

Test	Gender	Age	Ref Interval	Units
AFP	All	All	< 15	ug/L
Albumin	All	< 3 M	25 – 40	g/L
Albumin	All	3 – 12 M	32 – 45	g/L
Albumin	All	1 – 70 Y	34 – 48	g/L
Albumin	All	> 70 Y	32 – 46	g/L
Alk Phos	All	0 – 9 Y	80 – 350	U/L
Alk Phos	F	10 – 13 Y	45 – 300	U/L
Alk Phos	F	14 – 18 Y	45 – 250	U/L
Alk Phos	F	19 – 49 Y	40 – 100	U/L
Alk Phos	M	10 – 13 Y	45 – 400	U/L
Alk Phos	M	14 – 18 Y	45 – 200	U/L
Alk Phos	M	19 – 49 Y	40 – 110	U/L
Alk Phos	All	50 – 59 Y	40 – 120	U/L
Alk Phos	All	> 59 Y	40 – 130	U/L
ALT	All	All	< 55	U/L
Ammonia	All	All	11 – 35	µmol/L
Amylase	All	All	< 100	U/L
Amylase (Ur)	All	All	0 – 500	U/d
AST	All	0 – 2 Y	0 – 90	U/L
AST	All	2 – 10 Y	0 – 70	U/L
AST	All	> 10 Y	0 – 50	U/L
B12	All	All	110 – 650	pmol/L
B-HCG	F	Non-pregnant	< 5	IU/L
B-HCG	F	0.5 – < 1 W (GA)	5 – 50	IU/L
B-HCG	F	1 – 2 W (GA)	50 – 500	IU/L
B-HCG	F	3 – 5 W (GA)	500 – 50,000	IU/L
B-HCG	F	6 – 8 W (GA)	10,000 – 200,000	IU/L
B-HCG	F	2 – 3 M (GA)	10,000 – 100,000	IU/L
Bicarbonate	All	All	21 - 28	mmol/L
Bilirubin Direct	All	All	< 5	µmol/L
Bilirubin Total	All	< 1 D	< 150	µmol/L
Bilirubin Total	All	1 – 2 D	< 200	µmol/L
Bilirubin Total	All	3 D	< 250	µmol/L
Bilirubin Total	All	4 – 6 D	< 300	µmol/L
Bilirubin Total	All	7 – 21 D	< 100	µmol/L
Bilirubin Total	All	3 – < 4 W	< 50	µmol/L
Bilirubin Total	All	4 W – 16 Y	< 25	µmol/L
Bilirubin Total	All	> 16 Y	< 20	µmol/L
BNP	All	All	0 – 100	ng/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 (Ur)	All	All	2.5 – 7.5	mmol/d
Carbamazepine	All	All	17 – 51	µmol/L

Test	Gender	Age	Ref Interval	Units
CEA	All	Non-smoker	0 – 3	ng/mL
CEA	All	Smoker	0 – 5	ng/mL
Chloride	All	All	98 – 110	mmol/L
Cholesterol/HDL ratio	All	All	< 4.5	
Cholesterol	No reference intervals given.			mmol/L
Cholinesterase	All	All	5,300 – 12,900	U/L
CK	All	All	< 220	U/L
Cortisol	All	AM	170 – 500	nmol/L
Cortisol	All	PM	N/A	nmol/L
Creatinine	All	0 – 7 D	< 95	µmol/L
Creatinine	All	1 – < 4 W	< 50	µmol/L
Creatinine	All	4 W – < 2 Y	< 40	µmol/L
Creatinine	All	2 – 5 Y	< 50	µmol/L
Creatinine	All	6 – 11 Y	< 65	µmol/L
Creatinine	All	12 – 15 Y	< 80	µmol/L
Creatinine	M	> 15 Y	60 – 105	µmol/L
Creatinine	F	> 15 Y	45 – 90	µmol/L
Creatinine (Ur)	All	All	7 – 18	mmol/d
CRP	All	All	0 – 8	mg/L
DHEAS	M	0 – 21 Y	0.65 – 14.50	µmol/L
DHEAS	M	21 – 30 Y	2.30 – 18.60	µmol/L
DHEAS	M	31 – 40 Y	2.90 – 12.50	µmol/L
DHEAS	M	41 – 50 Y	1.90 – 13.30	µmol/L
DHEAS	M	51 – 60 Y	1.00 – 8.50	µmol/L
DHEAS	M	61 – 70 Y	0.65 – 6.60	µmol/L
DHEAS	M	71 – 120 Y	0.14 – 6.80	µmol/L
DHEAS	F	0 – 21 Y	1.38 – 8.70	µmol/L
DHEAS	F	21 – 30 Y	0.49 – 10.60	µmol/L
DHEAS	F	31 – 40 Y	0.62 – 7.20	µmol/L
DHEAS	F	41 – 50 Y	0.51 – 6.20	µmol/L
DHEAS	F	51 – 60 Y	0.22 – 5.10	µmol/L
DHEAS	F	61 – 70 Y	0.32 – 3.60	µmol/L
DHEAS	F	71 – 120 Y	0.19 – 5.80	µmol/L
Digoxin	All	All	0.6 – 2.0	nmol/L
Ethanol	All	All	N/A	mmol/l
eGFR	All	< 18 Y	N/A	mL/min
eGFR	All	> 18 Y	> 60	mL/min
Ferritin	All	< 4 M	15 – 400	µg/L
Ferritin	All	4 – 12 M	15 – 80	µg/L
Ferritin	All	1 – 19 Y	15 – 150	µg/L
Ferritin	M	20 – 29 Y	20 – 320	µg/L
Ferritin	F	20 – 29 Y	20 – 170	µg/L
Ferritin	M	30 – 40 Y	20 – 400	µg/L
Ferritin	F	30 – 40 Y	20 – 190	µg/L
Ferritin	M	> 40 Y	20 – 450	µg/L

Test	Gender	Age	Ref Interval	Units
Ferritin	F	> 40 Y	20 – 380	µg/L
Folate	All	All	7 – 45	nmol/L
Fructosamine	All	All	200 – 300	µmol/L
Free Kappa	All	All	3.3 – 19.4	mg/L
Free Lambda	All	All	5.7 – 26.3	mg/L
Kappa:Lambda Ratio	All	All	0.26 – 1.65	
FSH	M	0 – 1 y	< 4	U/L
FSH	M	1 – < 9 y	< 2.4	U/L
FSH	M	9 – < 12 y	0.6 – 5	U/L
FSH	M	≥ 12 Y	1.3 – 7	U/L
FSH	M	Post-pubertal	2 – 9	U/L
FSH	M	≥ 16 Y post-pubertal	2 – 9	U/L
FSH	F	0 – 1 Y	< 16	U/L
FSH	F	1 – < 9 Y	0.6 – 6.4	U/L
FSH	F	9 – < 12 Y	0.9 – 7.8	U/L
FSH	F	12 – < 16 Y	0.6 – 10	U/L
FSH	F	≥ 16 Y post-menarche:		U/L
FSH	F	Follicular	3 – 10	U/L
FSH	F	Mid-cycle	4 – 25	U/L
FSH	F	Luteal	2 – 8	U/L
FSH	F	Post-menopausal	> 20	U/L
FSH	F	Pregnant	< 1	U/L
FT3	All	0 – 10 Y	3.0 – 10.0	pmol/L
FT3	All	> 10 Y	3.6 – 6.5	pmol/L
FT4	All	4 – 7 D	12 – 27	pmol/L
FT4	All	1 – 4 W	11 – 22	pmol/L
FT4	All	1 M – 1 Y	10 – 20	pmol/L
FT4	All	> 1 Y	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
HbA1c	All	Random	0 – 40	mmol/mol
HDL Cholesterol	No reference intervals given.			mol/L
IgA	All	< 1 Y	< 0.4	g/L
IgA	All	1 – 2 Y	< 1.1	g/L
IgA	All	3 – 5 Y	< 1.7	g/L
IgA	All	6 – 13 Y	0.3 – 2.4	g/L
IgA	All	14 – 18 Y	0.4 – 3.1	g/L
IgA	All	19 – 70 Y	0.8 – 4.0	g/L
IgA	All	> 70 Y	0.8 – 4.0	g/L
IgE	All	All	0 – 100	kU/L
IgG	All	< 2 W	3.0 – 13.7	g/L

Test	Gender	Age	Ref Interval	Units
IgG	All	2 – < 6 W	1.2 – 6.0	g/L
IgG	All	6 W – < 6 M	1.2 – 7.0	g/L
IgG	All	6 – 12 M	3.0 – 10.5	g/L
IgG	All	1 – 3 Y	3.0 – 11.2	g/L
IgG	All	4 – 9 Y	5.0 – 13.3	g/L
IgG	All	10 – 18 Y	6.0 – 15.0	g/L
IgG	All	19 – 70 Y	7.0 – 16.0	g/L
IgG	All	> 70 Y	6.0 – 15.0	g/L
IgM	All	< 2 W	< 0.5	g/L
IgM	All	2 – 12 W	0.1 – 0.7	g/L
IgM	All	13 W – < 1 Y	0.1 – 0.9	g/L
IgM	All	1 – 18 Y	0.4 – 1.8	g/L
IgM	All	19 – 70 Y	0.4 – 2.5	g/L
IgM	All	> 70 Y	0.4 – 2.4	g/L
Iron	All	< 2 M	10 – 31	µmol/L
Iron	All	2 M – < 1 Y	4 – 27	µmol/L
Iron	All	1 – 2 Y	5 – 23	µmol/L
Iron	All	3 – 9 Y	6 – 25	µmol/L
Iron	All	10 – 18 Y	8 – 32	µmol/L
Iron	All	> 18 Y	10 – 30	µmol/L
Iron Saturation	All	All	20 – 50	%
LDH	M	All	120 – 250	U/L
LDH	F	All	120 – 230	U/L
LDL Cholesterol	All	All	< 3.4	mmol/L
LH	M	0 – 1 Y	Not given	U/L
LH	M	1 – 16 Y post-pubertal	2 – 9	U/L
LH	M	> 16 Y	2 – 9	U/L
LH	F	0 – 1 Y	Not given	U/L
LH	F	1 – 16 Y post-menarche:		
LH	F	Follicular	2 – 8	U/L
LH	F	Mid-cycle	10 – 75	U/L
LH	F	Luteal	2 – 8	U/L
LH	F	Post-menopausal	> 15	U/L
LH	F	Pregnant	< 1	U/L
LH	F	≥ 16:		
LH	F	Follicular	2 – 8	U/L
LH	F	Mid-cycle	10 – 75	U/L
LH	F	Luteal	2 – 8	U/L
LH	F	Post-menopausal	> 15	U/L
LH	F	Pregnant	< 1	U/L
Lipase	All	All	10 – 70	U/L
Lithium	All	All	0.5 – 1.0	mmol/L
Magnesium	All	All	0.7 – 1.0	mmol/L
Magnesium (Ur)	All	NC	2.5 – 8.0	mmol/d
Microalb/Creat ratio (ACR) Ur	All	All	0 – 2.5	mg/mmol

Test	Gender	Age	Ref Interval	Units
Microalbumin (Ur)	All	All	< 20	mg/L
Oestradiol	F	Follicular	< 921	pmol/L
Oestradiol	F	Pre-ovulation	< 2,511	pmol/L
Oestradiol	F	Luteal	< 1,207	pmol/L
Oestradiol	F	Post-menopausal	< 200	pmol/L
Oestradiol	F	OC	< 200	pmol/L
Oestradiol	F	Pregnancy	up to 99,000	pmol/L
Oestradiol	M	All	< 200	pmol/L
Osmolality	All	All	280 – 300	mOsm/Kg
Osmolality (Ur)	All	All	50 – 1,200	mOsm/Kg
Paracetamol	All	Consult Nomogram		µmol/L
Phenytoin	All	All	40 – 80	µmol/L
Phosphate	All	< 1 Y	1.00 – 2.50	mmol/L
Phosphate	All	1 – 6 Y	1.00 – 2.00	mmol/L
Phosphate	All	7 – 11 Y	1.00 – 1.85	mmol/L
Phosphate	All	12 – 16 Y	0.90 – 1.80	mmol/L
Phosphate	All	> 16 Y	0.70 – 1.50	mmol/L
Phosphate (Ur)	All	All	10 – 40	mmol/d
Potassium	All	All	3.5 – 5.2	mmol/L
Potassium (Ur)	All	All	25 – 100	mmol/d
Pr/Cr Ratio (PCR) (Ur)	All	All	0 – 10.9	mg/mmol
Progesterone	F	Follicular/Luteal	0 – 5	nmol/L
Progesterone	F	Mid-cycle	10 – 90	nmol/L
Progesterone	F	Post-menopausal	0 – 3	nmol/L
Progesterone	F	Oral Contraceptive	0 – 1	nmol/L
Progesterone	F	Ovulation unlikely	0 – 6	nmol/L
Progesterone	F	Ovulation possible	7 – 25	nmol/L
Progesterone	F	Ovulation 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 – 1 M	0.40 – 1.20	g/L
Protein CSF	All	> 1 M	0.15 – 0.45	g/L
PSA	M	< 40	0 – 2	µg/L
PSA	M	40 – 49	0 – 2.5	µg/L
PSA	M	50 – 59	0 – 3.5	µg/L
PSA	M	60 – 69	0 – 4.0	µg/L
PSA	M	70 – 80	0 – 6.5	µg/L
PSA	M	> 80	0 – 7.0	µg/L
RF	All	All	< 25	IU/mL
Salicylate	All	All	N/A	mmol/L
SHBG	M	All	13.3 – 89.5	nmol/L
SHBG	F	0 – 46 Y	18.2 – 135.5	nmol/L
SHBG	F	47 – 120 Y	16.8 – 125.2	nmol/L

Test	Gender	Age	Ref Interval	Units
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	µmol/L
Total Protein	All	0 – 5 M	40 – 65	g/L
Total Protein	All	6 M – < 1 Y	46 – 68	g/L
Total Protein	All	1 – 2 Y	51 – 70	g/L
Total Protein	All	> 2 Y	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	mU/L
Urea	All	< 1 M	1.0 – 4.0	mmol/L
Urea	All	1 M – < 1 Y	1.4 – 5.4	mmol/L
Urea	All	1 – 4 Y	1.8 – 5.4	mmol/L
Urea	All	> 4 Y	2.9 – 7.7	mmol/L
Urea (Ur)	All	All	420 – 720	mmol/d
Uric Acid	All	< 1 Y	0.08 – 0.37	mmol/L
Uric Acid	All	1 – 4 Y	0.10 – 0.30	mmol/L
Uric Acid	M	5 – 10 Y	0.13 – 0.33	mmol/L
Uric Acid	M	> 10 Y	0.23 – 0.42	mmol/L
Uric Acid	F	5 – 13 Y	0.13 – 0.33	mmol/L
Uric Acid	F	> 13 Y	0.16 – 0.42	mmol/L
Uric Acid (Ur)	All	< 6 M	< 1.5	mol/mol crea
Uric Acid (Ur)	All	Adult	0.6	mol/mol crea
Uric Acid (Ur)	M	Adult	1.6 – 5.6	mmol/d
Uric Acid (Ur)	F	Adult	2.2 – 6.6	mmol/d
Valproate	All	All	345 – 690	µmol/L
Vancomycin	All	All	Nil	mg/L

Microbiology Urinalysis Reference Intervals

Urine Specific Gravity	All	All	Nil	Nil
Urine pH	All	All	5.0 – 9.0	
Urine Glucose	All	All	Nil	+ / ++ / +++
Urine Creatinine Clearance	All	All	Nil	
Urine Blood/HGB	All	> 18 Y	0 – Trace	+ / ++ / +++