

Summary of Participant Performance (Mean and Standard Deviation)

pH

Specimen: G76	Specimen: G77	Specimen: G78	Specimen: G79	Specimen: G80	Number	[Code] Instrument or Reagent System
7.131 ± 0.024	7.255 ± 0.016	7.345 ± 0.016	7.573 ± 0.024	7.618 ± 0.029	n = 225	[] All Instruments
7.142 ± 0.004	7.255 ± 0.006	7.335 ± 0.006	7.570 ± 0.008	7.625 ± 0.006	n = 4	[AVQ] Opti Medical OPTI CCA
7.100 ± 0.008	7.240 ± 0.008	7.332 ± 0.006	7.569 ± 0.007	7.604 ± 0.006	n = 37	[BYS] Siemens Rapid Point 405
7.151 ± 0.007	7.274 ± 0.006	7.363 ± 0.007	7.591 ± 0.009	7.633 ± 0.007	n = 15	[BYT] Siemens RapidLab 1200 Series
7.156 ± 0.006	7.277 ± 0.012	7.361 ± 0.005	7.584 ± 0.006	7.626 ± 0.011	n = 6	[COA] Siemens RapidLab 845
7.150 ± 0.000	7.266 ± 0.005	7.356 ± 0.005	7.581 ± 0.002	7.622 ± 0.004	n = 3	[COW] Siemens RapidLab 865
7.149 ± 0.015	7.272 ± 0.021	7.355 ± 0.018	7.606 ± 0.010	7.658 ± 0.016	n = 3	[DTC] IRMA SL 2000
7.170 ± 0.005	7.286 ± 0.006	7.377 ± 0.006	7.632 ± 0.007	7.684 ± 0.006	n = 15	[IAA] i-STAT
7.111 ± 0.008	7.253 ± 0.006	7.352 ± 0.006	7.597 ± 0.009	7.653 ± 0.008	n = 31	[MAA] IL Gem Premier 3000
7.115 ± 0.006	7.253 ± 0.007	7.346 ± 0.006	7.580 ± 0.000	7.631 ± 0.000	n = 10	[MAC] IL Gem Premier 4000
7.161 ± 0.002	7.280 ± 0.005	7.363 ± 0.004	7.573 ± 0.004	7.617 ± 0.005	n = 8	[NOG] NOVA Critical Care Xpress
7.136 ± 0.011	7.250 ± 0.000	7.334 ± 0.006	7.548 ± 0.008	7.585 ± 0.008	n = 5	[RAX] Radiometer ABL 80 Flex
7.140 ± 0.000	7.257 ± 0.008	7.348 ± 0.008	7.576 ± 0.010	7.634 ± 0.007	n = 11	[RAJ] Radiometer NPT7
7.134 ± 0.005	7.249 ± 0.005	7.337 ± 0.004	7.553 ± 0.005	7.595 ± 0.005	n = 27	[RAN] Radiometer ABL700 series
7.132 ± 0.003	7.248 ± 0.004	7.334 ± 0.004	7.552 ± 0.003	7.593 ± 0.004	n = 34	[RAP] Radiometer ABL800 series
7.144 ± 0.008	7.262 ± 0.013	7.344 ± 0.008	7.539 ± 0.003	7.578 ± 0.007	n = 4	[ROW] Roche OMNI/Cobas series

Summary of Participant Performance (Mean and Standard Deviation)

Pco2 (mmHg)

Specimen: G76	Specimen: G77	Specimen: G78	Specimen: G79	Specimen: G80	Number	[Code] Instrument or Reagent System
69.99 ± 4.20	50.82 ± 2.23	42.96 ± 1.82	25.12 ± 1.14	22.43 ± 1.05	n = 225	[] All Instruments
70.50 ± 0.57	51.00 ± 0.00	43.50 ± 0.57	25.50 ± 0.57	22.85 ± 0.41	n = 4	[AVQ] Opti Medical OPTI CCA
75.64 ± 3.82	54.14 ± 2.65	45.64 ± 1.95	25.89 ± 1.12	23.39 ± 0.99	n = 37	[BYS] Siemens Rapid Point 405
69.83 ± 3.19	50.61 ± 1.88	42.00 ± 1.55	23.94 ± 0.85	21.14 ± 0.55	n = 15	[BYT] Siemens RapidLab 1200 Series
68.63 ± 2.70	50.65 ± 2.05	43.47 ± 1.13	25.25 ± 0.29	22.16 ± 0.98	n = 6	[COA] Siemens RapidLab 845
67.80 ± 1.56	50.77 ± 1.59	43.31 ± 1.29	25.79 ± 1.27	22.53 ± 1.05	n = 3	[COW] Siemens RapidLab 865
72.99 ± 3.28	51.51 ± 3.35	43.48 ± 2.41	23.52 ± 1.13	19.44 ± 0.79	n = 3	[DTC] IRMA SL 2000
62.72 ± 2.08	45.66 ± 1.78	39.00 ± 1.24	22.53 ± 0.74	20.99 ± 0.65	n = 14	[IAA] i-STAT
73.51 ± 2.57	51.41 ± 1.42	43.25 ± 0.87	24.38 ± 0.87	21.76 ± 0.74	n = 31	[MAA] IL Gem Premier 3000
70.26 ± 1.61	48.60 ± 1.09	41.59 ± 0.97	24.92 ± 0.49	22.20 ± 0.61	n = 10	[MAC] IL Gem Premier 4000
64.61 ± 2.36	48.96 ± 1.99	42.12 ± 1.25	25.50 ± 0.70	22.72 ± 0.87	n = 9	[NOG] NOVA Critical Care Xpress
71.10 ± 1.83	52.00 ± 1.00	44.00 ± 0.00	25.37 ± 0.55	23.00 ± 0.64	n = 5	[RAX] Radiometer ABL 80 Flex
69.67 ± 1.60	51.02 ± 1.57	43.41 ± 2.55	24.73 ± 1.65	22.64 ± 1.27	n = 11	[RAJ] Radiometer NPT7
68.26 ± 1.23	50.56 ± 0.76	42.67 ± 0.73	25.66 ± 0.50	22.68 ± 0.43	n = 27	[RAN] Radiometer ABL700 series
67.99 ± 1.25	50.30 ± 0.90	42.45 ± 0.76	25.52 ± 0.36	22.58 ± 0.34	n = 34	[RAP] Radiometer ABL800 series
70.80 ± 1.29	52.38 ± 0.87	44.47 ± 0.66	26.33 ± 0.38	23.22 ± 0.21	n = 4	[ROW] Roche OMNI/Cobas series

Summary of Participant Performance (Mean and Standard Deviation)

Po2 (mmHg)

Specimen: G76	Specimen: G77	Specimen: G78	Specimen: G79	Specimen: G80	Number	[Code]	Instrument or Reagent System
-----	-----	-----	-----	-----	-----	-----	-----
161.50 ± 5.93	142.34 ± 5.07	179.88 ± 6.78	76.89 ± 7.22	127.11 ± 4.37	n = 225	[]	All Instruments
158.02 ± 5.77	141.24 ± 2.04	176.19 ± 4.38	81.00 ± 3.16	126.43 ± 2.91	n = 4	[AVQ]	Opti Medical OPTI CCA
157.70 ± 4.64	140.67 ± 3.18	176.20 ± 5.03	81.86 ± 6.61	126.52 ± 2.60	n = 37	[BYS]	Siemens Rapid Point 405
159.62 ± 3.28	139.29 ± 3.56	180.04 ± 3.94	75.54 ± 5.58	123.01 ± 3.72	n = 15	[BYT]	Siemens RapidLab 1200 Series
159.09 ± 0.54	139.62 ± 10.68	178.88 ± 9.98	69.14 ± 4.19	120.54 ± 3.63	n = 6	[COA]	Siemens RapidLab 845
163.90 ± 5.19	140.57 ± 4.75	183.13 ± 7.88	70.15 ± 2.46	124.57 ± 5.34	n = 3	[COW]	Siemens RapidLab 865
167.56 ± 4.70	152.37 ± 3.93	194.01 ± 1.97	90.19 ± 8.11	136.09 ± 2.32	n = 3	[DTC]	IRMA SL 2000
164.93 ± 6.01	147.76 ± 4.64	178.06 ± 5.00	86.64 ± 4.89	129.07 ± 6.12	n = 15	[IAA]	i-STAT
168.98 ± 3.92	148.25 ± 3.26	188.83 ± 4.12	73.93 ± 2.76	130.85 ± 3.20	n = 31	[MAA]	IL Gem Premier 3000
164.95 ± 5.08	144.69 ± 4.63	179.66 ± 3.63	77.73 ± 3.45	128.04 ± 5.79	n = 10	[MAC]	IL Gem Premier 4000
166.78 ± 2.37	143.85 ± 2.79	188.58 ± 2.69	68.89 ± 1.60	129.05 ± 1.95	n = 8	[NOG]	NOVA Critical Care Xpress
159.46 ± 5.27	138.31 ± 2.70	178.94 ± 4.04	63.20 ± 2.46	120.86 ± 1.27	n = 5	[RAX]	Radiometer ABL 80 Flex
161.06 ± 3.58	140.29 ± 3.81	179.95 ± 4.68	67.12 ± 1.59	125.12 ± 2.58	n = 11	[RAJ]	Radiometer NPT7
158.97 ± 3.76	139.88 ± 2.91	176.76 ± 4.42	75.74 ± 1.64	126.21 ± 2.47	n = 27	[RAN]	Radiometer ABL700 series
160.12 ± 3.38	141.85 ± 2.76	177.82 ± 4.23	79.27 ± 2.00	128.18 ± 2.36	n = 34	[RAP]	Radiometer ABL800 series
162.93 ± 2.46	146.64 ± 3.40	176.25 ± 2.13	91.03 ± 1.36	127.25 ± 2.47	n = 4	[ROW]	Roche OMNI/Cobas series