

Test	Name	Synopsis	Units	Type	Sex M/F/Both	Patient Age	Previous Ref. Range	New Ref. Range	Reference Source
ALT	Alanine Aminotransferase	No Change	u/L	Blood	F		0-36	-	Local/Historical
ALT	Alanine Aminotransferase	No Change	u/L	Blood	M		0-40	-	Local/Historical
ALB	Albumin	Amended	g/L	Blood	B	<1 yr	30-45	Previous range now replaced with age related values below	Path Harmony
ALB	Albumin	Amended	g/L	Blood	B	0-4 d		28-44	Path Harmony
ALB	Albumin	Amended	g/L	Blood	B	4d-14 yr		38-54	Path Harmony
ALB	Albumin	Amended	g/L	Blood	B	14-18 yr		32-45	Path Harmony
ALB	Albumin	Amended	g/L	Blood	B	>18 yr	35-50	35-52	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	<1 yr	100-460	Previous range now replaced with age related values below	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	< 4 w	-	70-380	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	4 w -1 yr	-	60 -425	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	1-13 yr	70-300	60-425	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	13-16 yr	50-160	60-425	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	16-18 yr	50-120	30-130	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	18-55 yr	0-110	30-130	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	55-72 yr	0-140	30-130	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	F	>72 yr	0-146	30-130	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	<1 yr	80-460	Previous range now replaced with age related values below	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	< 4 w	80-460	70-380	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	4 w -1 yr	-	60 -425	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	1-13 yr	50-300	60-425	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	13-16 yr	50-390	60-425	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	16-18 yr	60-170	30-130	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	18-55 yr	0-120	30-130	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	55-72 yr	0-140	30-130	Path Harmony
ALKP	Alkaline Phosphatase	Amended	u/L	Blood	M	>72 yr	0-160	30-130	Path Harmony
AMM	Ammonia	No Change	umol/L	Blood	B	<4 wk	0-100	-	MetBio.Net
AMM	Ammonia	No Change	umol/L	Blood	B	4 wk-16yr	0-50	-	MetBio.Net
AMM	Ammonia	No Change	umol/L	Blood	B	adult	11.0-28.0	-	MetBio.Net
AMY	Amylase	Amended	u/L	Blood	B		0-110	0-100	Path Harmony
AST	Aspartate Aminotransferase	Amended	u/L	Blood	B		15-45	Previous range now replaced with age related values below	Local/Historical
AST	Aspartate Aminotransferase	Amended	u/L	Blood	F			0-32	Thefeld et al. Referenzwerte für die Bestimmungen der Transaminasen GOT und GPT sowie der alkalischen Phosphatase im Serum mit optimierten Standardmethoden. Dtsch Med Eschr 1974; 99:343-351
AST	Aspartate Aminotransferase	Amended	u/L	Blood	M			0-40	Thefeld et al. Referenzwerte für die Bestimmungen der Transaminasen GOT und GPT sowie der alkalischen Phosphatase im Serum mit optimierten Standardmethoden. Dtsch Med Eschr 1974; 99:343-351

Test	Name	Synopsis	Units	Type	Sex M/F/Both	Patient Age	Previous Ref. Range	New Ref. Range	Reference Source
HCO3	Bicarbonate	Amended	mmol/L	Blood	B	<16 yr	-	19-28	Path Harmony
HCO3	Bicarbonate	No Change	mmol/L	Blood	B	>16 yr	22-29	-	Path Harmony
CA	Calcium	No Change	mmol/L	Blood	B	<29 d	2.0-2.7	-	Path Harmony
CA	Calcium	No Change	mmol/L	Blood	B	4 wk - 16 yr	2.2-2.7	-	Path Harmony
CA	Calcium	No Change	mmol/L	Blood	B	> 16 yr	2.15-2.65	-	Local/Historical
CL	Chloride	No Change	mmol/L	Blood	B		95-108	-	Path Harmony
CRP	C-Reactive Protein	Amended	mg/L	Blood	B		0-8	0-5	Roche Kit insert
CK	Creatine Kinase	No Change	u/L	Blood	F		25-200	-	Path Harmony
CK	Creatine Kinase	No Change	u/L	Blood	M		40-320	-	Path Harmony
CREA	Creatinine	Amended	umol/L	Blood	F	0-2 mo	21-75	27-77	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	2 mo- 1yr	15-37	14-34	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	1-3 yr	21-36	15-31	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	3-5 yr	27-42	23-37	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	5-7 yr	28-52	25-42	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	7-9 yr	35-53	30-47	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	9-11 yr	34-65	29-56	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	11-13 yr	46-70	39-60	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	13-15 yr	50-77	40-68	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	F	15 yr +	52-88	45-84	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	0-2mo	21-75	27-77	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	2 mo- 1yr	15-37	14-34	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	1-3 yr	21-36	15-31	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	3-5 yr	27-42	23-37	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	5-7 yr	28-52	25-42	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	7-9 yr	35-53	30-47	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	9-11 yr	34-65	29-56	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	11-13 yr	46-70	39-60	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	13-15 yr	50-77	40-68	Roche Kit insert
CREA	Creatinine	Amended	umol/L	Blood	M	15 yr +	70-110	59-104	Roche Kit insert
CLAC	CSF Lactate	Amended	mmol/L	CSF	B	neonate	1.2-2.1	1.1-6.7	Roche Kit insert
CLAC	CSF Lactate	Amended	mmol/L	CSF	B	3-10 d	1.2-2.1	1.1-4.4	Roche Kit insert
CLAC	CSF Lactate	Amended	mmol/L	CSF	B	>10 d	1.2-2.1	1.1-2.8	Roche Kit insert
CLAC	CSF Lactate	Amended	mmol/L	CSF	B	adult	1.2-2.1	1.1-2.4	Roche Kit insert
CTP	CSF Total Protein	Amended	g/L	CSF	F		0.0-0.5	Previous sex related range now replaced with range for 'Both'	Beckman
CTP	CSF Total Protein	Amended	g/L	CSF	M		0.0-0.6	Previous sex related range now replaced with range for 'Both'	Beckman
CTP	CSF Total Protein	Amended	g/L	CSF	B			0.15-0.45	Roche Kit insert

Test	Name	Synopsis	Units	Type	Sex M/F/Both	Patient Age	Previous Ref. Range	New Ref. Range	Reference Source
DBIL	Direct Bilirubin	No Change	umol/L	Blood	B		0-3.4	0-3.4	Roche Kit insert
ALCO	Ethanol	No Change	mg/L	Blood	B		-	-	-
GGT	gamma-Glutamyl Transferase	Amended	u/L	Blood	F		7-35	0-40	Consensus IFCC
GGT	gamma-Glutamyl Transferase	Amended	u/L	Blood	M		10-50	0-60	Consensus IFCC
GENT	Gentamicin	No Change	mg/L	Blood	B	-	-	Peak 6-10, Trough 0.5-2.0	Bob
GLU	Glucose	No Change	mmol/L	Blood	B		2.5-5.8	-	Local/Historical
HDL	HDL Cholesterol	No Change	mmol/L	Blood	B		-	-	NICE Guidance
IGA	Immunoglobulin A	No Change	g/L	Blood	B	≤14 day	0.01-0.08	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	14-30 day	0.02-0.15	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	1-3 mo	0.05-0.4	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	3-6 mo	0.1-0.5	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	6-9 mo	0.15-0.7	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	9-12 mo	0.2-0.7	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	1-2 y	0.3-1.2	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	2-3 y	0.3-1.3	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	3-6 y	0.4-2	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	6-9 y	0.5-2.4	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	9-12 y	0.7-2.5	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	12-15y	0.8-2.8	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	15-45y	0.8-2.8	-	Protein Reference Unit
IGA	Immunoglobulin A	No Change	g/L	Blood	B	≥45	0.8-4	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	≤14 day	5-17	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	14-30 day	3.9-13	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	1-3 mo	2.1-7.7	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	3-6 mo	2.4-8.8	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	6-9 mo	3-9	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	9-12 mo	3-10.9	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	1-2 y	3.1-13.8	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	2-3 y	3.7-15.8	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	3-6 y	4.9-16.1	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	6-9 y	5.4-16.1	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	9-12 y	5.4-16.1	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	12-15y	5.4-16.1	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	15-45y	5.4-16.1	-	Protein Reference Unit
IGG	Immunoglobulin G	No Change	g/L	Blood	B	≥45	5.3-16.5	-	Protein Reference Unit

Test	Name	Synopsis	Units	Type	Sex M/F/Both	Patient Age	Previous Ref. Range	New Ref. Range	Reference Source
IGM	Immunoglobulin M	No Change	g/L	Blood	B	≤14 day	0.05-0.2	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	14-30 day	0.08-0.4	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	1-3 mo	0.15-0.7	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	3-6 mo	0.2-1	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	6-9 mo	0.4-1.6	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	9-12 mo	0.6-2.1	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	1-2 y	0.5-2.2	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	2-3 y	0.5-2.2	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	3-6 y	0.5-2	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	6-9 y	0.5-1.8	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	9-12 y	0.5-1.8	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	12-15y	0.5-1.9	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	15-45y	0.5-1.9	-	Protein Reference Unit
IGM	Immunoglobulin M	No Change	g/L	Blood	B	≥45	0.5-2	-	Protein Reference Unit
FE	Iron	No Change	umol/L	Blood	F		6.6-28.3	-	Weippl et al; Serumeisen-Normalwerte und statistische Verteilung der Einzelwerte bei Mann und Frau. Blut 1973; XXVII; 261-270
FE	Iron	No Change	umol/L	Blood	M		8.1-28.6	-	Weippl et al; Serumeisen-Normalwerte und statistische Verteilung der Einzelwerte bei Mann und Frau. Blut 1973; XXVII; 261-270
LACT	Lactate	Amended	mmol/L	Blood	B		0.63-2.44	0.5-2.2	Roche Kit insert
LDH	Lactate Dehydrogenase	Amended	u/L	Blood	B		240-525	240-480	Roche Kit insert
LITH	Lithium	No Change	mmol/L	Blood	B		0.4-1.0	-	Path Harmony
MG	Magnesium	No Change	mmol/L	Blood	B	<29 d	0.6-1.0	-	Path Harmony
MG	Magnesium	No Change	mmol/L	Blood	B	4wk -16 yr	0.7-1.0	-	Path Harmony
MG	Magnesium	No Change	mmol/L	Blood	B	>16 yr	0.7-1.0	-	Path Harmony
PARA	Paracetamol	No Change	mg/L	Blood	B		-	-	-
PHOS	Phosphate	Amended	mmol/L	Blood	B	≤1 mo	1.4-2.4	1.3-2.6	Path Harmony
PHOS	Phosphate	Amended	mmol/L	Blood	B	>4 w < 1y	-	1.3-2.4	Path Harmony
PHOS	Phosphate	Amended	mmol/L	Blood	B	1-16 yr	-	0.9-1.8	Path Harmony
PHOS	Phosphate	Amended	mmol/L	Blood	B	1-10 y	1.1-1.65	Previous range no longer used	Local/Historical
PHOS	Phosphate	Amended	mmol/L	Blood	B	1-6 mo	1.2-2.15	Previous range no longer used	Local/Historical
PHOS	Phosphate	Amended	mmol/L	Blood	B	6-12 mo	1.15-1.9	Previous range no longer used	Local/Historical
PHOS	Phosphate	No Change	mmol/L	Blood	B	≥16 y	0.8-1.5	0.8-1.5	Path Harmony

Test	Name	Synopsis	Units	Type	Sex M/F/Both	Patient Age	Previous Ref. Range	New Ref. Range	Reference Source
K	Potassium	Amended	mmol/L	Blood	B	< 29 d	3.5-5.3	3.4-6.0	Path Harmony
K	Potassium	Amended	mmol/L	Blood	B	4 wk - 1 yr	3.5-5.3	3.5-5.7	Path Harmony
K	Potassium	Amended	mmol/L	Blood	B	1-16 yr	3.5-5.3	3.5-5.0	Path Harmony
K	Potassium	No Change	mmol/L	Blood	B	>16 yr	3.5-5.3	No change for adult reference range	Path Harmony
SALI	Salicylate	No Change	mg/L	Blood	B		-	-	-
NA	Sodium	No Change	mmol/L	Blood	B		133-146	-	Path Harmony
THEO	Theophylline	No Change	mg/L	Blood	B	-	10.0-20.0	-	Path Harmony
TBIL	Total Bilirubin	Amended	umol/L	Blood	B	< 1d	24-149	<137	Roche Kit insert
TBIL	Total Bilirubin	Amended	umol/L	Blood	B	1-2 d	58-197	<222	Roche Kit insert
TBIL	Total Bilirubin	Amended	umol/L	Blood	B	2-14 d	26-205	<290	Roche Kit insert
TBIL	Total Bilirubin	No Change	umol/L	Blood	B	14 d +	0-21		Path Harmony
CHOL	Total Cholesterol	No Change	mmol/L	Blood	B		-	-	NICE Guidance
TP	Total Protein	No Change	g/L	Blood	B		60-80	-	Path Harmony
TRIG	Triglycerides	No Change	mmol/L	Blood	B		-	-	NICE Guidance
UA	Urate	No Change	umol/L	Blood	F		140-360	-	Path Harmony
UA	Urate	No Change	umol/L	Blood	M		200-430	-	Path Harmony
UREA	Urea	No Change	mmol/L	Blood	B	≤28 d	0.8-5.5	-	Path Harmony
UREA	Urea	No Change	mmol/L	Blood	B	29-364d	1-5.5	-	Path Harmony
UREA	Urea	No Change	mmol/L	Blood	B	1-16 yr	2.5-6.5	-	Path Harmony
UREA	Urea	Amended	mmol/L	Blood	B	16-40y	2.5-6.2	2.5-7.8	Path Harmony
UREA	Urea	Amended	mmol/L	Blood	B	40-60y	3.3-7.2	2.5-7.8	Path Harmony
UREA	Urea	Amended	mmol/L	Blood	B	≥60 y	3.8-8.3	2.5-7.8	Path Harmony
UK	Urine Potassium (random)	No Change	mmol/L	Urine	B		-	-	-
UTP	Urine Protein (random)	Amended	g/L	Urine	B		0-0.6	Previous range no longer used	RD&E
UNA	Urine Sodium (random)	No Change	mmol/L	Urine	B		-	-	-
VANC	Vancomycin	No Change	mg/L	Blood	B		-	-	Bob