

Test	Gender	Age	Ref Interval	Units
AFP	All	All	< 15	ug/L
Albumin	All	<3M	25 - 40	g/L
Albumin	All	3-12M	32 - 45	g/L
Albumin	All	1-70Y	34 - 48	g/L
Albumin	All	>70Y	32 - 46	g/L
Alk Phos	All	0-9Y	80 - 350	U/L
Alk Phos	M	10-13Y	45 - 400	U/L
Alk Phos	F	10-13Y	45 - 300	U/L
Alk Phos	M	14-18Y	45 - 200	U/L
Alk Phos	F	14-18Y	45 - 250	U/L
Alk Phos	M	19-49Y	40 - 110	U/L
Alk Phos	F	19-49Y	40 - 100	U/L
Alk Phos	All	50-59Y	40 - 120	U/L
Alk Phos	All	>59Y	40 - 130	U/L
ALT	All	<1M	10-80	U/L
ALT	All	1-5M	10-70	U/L
ALT	All	6-<12M	10-60	U/L
ALT	All	1-2Y	10-50	U/L
ALT	M	3-20Y	< 40	U/L
ALT	F	3-20Y	< 35	U/L
ALT	M	>20	< 50	U/L
ALT	F	>20	< 40	U/L
Amylase	All	All	< 100	U/L
Amylase (Ur)	All	All	0 – 500	U/d
ASO	All	< 12 Y	< 75	IU/mL
ASO	All	> 12 Y	< 200	IU/mL
AST	M	All	< 40	U/L
AST	F	All	< 35	U/L
B12	All	All	140 - 650	pmol/L
B-HCG	F	Non-pregnant	< 5	IU/L
B-HCG	F	0.5-<1W (GA)	5-50	IU/L
B-HCG	F	1-2W (GA)	50 - 500	IU/L
B-HCG	F	3-5W (GA)	500 – 50000	IU/L
B-HCG	F	6-8W (GA)	10000 – 200000	IU/L
B-HCG	F	2-3M (GA)	10000 - 100000	IU/L
Bicarbonate	All	All	21 - 28	mmol/L
Bilirubin Direct	All	All	< 5	umol/L
Bilirubin Total	All	<1D	< 150	umol/L
Bilirubin Total	All	1-2D	< 200	umol/L
Bilirubin Total	All	3D	< 250	umol/L
Bilirubin Total	All	4-6D	< 300	umol/L
Bilirubin Total	All	7-21D	< 100	umol/L
Bilirubin Total	All	3-<4W	< 50	umol/L
Bilirubin Total	All	4W-16Y	< 25	umol/L
Bilirubin Total	All	>16Y	< 20	umol/L

Test	Gender	Age	Ref Interval	Units
BNP	NC	All	0-100	pmol/L
CA 125	All	All	< 37	kU/L
CA 15.3	All	All	< 37	kU/L
CA 19.9	All	All	< 37	kU/L
Calcium (adj)	All	All	2.10 - 2.55	mmol/L
Calcium	All	1 – 7D	1.7 – 2.7	mmol/L
Calcium	All	8D to 1Y	2.1 – 2.9	mmol/L
Calcium (Ur)	All	All	2.5 - 7.5	mmol/d
Carbamazepine	All	All	17 - 51	umol/L
CEA	All	Non-Smoker	0 - 3	ng/mL
CEA	All	Smoker	0 - 5	ng/mL
Chloride	All	All	98 – 110	mmol/L
Chol/HDL ratio	All	All	< 4.5	
Cholesterol	No reference intervals given			mmol/L
Cholinesterase	All	All	5300 - 12900	U/L
CK	All	All	<220	U/L
Cortisol	All	am	200 - 700	nmol/L
Cortisol	All	pm	N/A	nmol/L
Creatinine	All	0-7D	<95	umol/L
Creatinine	All	1-<4W	<50	umol/L
Creatinine	All	4W-<2Y	<40	umol/L
Creatinine	All	2-5Y	<50	umol/L
Creatinine	All	6-11Y	<65	umol/L
Creatinine	All	12-15Y	<80	umol/L
Creatinine	M	>15Y	60 - 105	umol/L
Creatinine	F	>15Y	45 – 90	umol/L
Creatinine (Ur)	All	All	7-18	mmol/d
CRP	All	All	0 - 8	mg/L
Digoxin	All	All	0.6 - 2.0	nmol/L
Ethanol	All	All	N/A	mmol/l
Ferritin	All	<4M	15 - 400	ug/L
Ferritin	All	4-12M	15 – 80	ug/L
Ferritin	All	1-19Y	15 – 150	ug/L
Ferritin	M	20-29Y	20 - 320	ug/L
Ferritin	F	20-29Y	20 - 170	ug/L
Ferritin	M	30-40Y	20 - 400	ug/L
Ferritin	F	30-40Y	20 - 190	ug/L
Ferritin	M	>40Y	20 - 450	ug/L
Ferritin	F	>40Y	20 - 380	ug/L
Folate	All	All	7-45	nmol/L
Folate (Red cell)	All	All	317 – 1894	nmol/L
Fructosamine	All	All	200 – 300	umol/L
FSH	F	Foll. / Luteal	2-12	U/L
FSH	F	Mid-cycle	6-25	U/L
FSH	F	Post Menop'	30 - 120	U/L

Test	Gender	Age	Ref Interval	Units
FSH	M	All	2-10	U/L
FT3	All	0-10Y	3.0 - 10.0	pmol/L
FT3	All	>10Y	3.6 - 6.5	pmol/L
FT4	All	4-7D	12 – 27	pmol/L
FT4	All	1-4W	11-22	pmol/L
FT4	All	1M-1Y	10-20	pmol/L
FT4	All	>1Y	7-16	pmol/L
Gentamicin	All	All	N/A	mg/L
GGT	M	All	0 - 60	U/L
GGT	F	All	0 - 50	U/L
Globulins	All	All	25 – 35	g/L
Glucose	All	Fasting	3.5 - 5.4	mmol/L
Glucose	All	Random	3.0 - 7.8	mmol/L
HDLC	No reference intervals stated			mmol/L
IgA	All	<1Y	<0.4	g/L
IgA	All	1-2Y	<1.1	g/L
IgA	All	3-5Y	<1.7	g/L
IgA	All	6-13Y	0.3 - 2.4	g/L
IgA	All	14-18Y	0.4 - 3.1	g/L
IgA	All	19-70Y	0.8 - 4.0	g/L
IgA	All	>70Y	0.8 - 4.0	g/L
IgG	All	<2W	3.0 - 13.7	g/L
IgG	All	2-<6W	1.2 - 6.0	g/L
IgG	All	6W-<6M	1.2 - 7.0	g/L
IgG	All	6-12M	3.0 - 10.5	g/L
IgG	All	1-3Y	3.0 - 11.2	g/L
IgG	All	4-9Y	5.0 - 13.3	g/L
IgG	All	10-18Y	6.0 - 15.0	g/L
IgG	All	19-70Y	7.0 - 16.0	g/L
IgG	All	>70Y	6.0 - 15.0	g/L
IgM	All	<2W	<0.5	g/L
IgM	All	2-12W	0.1 - 0.7	g/L
IgM	All	13W-<1Y	0.1 - 0.9	g/L
IgM	All	1-18Y	0.4 - 1.8	g/L
IgM	All	19-70Y	0.4 - 2.5	g/L
IgM	All	>70Y	0.4 - 2.4	g/L
Iron	All	< 2 M	10 – 31	umol/L
Iron	All	2M - <1Y	4-27	umol/L
Iron	All	1 - 2Y	5 – 23	umol/L
Iron	All	3 - 9Y	6 – 25	umol/L
Iron	All	10 - 18Y	8-32	umol/L
Iron	All	>18Y	10-30	umol/L
Iron Saturation	All	All	20 - 50	%
LDH	M	All	120 - 250	U/L
LDH	F	All	120 - 230	U/L

Test	Gender	Age	Ref Interval	Units
LDLC	All	All	< 3.4	mmol/L
LH	F	Foll. / Luteal	1-18	U/L
LH	F	Mid-cycle	15 - 80	U/L
LH	F	Post Menop'	7-60	U/L
LH	M	All	1-10	U/L
Lithium	All	All	0.5 - 1.0	mmol/L
Magnesium	All	All	0.7 - 1.0	mmol/L
Magnesium (Ur)	All	NC		mmol/d
Microalb / Creat ratio	All	0 - 2.5		mg/mmol
Microalbumin	All	All	< 20	mg/L
Oestradiol	F	Follicular	< 921	pmol/L
Oestradiol	F	Pre-ovulation	< 2511	pmol/L
Oestradiol	F	Luteal	< 1207	pmol/L
Oestradiol	F	Post Menop'	< 200	pmol/L
Oestradiol	F	OC	< 200	pmol/L
Oestradiol	F	Pregnancy	up to 99000	pmol/L
Oestradiol	M	All	< 200	pmol/L
Osmolality	All	All	280 - 300	mOsm/Kg
Osmolality (Ur)	All	All	50 - 1200	mOsm/Kg
Paracetamol	All	Consult Nomogram		umol/L
Phenytoin	All	All	40 - 80	umol/L
Phosphate	All	< 1Y	1.00 - 2.50	mmol/L
Phosphate	All	1 - 6Y	1.00 - 2.00	mmol/L
Phosphate	All	7 - 11Y	1.00 - 1.85	mmol/L
Phosphate	All	12 - 16Y	0.90 - 1.80	mmol/L
Phosphate	All	>16Y	0.70 - 1.50	mmol/L
Phosphate (Ur)	All	All	NC	mmol/d
Potassium	All	All	3.5 - 5.2	mmol/L
Potassium (Ur)	All	All	25 - 100	mmol/d
Pr/Cr Ratio (Ur)	All		NC	
Progesterone	F	Foll. / Luteal	0 - 5	nmol/L
Progesterone	F	Mid-cycle	10-90	nmol/L
Progesterone	F	Post Menop'	0 - 3	nmol/L
Progesterone	F	OC	0 - 1	nmol/L
Progesterone	F	Ovul unlikely	0 - 6	nmol/L
Progesterone	F	Ovul possible	7-25	nmol/L
Progesterone	F	Ovul likely	> 25	nmol/L
Progesterone	M	All	0 - 2	nmol/L
Prolactin	F	All	60 - 620	mU/L
Prolactin	M	All	45 - 375	mU/L
Protein (Ur)	All	All	< 0.15	g/L
Protein CSF	All	0-1M	0.40 - 1.20	g/L
Protein CSF	All	>1M	0.15 - 0.45	g/L
PSA	M	<40	0 - 2	ug/L

Test	Gender	Age	Ref Interval	Units
PSA	M	40-49	0 - 2.5	ug/L
PSA	M	50 – 59	0 - 3.5	ug/L
PSA	M	60 – 69	0 - 4.0	ug/L
PSA	M	70-80	0 - 6.5	ug/L
PSA	M	>80	0 - 7.0	ug/L
RF	All	All	< 20	IU/mL
Salicylate	All	All	N/A	mmol/L
Sodium	All	All	135 - 145	mmol/L
Sodium (Ur)	All	All	50 - 220	mmol/d
Testosterone	F	All	0 - 3	nmol/L
Testosterone	M	All	9 – 30	nmol/L
Theophylline	All	All	55 - 110	umol/L
Total Protein	All	0-5M	40 - 65	g/L
Total Protein	All	6M-<1Y	46 - 68	g/L
Total Protein	All	1-2Y	51 - 70	g/L
Total Protein	All	>2Y	60 - 80	g/L
Transferrin	All	All	2.00 - 3.60	g/L
Triglyceride	No reference intervals given			mmol/L
High Sensitivity Troponin-I	F	All	< 10	ng/L
High Sensitivity Troponin-I	M	All	< 20	ng/L
TSH	All	All	0.3 - 5.0	mIU/L
Urea	All	<1M	1.0 - 4.0	mmol/L
Urea	All	1M-<1Y	1.4 - 5.4	mmol/L
Urea	All	1-4Y	1.8 - 5.4	mmol/L
Urea	All	>4Y	2.9 - 7.7	mmol/L
Urea (Ur)	All	All	NC	mmol/d
Uric Acid	All	<1Y	0.08 – 0.37	mmol/L
Uric Acid	All	1-4Y	0.10 – 0.30	mmol/L
Uric Acid	M	5-10Y	0.13 – 0.33	mmol/L
Uric Acid	M	>10Y	0.23 – 0.42	mmol/L
Uric Acid	F	5-13Y	0.13 – 0.33	mmol/L
Uric Acid	F	>13Y	0.16 - 0.42	mmol/L
Uric Acid (Ur)	All	All	NC	mmol/d
Valproate	All	All	345 – 690	umol/L
Vancoymycin	All	All	N/A	mg/L

HbA1c diagnostic and monitoring comments

HbA1c \geq 50 mmol/mol is diagnostic of diabetes in symptomatic patients

HbA1c \geq 50 mmol/mol needs to be confirmed on a separate occasion, preferably by another HbA1c if asymptomatic

HbA1c of 41 – 49 mmol/mol = pre-diabetes/dysglycaemia/borderline diabetes

HbA1c \leq 40 mmol/mol excludes diabetes