



## 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>                  |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Osmetech Opti CCA                                   | 1        | 7.213 - 7.293 | C 7.2527 | 0.0097 | 7.4 - 7.48    | C 7.4398 | 0.0137 | 7.077 - 7.157 | C 7.1173 | 0.011  | 7.226 - 7.306 | C 7.2658 | 0.01   | 7.218 - 7.298 | C 7.2575 | 0.0108 | 37          |
| Abbott i-STAT thermal                               | 2        | 7.287 - 7.367 | C 7.3272 | 0.0059 | 7.474 - 7.554 | C 7.5135 | 0.0028 | 7.11 - 7.19   | C 7.1495 | 0.0043 | 7.271 - 7.351 | C 7.3111 | 0.0045 | 7.29 - 7.37   | C 7.3304 | 0.0055 | 20          |
| <b>Initial Grouping by Sensitivity or Principle</b> |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| AVL instruments                                     | 3        | 7.213 - 7.293 | C 7.2527 | 0.0097 | 7.4 - 7.48    | C 7.4398 | 0.0137 | 7.077 - 7.157 | C 7.1173 | 0.011  | 7.226 - 7.306 | C 7.2658 | 0.01   | 7.218 - 7.298 | C 7.2575 | 0.0108 | 37          |
| IL instruments                                      | 4        | 7.315 - 7.395 | C 7.355  | 0.0076 | 7.506 - 7.586 | C 7.5458 | 0.0104 | 7.119 - 7.199 | C 7.1592 | 0.0111 | 7.27 - 7.35   | C 7.31   | 0.0058 | 7.315 - 7.395 | C 7.355  | 0.0096 | 12          |
| Abbott instruments                                  | 5        | 7.288 - 7.368 | C 7.3281 | 0.0072 | 7.474 - 7.554 | C 7.5136 | 0.004  | 7.111 - 7.191 | C 7.1506 | 0.0064 | 7.272 - 7.352 | C 7.312  | 0.0054 | 7.29 - 7.37   | C 7.3304 | 0.0053 | 26          |
| <b>Total Population</b>                             |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Whole Population                                    | 6        | 7.252 - 7.332 | C 7.2922 | 0.0424 | 7.438 - 7.518 | C 7.4779 | 0.0441 | 7.093 - 7.173 | C 7.1333 | 0.0268 | 7.245 - 7.325 | C 7.2845 | 0.0249 | 7.256 - 7.336 | C 7.2957 | 0.0414 | 91          |
| <b>pCO2</b>   |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| <b>Initial Grouping by Reagent</b>                  |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Osmetech Opti CCA                                   | 1        | 47.7 - 57.7   | C 52.71  | 1.56   | 18.0 - 28.0   | C 23.04  | 0.81   | 72.2 - 84.8   | P 78.5   | 2.95   | 45.5 - 55.5   | C 50.47  | 1.45   | 46.2 - 56.2   | C 51.16  | 3.13   | 37          |
| Abbott i-STAT thermal                               | 2        | 39.1 - 49.1   | C 44.06  | 1.59   | 14.5 - 24.5   | C 19.53  | 1.06   | 63.0 - 74.0   | P 68.52  | 2.15   | 36.9 - 46.9   | C 41.9   | 1.29   | 38.1 - 48.1   | C 43.14  | 1.8    | 20          |
| <b>Initial Grouping by Sensitivity or Principle</b> |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| AVL instruments                                     | 3        | 47.7 - 57.7   | C 52.71  | 1.56   | 18.0 - 28.0   | C 23.04  | 0.81   | 72.2 - 84.8   | P 78.5   | 2.95   | 45.5 - 55.5   | C 50.47  | 1.45   | 46.2 - 56.2   | C 51.16  | 3.13   | 37          |
| IL instruments                                      | 4        | 49.3 - 59.3   | C 54.25  | 1.96   | 15.8 - 25.8   | C 20.75  | 0.6    | 78.6 - 92.3   | P 85.42  | 3.17   | 46.3 - 56.3   | C 51.25  | 1.74   | 49.1 - 59.1   | C 54.08  | 1.11   | 12          |
| Abbott instruments                                  | 5        | 39.0 - 49.0   | C 44.0   | 1.6    | 14.7 - 24.7   | C 19.7   | 1.02   | 62.8 - 73.7   | P 68.27  | 2.04   | 37.0 - 47.0   | C 42.04  | 1.31   | 38.4 - 48.4   | C 43.43  | 1.85   | 26          |
| <b>Total Population</b>                             |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Whole Population                                    | 6        | 45.5 - 55.5   | C 50.48  | 4.66   | 16.4 - 26.4   | C 21.43  | 1.72   | 70.5 - 82.7   | P 76.61  | 6.89   | 43.6 - 53.6   | C 48.55  | 4.46   | 44.6 - 54.6   | C 49.58  | 4.89   | 91          |
| <b>pO2</b>  |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| <b>Initial Grouping by Reagent</b>                  |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Osmetech Opti CCA                                   | 1        | 149 - 207     | S 178.1  | 9.7    | 143 - 205     | S 174.0  | 10.4   | 73 - 99       | S 86.0   | 4.5    | 60 - 87       | S 73.1   | 4.5    | 153 - 200     | S 176.8  | 7.8    | 37          |
| Abbott i-STAT thermal                               | 2        | 146 - 186     | S 166.0  | 6.6    | 140 - 180     | S 159.9  | 6.7    | 66 - 102      | S 84.1   | 6.1    | 57 - 87       | S 72.1   | 5.1    | 148 - 179     | S 163.4  | 5.1    | 20          |
| <b>Initial Grouping by Sensitivity or Principle</b> |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| AVL instruments                                     | 3        | 149 - 207     | S 178.1  | 9.7    | 143 - 205     | S 174.0  | 10.4   | 73 - 99       | S 86.0   | 4.5    | 60 - 87       | S 73.1   | 4.5    | 153 - 200     | S 176.8  | 7.8    | 37          |
| IL instruments                                      | 4        | 156 - 193     | S 174.7  | 6.2    | 150 - 210     | S 180.2  | 10.0   | 81 - 94       | S 87.8   | 2.1    | 66 - 78       | S 71.8   | 1.9    | 168 - 192     | S 180.4  | 4.0    | 12          |
| Abbott instruments                                  | 5        | 141 - 187     | S 164.0  | 7.8    | 136 - 182     | S 159.0  | 7.7    | 65 - 104      | S 84.6   | 6.5    | 54 - 92       | S 73.2   | 6.3    | 138 - 184     | S 160.9  | 7.7    | 26          |
| <b>Total Population</b>                             |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Whole Population                                    | 6        | 135 - 210     | S 172.7  | 12.5   | 130 - 209     | S 169.4  | 13.2   | 62 - 107      | S 84.3   | 7.5    | 48 - 93       | S 70.6   | 7.5    | 134 - 210     | S 172.0  | 12.7   | 91          |
| <b>Chloride - Blood Gas</b>                         |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| <b>Total Population</b>                             |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Whole Population                                    | 1        | 104 - 115     | P 109.4  | 10.6   | 110 - 122     | P 116.1  | 9.6    | 91 - 100      | P 95.3   | 7.5    | 82 - 91       | P 86.3   | 6.2    | 105 - 116     | P 110.0  | 10.4   | 7           |
| <b>Glucose - Blood Gas</b>                          |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| <b>Total Population</b>                             |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| Whole Population                                    | 1        | 196 - 240     | P 218.0  | 19.0   | 82 - 100      | P 90.8   | 4.8    | 143 - 175     | P 159.0  | 12.5   | 44 - 56       | C 50.3   | 0.8    | 195 - 238     | P 216.3  | 20.1   | 4           |
| <b>Ionized Calcium</b>                              |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |
| <b>Total Population</b>                             |          |               |          |        |               |          |        |               |          |        |               |          |        |               |          |        |             |

|                  |   |           |        |      |           |        |      |           |        |      |           |        |      |           |        |      |   |
|------------------|---|-----------|--------|------|-----------|--------|------|-----------|--------|------|-----------|--------|------|-----------|--------|------|---|
| Whole Population | 1 | 0.8 - 1.3 | C 1.02 | 0.12 | 0.6 - 1.1 | C 0.85 | 0.05 | 2.1 - 2.6 | C 2.36 | 0.39 | 0.4 - 0.9 | C 0.62 | 0.04 | 0.8 - 1.3 | C 1.02 | 0.12 | 8 |
|------------------|---|-----------|--------|------|-----------|--------|------|-----------|--------|------|-----------|--------|------|-----------|--------|------|---|

**Lactate**

|                         |   |           |        |      |         |        |      |           |        |      |           |        |      |           |        |      |   |
|-------------------------|---|-----------|--------|------|---------|--------|------|-----------|--------|------|-----------|--------|------|-----------|--------|------|---|
| <b>Total Population</b> |   |           |        |      |         |        |      |           |        |      |           |        |      |           |        |      |   |
| Whole Population        | 1 | 0.6 - 4.6 | C 2.61 | 0.72 | 0 - 3.3 | C 1.31 | 0.23 | 2.1 - 6.1 | C 4.05 | 0.81 | 5.1 - 9.1 | C 7.05 | 0.99 | 0.6 - 4.6 | C 2.64 | 0.67 | 8 |

**Potassium - Blood Gas**

|                         |   |           |        |      |           |        |      |           |        |      |           |        |      |           |        |     |    |
|-------------------------|---|-----------|--------|------|-----------|--------|------|-----------|--------|------|-----------|--------|------|-----------|--------|-----|----|
| <b>Total Population</b> |   |           |        |      |           |        |      |           |        |      |           |        |      |           |        |     |    |
| Whole Population        | 1 | 4.1 - 5.1 | C 4.62 | 0.29 | 5.7 - 6.7 | C 6.16 | 0.32 | 3.3 - 4.3 | C 3.78 | 0.14 | 1.7 - 2.7 | C 2.15 | 0.12 | 4.1 - 5.1 | C 4.64 | 0.3 | 11 |

**Sodium - Blood Gas**

|                         |   |           |         |     |           |         |     |           |         |     |           |         |     |           |         |     |    |
|-------------------------|---|-----------|---------|-----|-----------|---------|-----|-----------|---------|-----|-----------|---------|-----|-----------|---------|-----|----|
| <b>Total Population</b> |   |           |         |     |           |         |     |           |         |     |           |         |     |           |         |     |    |
| Whole Population        | 1 | 148 - 156 | C 151.9 | 9.1 | 141 - 149 | C 145.4 | 8.1 | 134 - 142 | C 138.2 | 6.5 | 120 - 128 | C 124.2 | 5.8 | 148 - 156 | C 151.7 | 9.8 | 11 |