**Supplemental Digital Content 3: Arterial blood gas sampling values at baseline and 15 minutes after drug administration for each ABP-700 dosing cohort and placebo. Data are shown as median [range].**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cohort** | **Timepoint (min)** | **pH** | **PaCO2** | **PaO2** | **HCO3** | **Na+** | **Cl-** | **AnionGap** |
| **Placebo** | 0 | 7.42 [7.39,7.54] | 5.58 [3.77,6.22] | 13.01 [11.56,15.01] | 25.85 [23.7,29.3] | 139 [137,141] | 103 [101,105] | 13.5 [7.0,17.3] |
|  | 15 | 7.40 [7.37,7.54] | 5.46 [3.50,6.58] | 12.01 [11.69,14.44] | 25.2 [21.9,30.2] | 140 [137,142] | 103 [102,105] | 14.55 [8.5,19.6] |
| **0.03 mg/kg** | 0 | 7.40 [7.39,7.42] | 5.65 [5.38,6.19] | 11.81 [11.69,12.68] | 26.0 [23.7,27.9] | 141 [138,141] | 104 [102,104] | 14.8 [12.8,17.4] |
|  | 15 | 7.40 [7.40,7.43] | 5.32 [5.04,5.95] | 13.18 [11.63,13.24] | 24.3 [23.8,27.1] | 139 [137,140] | 103 [102,104] | 14.6 [12.8,17.4] |
| **0.10 mg/kg** | 0 | 7.41 [7.40,7.44] | 5.50 [4.77,5.99] | 12.28 [10.06,13.05] | 25.8 [22.50,27.60] | 140 [138,140] | 102 [100,103] | 17.8 [16.7,18.0] |
|  | 15 | 7.42 [7.39,7.47] | 5.59 [4.29,6.17] | 12.11 [11.85,13.70] | 25.8 [22.9,29.4] | 139 [139,139] | 102 [100,104] | 16.5 [15.8,16.7] |
| **0.175 mg/kg** | 0 | 7.42 [7.40,7.48] | 5.57 [4.51,5.88] | 12.85 [12.55,14.26] | 25.8 [24.2,27.6] | 140 [138,142] | 104 [101,105] | 13.8 [13.1,16.5] |
|  | 15 | 7.42 [7.41,7.47] | 5.44 [4.33,5.77] | 12.96 [12.50,14.40] | 25.0 [22.0,27.4] | 139 [137,141] | 103 [100,105] | 14.7 [14.0,15.9] |
| **0.25 mg/kg** | 0 | 7.42 [7.41,7.52] | 5.59 [3.98,5.86] | 13.07 [11.51,15.04] | 26.4 [23.6,28.2] | 140 [137,142] | 103 [102,105] | 15.1 [9.6,16.2] |
|  | 15 | 7.42 [7.40,7.48] | 5.23 [4.49,6.00] | 12.01 [10.94,14.03] | 24.6 [22.7,28.1] | 139 [138,142] | 102 [102,104] | 16.8 [11.2,18.2] |
| **0.25 mg/kg + fentanyl** | 0 | 7.41 [7.40,7.43] | 5.63 [4.92,6.05] | 12.85 11.92,13.86] | 25.6 [24.2,27.9] | 139 [138,141] | 105 [102,106] | 12.4 [12.2,14.5] |
|  | 15 | 7.38 [7.37,7.38] | 6.12 [5.77,6.61] | 11.97 [11.21,12.78] | 26.4 [24.4,28.0] | 140 [139,141] | 104 [101,105] | 13.2 [12.8,14.7] |
| **0.35 mg/kg** | 0 | 7.42 [7.42,7.56] | 5.31 [3.13,5.75] | 13.08 [12.38,15.62] | 25.5 [20.7,27.3] | 139 [138,140] | 103 [101,105] | 15.0 [11.6,19.7] |
|  | 15 | 7.43 [7.39,7.52] | 5.11 [3.71,5.68] | 13.15 [11.52,14.46] | 23.4 [22.1,25.9] | 139 [138,140] | 103 [101,105] | 15.1 [14.2,18.8] |
| **0.35 mg/kg + fentanyl** | 0 | 7.42 [7.42,7.42] | 5.78 5.64,5.85] | 12.57 [10.88,12.69] | 27.5 [26.8,27.8] | 140 [139,142] | 103 [101,104] | 15.0 [12.1,15.3] |
|  | 15 | 7.39 [7.36,7.40] | 6.25 [5.94,6.41] | 12.04 [11.45,12.99] | 27.1 [26.1,28.7] | 140 [139,141]  | 103 [100,104] | 14.1 [13.0,15.6] |
| **0.50 mg/kg** | 0 | 7.41 [7.39,7.44] | 5.51 [4.99,6.03] | 12.39 [10.95,12.69] | 24.9 [22.6,28.2] | 140 [137,141] | 103 [100,104] | 16.4 [15,18.8] |
|  | 15 | 7.42 [7.40,7.43] | 5.45 [5.14,5.84] | 12.2 [10.96,12.44] | 26.2 [24.1,26.7] | 140 [138,142] | 104 [101.104] | 14.6 [14,17.1] |
| **0.75 mg/kg** | 0 | 7.41 [7.41,7.47] | 5.67 [4.18,5.79] | 12.02 [11.20,18.40] | 26.2 [22.5,27.4] | 140 [137,141] | 106 [101,107] | 10.2 [7.3,15.2] |
|  | 15 | 7.41 [7.37,7.43] | 5.66 [4.89,5.93] | 12.53 [11.00,13.34] | 26.2 [22.0,27.3] | 139 [138,141] | 106 [102,106] | 13.3 [6.8,14.0] |
| **1.00 mg/kg** | 0 | 7.40 [7.39,7.45] | 5.63 [4.63,5.98] | 13.36 [12.08,13.90] | 26.5 [23.4,26.9] | 140 [139,141] | 104 [103,104] | 13.9 [12.4,17.7] |
|  | 15 | 7.40 [7.37,7.505] | 5.23 [4.32,5.64] | 13.05 [11.36,17.68] | 25.0 [21.9,25.4] | 140 [139,142] | 103 [103,104] | 17.3 [14.8,18.8] |