



## 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 Method</b>																						
Abbott i-STAT thermal	1	7.253 - 7.333	C	7.2932	0.0067	6.98 - 7.06	C	7.0196	0.0113	7.421 - 7.501	C	7.4610	0.0071	7.34 - 7.42	C	7.3802	0.0050	7.643 - 7.723	C	7.6834	0.0044	60
IL GEM Premier 3000	2	7.211 - 7.29	C	7.2505	0.0051	6.955 - 7.035	C	6.9947	0.0133	7.397 - 7.477	C	7.4370	0.0047	7.308 - 7.388	C	7.3481	0.0051	7.61 - 7.69	C	7.6505	0.0080	21
Osmetech Opti CCA	3	7.21 - 7.29	C	7.2504	0.0096	6.983 - 7.063	C	7.0233	0.0138	7.385 - 7.465	C	7.4250	0.0106	7.295 - 7.375	C	7.3346	0.0082	7.582 - 7.662	C	7.6216	0.0172	67
Radiometer ABL80	4	7.213 - 7.293	C	7.2530	0.0159	6.92 - 7.0	C	6.9600	0.0205	7.37 - 7.45	C	7.4100	0.0138	7.296 - 7.376	C	7.3360	0.0139	7.546 - 7.626	C	7.5860	0.0135	20
<b>Initial Grouping by Sensitivity or Principle</b>																						
AVL instruments	5	7.21 - 7.29	C	7.2499	0.0111	6.983 - 7.063	C	7.0226	0.0145	7.384 - 7.464	C	7.4240	0.0115	7.294 - 7.374	C	7.3344	0.0086	7.58 - 7.66	C	7.6201	0.0190	72
Diametrics instruments	6	7.225 - 7.305	C	7.2650	0.0154	6.925 - 7.005	C	6.9648	0.0140	7.393 - 7.473	C	7.4334	0.0137	7.315 - 7.395	C	7.3554	0.0126	7.603 - 7.683	C	7.6430	0.0154	20
IL instruments	7	7.211 - 7.291	C	7.2510	0.0075	6.955 - 7.035	C	6.9947	0.0113	7.397 - 7.477	C	7.4371	0.0078	7.307 - 7.387	C	7.3472	0.0077	7.608 - 7.688	C	7.6478	0.0154	32
Radiometer instruments	8	7.212 - 7.292	C	7.2517	0.0144	6.925 - 7.005	C	6.9652	0.0218	7.372 - 7.452	C	7.4124	0.0135	7.296 - 7.376	C	7.3362	0.0121	7.554 - 7.634	C	7.5938	0.0201	29
Siemens instruments	9	7.217 - 7.297	C	7.2570	0.0163	6.94 - 7.02	C	6.9803	0.0194	7.383 - 7.463	C	7.4231	0.0088	7.304 - 7.384	C	7.3437	0.0130	7.574 - 7.654	C	7.6143	0.0086	15
All other methods	10	7.251 - 7.331	C	7.2911	0.0138	6.977 - 7.057	C	7.0169	0.0212	7.42 - 7.5	C	7.4596	0.0112	7.339 - 7.419	C	7.3788	0.0107	7.642 - 7.722	C	7.6818	0.0123	70
<b>Total Population</b>																						
Whole Population	11	7.224 - 7.304	C	7.2642	0.0217	6.963 - 7.043	C	7.0028	0.0283	7.396 - 7.476	C	7.4359	0.0202	7.312 - 7.392	C	7.3519	0.0211	7.6 - 7.68	C	7.6401	0.0345	243

**pCO2****Initial Grouping by Method**

Abbott i-STAT thermal	1	41.4 - 51.4	C	46.38	1.28	61.2 - 71.9	P	66.54	2.61	28.4 - 38.4	C	33.40	0.83	35.0 - 45.0	C	40.05	0.85	16.0 - 26.0	C	21.02	0.58	61
IL GEM Premier 3000	2	47.9 - 57.9	C	52.90	1.04	65.4 - 76.8	P	71.10	2.12	32.1 - 42.1	C	37.14	0.65	40.1 - 50.1	C	45.10	1.00	16.7 - 26.7	C	21.67	0.58	21
Osmetech Opti CCA	3	46.7 - 56.7	C	51.73	1.67	65.0 - 76.3	P	70.63	2.28	31.1 - 41.1	C	36.08	1.86	38.8 - 48.8	C	43.78	1.26	18.2 - 28.2	C	23.25	0.97	66
Radiometer ABL80	4	46.8 - 56.8	C	51.75	2.61	68.5 - 80.4	P	74.45	3.05	33.2 - 43.2	C	38.15	2.01	39.6 - 49.6	C	44.60	2.21	18.1 - 28.1	C	23.10	1.17	20

**Initial Grouping by Sensitivity or Principle**



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		
Whole Population	1	179.0	P	163.0	5.8	420.0	P	381.6	11.1	256.0	P	233.1	5.1	219.0	P	199.3	8.1	46.0 - 58.0	C	52.3	1.0	8

### Ionized Calcium

Whole Population	1	0.9 - 1.4	C	1.12	0.06	1.9 - 2.4	C	2.18	0.12	1.1 - 1.6	C	1.34	0.05	1.2 - 1.7	C	1.48	0.06	0.4 - 0.9	C	0.62	0.06	20
------------------	---	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	----

### Lactate

Whole Population	1	21.7 - 36.2	P	28.99	24.55	34.0 - 56.8	P	45.40	41.31	23.1 - 38.4	P	30.75	27.77	16.8 - 28.0	P	22.38	20.18	6.5 - 10.9	P	8.73	7.86	11
------------------	---	-------------	---	-------	-------	-------------	---	-------	-------	-------------	---	-------	-------	-------------	---	-------	-------	------------	---	------	------	----

### Potassium - Blood Gas

#### Initial Grouping by Sensitivity or Principle

All other methods	1	2.0 - 3.0	C	2.54	0.07	5.6 - 6.6	C	6.13	0.07	3.8 - 4.8	C	4.26	0.05	3.3 - 4.3	C	3.77	0.05	6.1 - 7.1	C	6.64	0.07	10
-------------------	---	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	----

#### Total Population

Whole Population	2	2.1 - 3.1	C	2.59	0.15	5.7 - 6.7	C	6.18	0.12	3.8 - 4.8	C	4.30	0.10	3.3 - 4.3	C	3.81	0.07	6.2 - 7.2	C	6.71	0.12	22
------------------	---	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	-----------	---	------	------	----

### Sodium - Blood Gas

#### Initial Grouping by Sensitivity or Principle

All other methods	1	118.0 - 126.0	C	121.5	0.8	148.0 - 156.0	C	152.0	0.9	132.0 - 140.0	C	135.5	0.8	127.0 - 135.0	C	130.6	0.7	150.0 - 158.0	C	153.9	0.6	10
-------------------	---	---------------	---	-------	-----	---------------	---	-------	-----	---------------	---	-------	-----	---------------	---	-------	-----	---------------	---	-------	-----	----

#### Total Population

Whole Population	2	119.0 - 127.0	C	122.7	3.4	149.0 - 157.0	C	152.8	2.4	132.0 - 140.0	C	136.2	3.0	127.0 - 135.0	C	131.5	3.0	150.0 - 158.0	C	153.8	2.5	22
------------------	---	---------------	---	-------	-----	---------------	---	-------	-----	---------------	---	-------	-----	---------------	---	-------	-----	---------------	---	-------	-----	----