	0.4-2.0 mmol/L	≥4.0 mmol/L	
LDH	Male: 87-241 Units/L Female: 84-246 Units/L		
Lipase	73 - 393 Units/L		
Mg	1.7 – 2.3 mg/dL	≤1.0 or ≥4.0 mg/dL <28 days: <1.0 or >3.0	1, 1.0
Na	136 – 146 mmol/L	≤28 days: <125 or >150 mmol/L ≥29 days: <120 or >160 mmol/L	1, 10%
NT-proBNP	<75 years old: <125 pg/mL ≥75 years old: >450 pg/mL		
Phosphorus	2.5-4.8 mg/dL	<1.1 mg/dL	
Total Bilirubin	0.1 –1.2 mg/dL Neonatal: <12.0 mg/dL	Neonatal: >15.0 mg/dL	
Total Protein	6.3 – 8.2 g/dL		
Troponin	<0.034	≥0.120ng/mL	
Uric Acid	3.5 – 7.2 mg/dL male 2.6 – 6.0 mg/dL female		
	See attached addendum for pediatric reference ranges		

@Glucose: If the sample status is Fasting or Unknown, the following American Diabetes Association's recommended decision limits will be appended to the result: GLUC1-GLUC2-GLUCF-GLUCI-GLUCD-GLUCDR-GLUC3. Samples that are defined as non-fasting will not have the ADA comment appended.

Policy/Procedure Development		
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Revised By:	Mary Kay Liggins, CLS, MT(ASCP)SC	
Supersedes:	S-LAB-PC- 32513 Revision 05/2020	
Approvals/Reviews		
Committee/Department:	Chair Name /Title:	Date:
Chemistry Technical Committee	Joanne Cunanan – Chair	Recorded in Medialab
Medical Director RB	Beth Palla, MD	Recorded in Medialab
Medical Director JF	Keith Thompson, MD	Recorded in Medialab

Alk Phos	Female	Male
Ages		
0-14 days	82-249	82-249
15 days - <1 yr	122-473	122-473
1-<10 yrs	142-336	142-336
10-<13 yrs	128-420	128-420
13-<15 yrs	55-225	115-471
15-<17 yrs	49-166	81-333
17-<19 yrs	43-86	53-149
5-12yr	0.3-0.6	0.3-0.6
12-15 yrs	0.4-0.8	0.4-0.8
15-19yrs	0.5-0.8	0.6-1.0

Creatinine	Female	Male
Ages		
0-14 days	0.3-0.9	0.3-0.9
15days-2yrs	0.1-0.4	0.1-0.4
2-5 yrs	0.2-0.4	0.2-0.4
5-12yr	0.3-0.6	0.3-0.6
12-15 yrs	0.4-0.8	0.4-0.8
15-19yrs	0.5-0.8	0.6-1.0

BUN	Female	Male
Ages		
0-14 days	3-23	3-23
15 days-1yr	3-17	3-17
1-10yrs	9-22	9-22
10-19yrs	7-19	7-21

LDH	M&F
Ages	
0-14 days	84-1255
15 days -<1yr	84-470
1-<10 yrs	84-337
10-<15 yrs	84-287
15-<19yrs	84-265

ALT	Female	Male
Ages		
0-<1 yr	13-41	16-41
1-<13yrs	13-32	16-32
13-<19 yrs	13-29	16-31
AST	Female	Male
Ages		
0-14 days	15-185	15-185
15 days-<1yr	15-73	15-73
1-<7 yrs	15-46	15-46
7-<12 yrs	15-37	15-37
12-<19 yrs	15-25	15-36

Albumin	Female	Male
Ages		
0-14days	3.0-4.3	3.0-4.3
15days-1yr	2.7-4.8	2.7-4.8
1-8yrs	3.7-4.7	3.7-4.7
8-15yrs	3.9-4.9	3.9-4.9
15-19yrs	3.7-5.1	4.0-5.3

Phosphorus	Female	Male
Ages		
0-14 days	5.3-10.0	5.3-10.0
15days-1yr	4.6-8.0	4.6-8.0
1-5yrs	4.1-6.5	4.1-6.5
5-13yrs	4.0-5.7	4.0-5.7
13-16yrs	3.1-5.3	3.4-5.9
16-19yrs	2.8-4.8	2.8-4.8

Uric Acid	Female	Male
Ages		
0-14days	2.2-11.0	2.2-11.0
15days-1yr	1.2-5.4	1.2-5.4
1-12yrs	1.4-4.1	1.4-4.1
12-19yrs	2.1-5.0	2.1-6.5

Total Protein	M&F
Ages	
0-14 days	5.4-8.6
15days-1yr	4.5-7.3
1-6yrs	6.3-7.8
6-9yrs	6.6-8.0
9-19yrs	6.7-8.4

Calcium	M&F
Ages	
0-1 yr	8.5-10.7
1yr-19yr	9.1-10.3

DBILI	M&F
Ages	
0-14 days	0-0.5
15days-<1yr	0-0.2
1-<9 yrs	0-0.1
9-<13 yrs	0-0.2
13-<19yrs	0-0.2

Lipase	M&F
Ages	
0-<19yrs	73-194