ROTUNDA HOSPITAL DEPARTMENT OF LABORATORY MEDICINE
POCT Active Test Repertoire Table LF-GEN-0076 Ed 02

Please note: Printed reference ranges from the blood gas analysers, and ranges displayed on the screen of the Hb and glucose meters are not configurable to pregnancy/non pregnancy status. Samples processed in ***syringe*** mode on the blood gas analysers will print ***adult non pregnant*** reference ranges. Samples processed in **capillary mode** on the blood gas analysers will print **neonatal reference ranges**.
Correct sample type should be selected e.g. arterial, venous, cord, fetal scalp should be selected to ensure appropriate ranges apply.
Ranges displayed on the glucose and Hb meters are for adult non pregnant patients.
See table below for a more comprehensive list of ranges related to age, pregnancy status and sample type

Results should be interpreted in relation to agreed clinical decision limits. Where a POC result warrants clinical intervention, or where the care giver is not reassured by the result, a sample should be sent to the laboratory for confirmation

TEST	SAMPLE TYPE	SPECIAL PRECAUTIONS	REFERENCE RANGE	Reference	INAB ACCREDI TEST REG NO 208MT
pH	Venous, Arterial, Capillary, Cord vein/artery, fetal scalp Via Syringe, capillary tube, as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling. Capillary tube samples-Ensure no air pockets Fetal Scalp tube-Ensure the er of tube that has touched baby's scalp is not presented to analy	**Adult Whole Blood** Arterial 7.35-7.45 Venous 7.32-7.43 **Cord Blood** Arterial 7.18-7.38 Venous 7.25-7.45 **Fetal Scalp** >/= 7.25 Normal 7.21-7.24 Borderline </= 7.2 Abnormal Result	1 1 2	Yes
pCO2		Ensure no air pockets Syringe Sample-mix well by inverting several times and	**Adult Whole Blood, Arterial** 4.3-6.0 kPa	1	Yes

	Venous, Arterial, Capillary, Cord vein or artery, Fetal scalp. Via Syringe or capillary tube, as appropriate	rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe	**Infant WB Arterial** 3.6-5.5kPa	1	
pO2	Venous, Arterial, Capillary, Cord vein or artery, Fetal scalp. Via Syringe , capillary tube, as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling. Capillary tube samples-Ensure no air pockets Fetal Scalp -Ensure the end of tube that has touched baby's scalp is not presented to analyser.	**2 days-60 years Whole Blood arteria** 11.04-14.4 kPa **Cord Blood** Arterial 0.8-4.1kPa Venous 2.3-5.5kPa	1 1	Yes
Sodium	Venous, Arterial, Capillary. Via syringe or capillary tube, as appropriate.	Ensure no air pockets in sample Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling.	**Pregnant, Li-Hep Plasma** 133-143 mmol/L **Non pregnant, Li-Hep Plasma** 133-146 mmol/L **Infants, Li-Hep Plasma** 133-144 mmol/L	3 4 5	Yes

Potassium	Venous, Arterial, Capillary Via Syringe or capillary tube, as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling. Vacutainer-mix by inverting and rolling several times. Sample via sample adaptor	**Pregnant, Li-Hep Plasma** 3.5-5.3mmol/L **Non Pregnant, Li-Hep Plasma** 3.5-5.3mmol/L **Neonate, Li-hep Plasma** 3.5-5.5mmol/L	3 1 5	Yes
Chloride	Venous, Arterial, Capillary, Via Syringe or capillary tube as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling.	**Pregnant, Li-hep Plasma** 95-108mmol/L **Non-Pregnant** 95-108mmol/L **Neonates, Li-Hep plasma** 98-110mmol/L	3 1 5	Yes
Glucose-Blood Gas Analyser:	Venous, Arterial, Capillary. Via Syringe or capillary tube,as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling.	**Pregnant, non pregnant Fasting, neonates Plasma** 3.0-5.1mmol/L	6	Yes

Glucose Glucose Meter	Wholeblood- Fingerprick/Heel Prick (results are plasma equivalent)	Do not wipe puncture site with alcohol wipe before sampling Use sterile water to clean Sample site	**Pregnant, non pregnant fasting, & neonates Plasma** 3.0-5.1mmol/L	6	Yes
Lactate Lactate Contd..	Venous, Arterial, Capillary, Via Syringe or capillary tube , as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling. Capillary tube samples-Ensure No air pockets	**Adult WB heparin** Venous 0.6-1.4mmol/L Arterial 0.4-0.8mmol/L **At Birth** Umbilical Artery 1.6-5.5 mmol/L Umbilical Vein 1.2-5.0mmol/L **Neonates** <2.9mmol/L	1 7 8	Yes Yes
Ionised Calcium	Venous, Arterial, Capillary Via Syringe or capillary tube as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling. Capillary tube samples-Ensure no air pockets	**Adult. WB (Heparin)** 1.18 -1.32mmol/L **Infants 0-1month** 1.0-1.5mmol/L **Infants 1-6 months** 0.95-1.5mmol/L	9	Yes
Bilirubin	Venous, Arterial, Capillary	Ensure no air pockets Syringe Sample-mix well by			

	Via Syringe or capillary tube as appropriate	inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling. Capillary tube samples- Ensure no air pockets	**Non pregnant, Li-hep Plasma** <21umol/L **Pregnant, Li-hep Plasma** <21umol/L **Neonates, Li-hep Plasma** <17umol/L	10 10 10	Yes
Hb-Blood Gas Analyser	Venous, Arterial, Capillary, Via Syringe or Capillary tube, as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling.	**Pregnant, Whole Blood EDTA** 100-160g/L **Non-Pregnant, whole blood EDTA** 120-160g/L **Infant Whole Blood EDTA** Day 0-2 : 135-195g/L Day 2-4 : 145-255g/L Day 5-8: 135-215g/L Day 9-21: 125-205g/L Day 22-35:110-180g/L Week 6-9 : 90-140g/L Week 10-Month 18: 110-135g/L	11 11 11 11	Yes
Hb-Hemocue Hb meter	Finger Prick/heel Prick	Expel first 2-3 drops from puncture site before sampling.	**Pregnant, EDTA Whole Blood** 100-160g/L	11	Yes

		Wipe cuvette with tissue before sampling-ensure no blood is drawn out of cuvette. Ensure cuvette is completely Filled and free from air bubbles	**Non-Pregnant, EDTA Whole Blood** 120-160g/L **Infant EDTA Whole Blood** Day 0-2 : 135-195g/L Day 2-4 : 145-255g/L Day 5-8: 135-215g/L Day 9-21: 125-205g/L Day 22-35:110-180g/L Week 6-9 : 90-140g/L Week 10-Month 18: 110-135g/L	11 11	
MethHb	Venous, Arterial. Capillary. Via Syringe or capillary tube as appropriate	Ensure no air pockets Syringe Sample-mix well by inverting several times and rolling between palms. Expel first drop of blood onto tissue. Ensure blood is at top of syringe before sampling.	**Pregnant, Non Pregnant, Infant, Whole Blood** *0.0-1.5%	1	Yes
Covid POC Abbott ID Now	Nasal Swab	Inset swab until you meet resistance. Touch swab off nasal wall and rotate several times, repeat with same swab on both nostrils	**N/A**		No
Pregnancy testing-urine	Urine	First morning urine recommended as is contains highest conc. of hcg. Not less than 1ml of sample.	**N/A** Sensitivity of 25mIU/ml	12	No

References

1. Teitz Textbook of Clinical Chemistry and Molecular Diagnostics 5th Ed. 2012
2. Rotunda Hospital Guidelines on Intrapartum Fetal Surveillance PPGC-OBC-21 ; Nice 2007
3. In House data, Rotunda Hospital. Biochemistry central lab reference ranges REF-LP-GEN-0007
4. Pathology Harmonisation UK2011. Biochemistry central lab reference ranges REF-LP-GEN-0007
5. In house data from Temple St Children's Hospital and OLHSC, Crumlin. Biochemistry central lab reference ranges REF-LP-GEN-0007
6. HSE Guidelines 2007. Biochemistry central lab reference ranges REF-LP-GEN-0007.
7. Olesen H. Kompendium 2000 - Kompendium i laboratoriemedicin. http://www.dskb.dk/default.asp?id=327 as accessed 21-02-2014.
8. Heil W, Koberstein R, Zawata B. Reference ranges for adults and children; preanalytical considerations. Wuppertal: Roche Diagnostics GmbH, 2001.
9. Soldin SJ, Wong EC, Brugnara C et al. Pediatric reference intervals. 7th ed. Washington DC: AACC Press, 2011.
10. Biochemistry central lab reference ranges REF-LP-GEN-0007
11. Sourced Internally-refer to Haematology Laboratory Reference ranges for source
12. SureScreen Diagnostics Kit Insert