



## BLOOD GASES

Name	Line No.	Specimen 1			Specimen 2			Specimen 3			Specimen 4			Specimen 5			No. of Labs
		Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	
<b>pH - Blood Gas</b>																	
<b>Initial Grouping by Reagent</b>																	
Radiometer ABL80	1	7.216 - 7.296	C 7.2564	0.0088	7.269 - 7.349	C 7.3091	0.01	6.89 - 6.97	C 6.93	0.0085	7.154 - 7.234	C 7.1936	0.0064	7.12 - 7.2	C 7.16	0.0074	11
Abbott i-STAT thermal	2	7.243 - 7.323	C 7.2826	0.0046	7.281 - 7.361	C 7.3211	0.0048	6.92 - 7.0	C 6.9597	0.0042	7.189 - 7.269	C 7.229	0.0063	7.141 - 7.221	C 7.1807	0.0049	30
Abbott i-STAT non-thermal	3	7.241 - 7.321	C 7.2807	0.0098	7.276 - 7.356	C 7.3163	0.0068	6.919 - 6.999	C 6.959	0.0089	7.182 - 7.262	C 7.222	0.0096	7.134 - 7.214	C 7.1735	0.0102	6
Osmetech Opti CCA	4	7.203 - 7.283	C 7.2433	0.0095	7.261 - 7.341	C 7.3009	0.0085	6.937 - 7.017	C 6.9772	0.0109	7.165 - 7.245	C 7.2047	0.0094	7.114 - 7.194	C 7.1536	0.009	42
IL GEM Premier 3500	5	7.299 - 7.379	C 7.3388	0.006	7.31 - 7.39	C 7.35	0.005	6.956 - 7.036	C 6.9963	0.0111	7.241 - 7.321	C 7.2813	0.0093	7.156 - 7.236	C 7.1963	0.007	8
IL GEM Premier 3000	6	7.297 - 7.377	C 7.3367	0.0047	7.307 - 7.387	C 7.3467	0.0047	6.952 - 7.032	C 6.9917	0.0107	7.242 - 7.322	C 7.2817	0.0069	7.152 - 7.232	C 7.1917	0.0037	7
Alere	7	7.19 - 7.27	C 7.2295	0.0015	7.259 - 7.339	C 7.2985	0.0055	6.87 - 6.95	C 6.91	0.01	7.112 - 7.192	C 7.1515	0.0015	7.087 - 7.167	C 7.1265	0.0085	4
<b>Initial Grouping by Sensitivity or Principle</b>																	
Diametrics instruments	8	7.232 - 7.312	C 7.272	0.0093	7.288 - 7.368	C 7.3278	0.0109	6.9 - 6.98	C 6.9402	0.0127	7.166 - 7.246	C 7.2056	0.0045	7.12 - 7.2	C 7.16	0.0087	5
Radiometer instruments	9	7.218 - 7.298	C 7.2581	0.0116	7.269 - 7.349	C 7.3086	0.0114	6.888 - 6.968	C 6.9284	0.0086	7.155 - 7.235	C 7.1949	0.0062	7.12 - 7.2	C 7.1597	0.0118	15
Abbott instruments	10	7.242 - 7.322	C 7.2823	0.0058	7.28 - 7.36	C 7.3203	0.0055	6.92 - 7.0	C 6.9596	0.0053	7.188 - 7.268	C 7.2278	0.0074	7.14 - 7.22	C 7.1795	0.0067	36
AVL instruments	11	7.203 - 7.283	C 7.2434	0.0093	7.261 - 7.341	C 7.3011	0.0084	6.937 - 7.017	C 6.9773	0.0107	7.165 - 7.245	C 7.2047	0.0093	7.114 - 7.194	C 7.1539	0.0089	44
IL instruments	12	7.297 - 7.377	C 7.3367	0.007	7.307 - 7.387	C 7.3473	0.0068	6.953 - 7.033	C 6.9933	0.0114	7.24 - 7.32	C 7.28	0.0097	7.153 - 7.233	C 7.1933	0.007	16
All other methods	13	7.213 - 7.293	C 7.253	0.0333	7.267 - 7.347	C 7.3067	0.0124	6.898 - 6.978	C 6.938	0.0404	7.144 - 7.224	C 7.1837	0.0455	7.104 - 7.184	C 7.1443	0.0262	5
<b>Total Population</b>																	
Whole Population	14	7.229 - 7.309	C 7.2689	0.0411	7.276 - 7.356	C 7.3155	0.0181	6.929 - 7.009	C 6.9686	0.0355	7.18 - 7.26	C 7.2202	0.0282	7.127 - 7.207	C 7.1674	0.0175	126

**pCO2**

<b>Initial Grouping by Reagent</b>																	
Radiometer ABL80	1	47.7 - 57.7	C 52.73	1.81	37.1 - 47.1	C 42.09	1.0	76.4 - 89.6	P 83.0	2.0	54.6 - 64.6	C 59.55	1.5	63.5 - 74.5	P 69.0	2.09	11
Abbott i-STAT thermal	2	39.3 - 49.3	C 44.3	1.45	29.6 - 39.6	C 34.63	1.31	63.3 - 74.3	P 68.81	2.19	44.8 - 54.8	C 49.81	1.86	53.9 - 63.9	C 58.88	1.57	30
Abbott i-STAT non-thermal	3	39.6 - 49.6	C 44.6	1.32	30.1 - 40.1	C 35.12	1.21	64.0 - 75.1	P 69.55	2.74	45.6 - 55.6	C 50.55	2.65	54.7 - 64.7	C 59.7	2.84	6
Osmetech Opti CCA	4	46.9 - 56.9	C 51.93	1.49	35.0 - 45.0	C 40.03	1.98	71.1 - 83.5	P 77.27	2.0	51.9 - 61.9	C 56.85	1.7	61.9 - 72.7	P 67.33	1.33	42
IL GEM Premier 3500	5	47.8 - 57.8	C 52.75	0.97	36.3 - 46.3	C 41.25	0.66	73.3 - 86.0	P 79.63	2.34	52.9 - 62.9	C 57.88	1.36	63.6 - 74.7	P 69.13	1.69	8
IL GEM Premier 3000	6	48.7 - 58.7	C 53.71	0.88	36.7 - 46.7	C 41.71	0.7	73.5 - 86.2	P 79.86	2.29	53.7 - 63.7	C 58.71	3.84	62.2 - 73.0	P 67.57	4.81	7
Alere	7	40.4 - 50.4	C 45.35	2.12	29.5 - 39.5	C 34.53	2.06	67.6 - 79.4	P 73.5	2.65	48.2 - 58.2	C 53.2	2.69	52.8 - 62.8	C 57.8	1.84	4
<b>Initial Grouping by Sensitivity or Principle</b>																	
Diametrics	8	49.5 - 59.5	C 54.48	0.53	37.4 - 47.4	C 42.4	0.82	76.0 - 89.2	P 82.62	1.79	56.1 - 66.1	C 61.08	0.89	66.6 - 78.1	P 72.34	0.64	5
Radiometer instruments	9	46.7 - 56.7	C 51.69	2.65	36.9 - 46.9	C 41.85	1.06	75.3 - 88.4	P 81.84	3.08	53.2 - 63.2	C 58.2	3.1	62.4 - 73.2	P 67.8	3.18	15
Abbott instruments	10	39.4 - 49.4	C 44.35	1.43	29.7 - 39.7	C 34.71	1.31	63.4 - 74.4	P 68.93	2.31	44.9 - 54.9	C 49.93	2.03	54.0 - 64.0	C 59.02	1.87	36
AVL instruments	11	46.9 - 56.9	C 51.86	1.58	35.0 - 45.0	C 40.03	1.94	71.1 - 83.4	P 77.26	2.14	51.8 - 61.8	C 56.81	1.79	61.8 - 72.6	P 67.22	1.45	44
IL instruments	12	48.0 - 58.0	C 53.0	1.27	36.4 - 46.4	C 41.44	0.7	73.1 - 85.8	P 79.44	2.52	53.1 - 63.1	C 58.06	2.86	62.8 - 73.8	P 68.31	3.49	16
All other methods	13	41.7 - 51.7	C 46.74	3.37	31.0 - 41.0	C 36.0	3.48	68.7 - 80.7	P 74.7	3.37	49.2 - 59.2	C 54.18	3.1	55.0 - 65.0	C 60.02	4.74	5
<b>Total Population</b>																	
Whole Population	14	44.9 - 54.9	C 49.85	4.9	33.8 - 43.8	C 38.8	3.44	69.2 - 81.2	P 75.18	6.84	50.2 - 60.2	C 55.21	4.28	59.8 - 70.2	P 65.03	4.94	126

**pO2**



