

## Core Biochemistry Reference Intervals

### Blood Gases

This document is valid as of the date of issue and will be updated as required by Canterbury Health Laboratories (CHL). Outside of Canterbury Health Laboratories, this document should be used with caution.

Please contact CHL should you require an updated version.

### Whole Blood

Test Name	Additional Information	Reference Intervals		Units	Revision Date
		Lower	Upper		
pH	Arterial	7.35	7.45	Units	Jan-20
	Venous	7.3	7.4		
pCO <sub>2</sub>	Arterial	35	45	mmHg	Jan-20
	Venous	40	50		
pO <sub>2</sub>	Arterial	75	105	mmHg	Jan-20
p50	Venous	22	27	mmHg	Jan-20
HCO <sub>3</sub>	Arterial	22	28	mmol/L	Jan-20
	Venous	22	32		
Base Excess	Arterial	± 3		mmol/L	Jan-20
	Venous	± 3			
Total CO <sub>2</sub>	Arterial	24	30	mmol/L	Jan-20
	Venous	25	33		
O <sub>2</sub> Saturation	Arterial	> 97		%	Jan-20
Lactate	Arterial	< 2		mmol/L	Jan-20
	Venous	< 2			
Ionised Calcium	Arterial	1.15	1.3	mmol/L	Jan-20
	Venous	1.15	1.3		
Ionised Calcium pH corrected 7.4	Arterial	1.13	1.26	mmol/L	May-10
	Venous	1.13	1.26		
tHb	Refer to Core Haematology				
Oxy Hb	Arterial	94	97	%	May-10
Carboxy Hb (non-smoker)	Arterial	0	1.5	%	May-10
	Venous	0	1.5		
Carboxy Hb (smoker)	Arterial	0	1.5	%	May-10
	Venous		< 9		
Met Hb	Arterial	0	1.5	%	May-10
	Venous	0	1.5		
DeOxy Hb	Arterial	0	5	%	May-10

### Cord Blood

Test Name	Additional Information	Reference Intervals		Units	Revision Date
		Lower	Upper		
pH	Cord Arterial	7.1	7.4	Units	Jan-20
	Cord Venous	7.22	7.44		
pCO <sub>2</sub>	Cord Arterial	42	74	mmHg	Jan-20
	Cord Venous	28	53		
pO <sub>2</sub>	Cord Arterial	6	28	mmHg	Jan-20
	Cord Venous	16	40		
HCO <sub>3</sub>	Cord Arterial	18	28	mmol/L	Jan-20
	Cord Venous	17	26		

Test Name	Additional Information	Reference Intervals		Units	Revision Date
		Lower	Upper		
Base Excess	Cord Arterial	- 12	2	mmol/L	Jan-20
	Cord Venous	- 12	2		
Lactate	Cord Arterial	< 6.1		mmol/L	Jan-20
	Cord Venous	< 6.1			