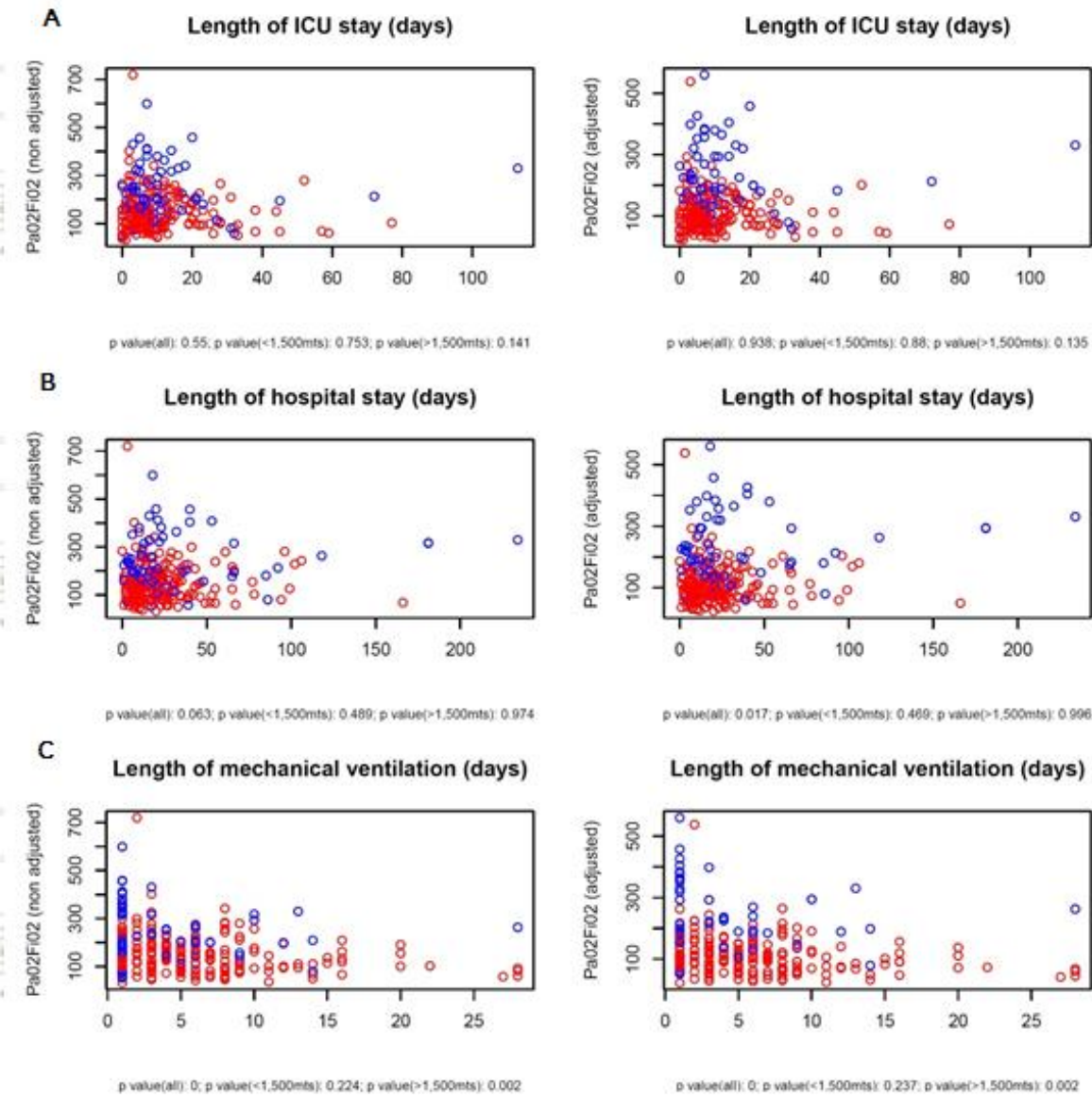
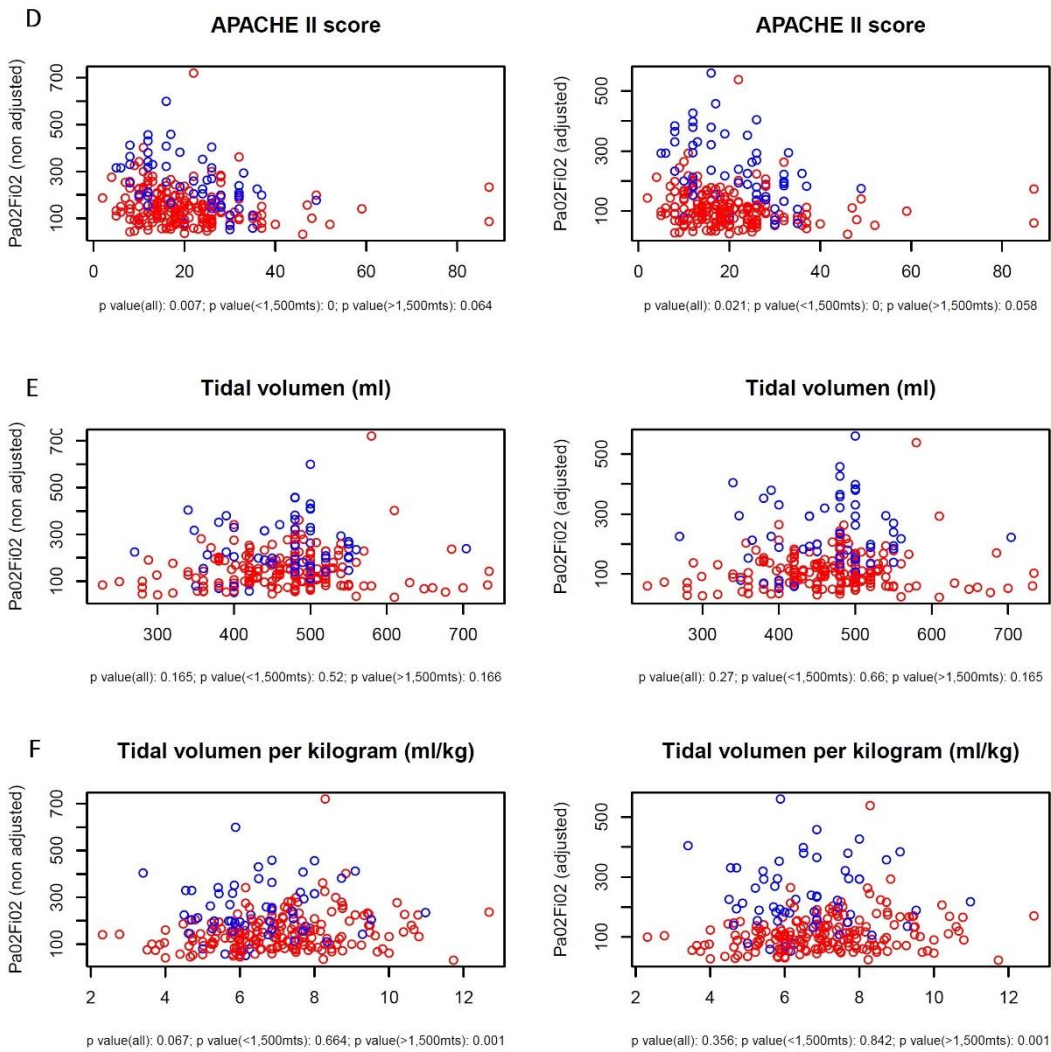
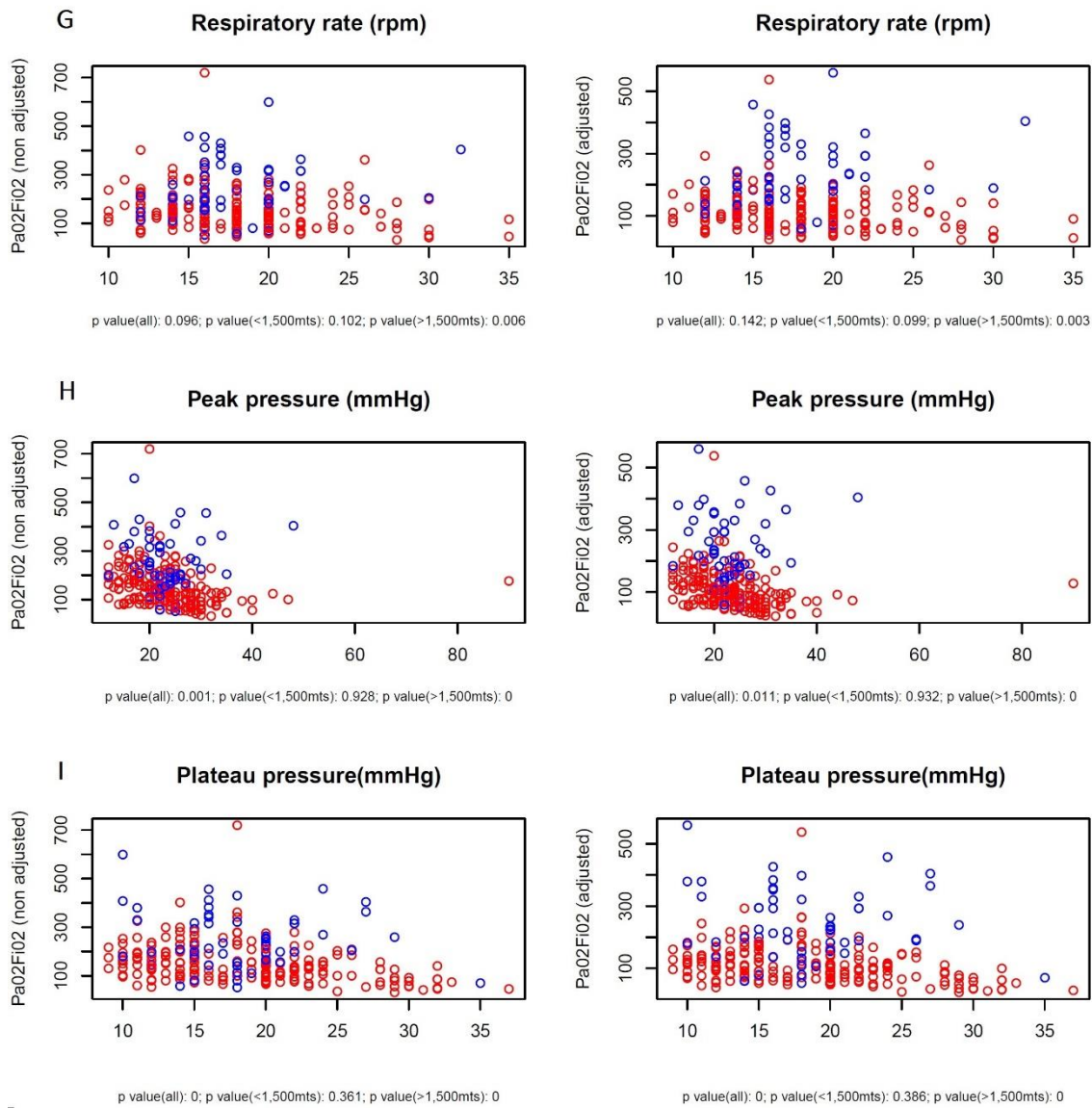
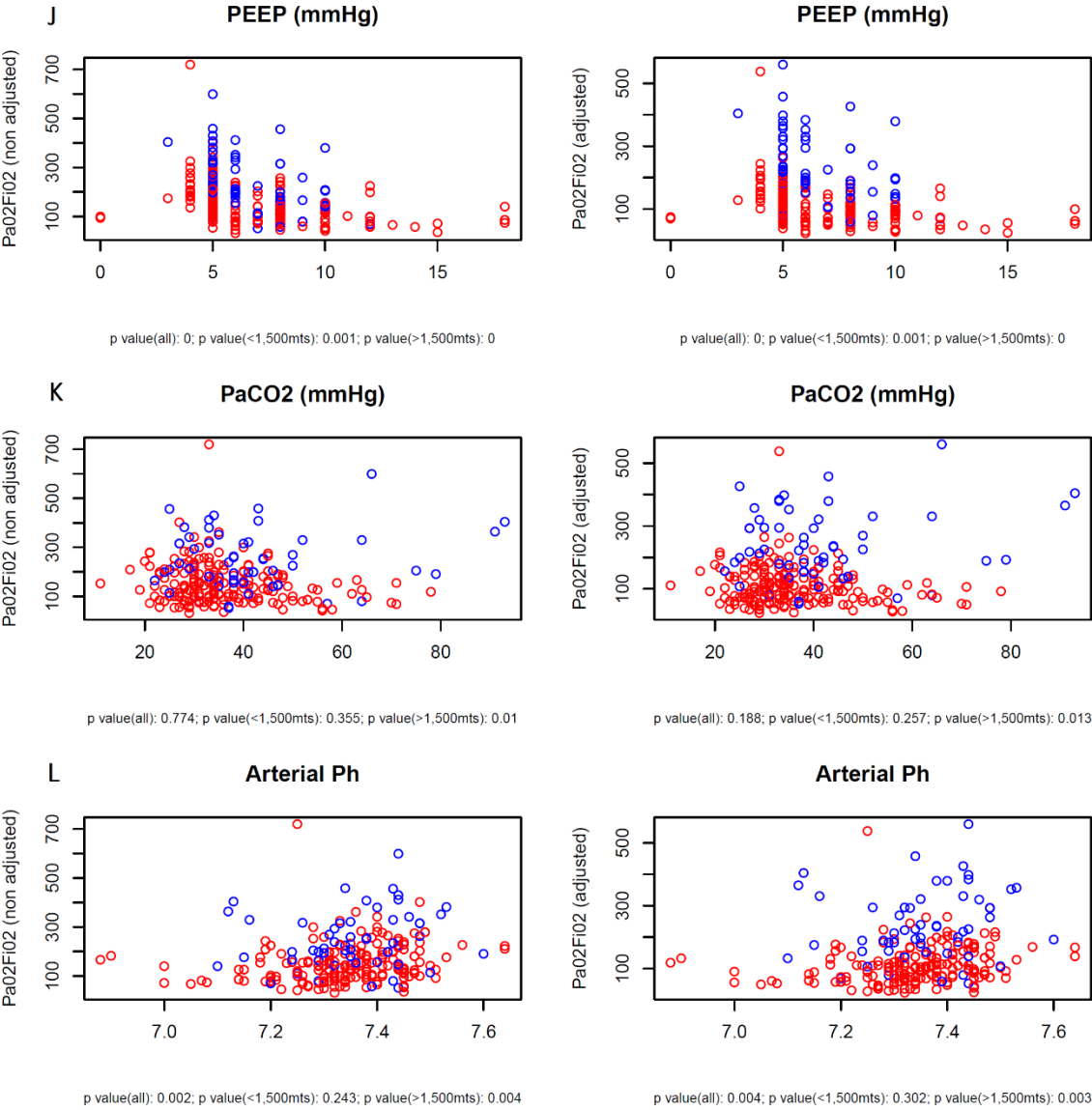


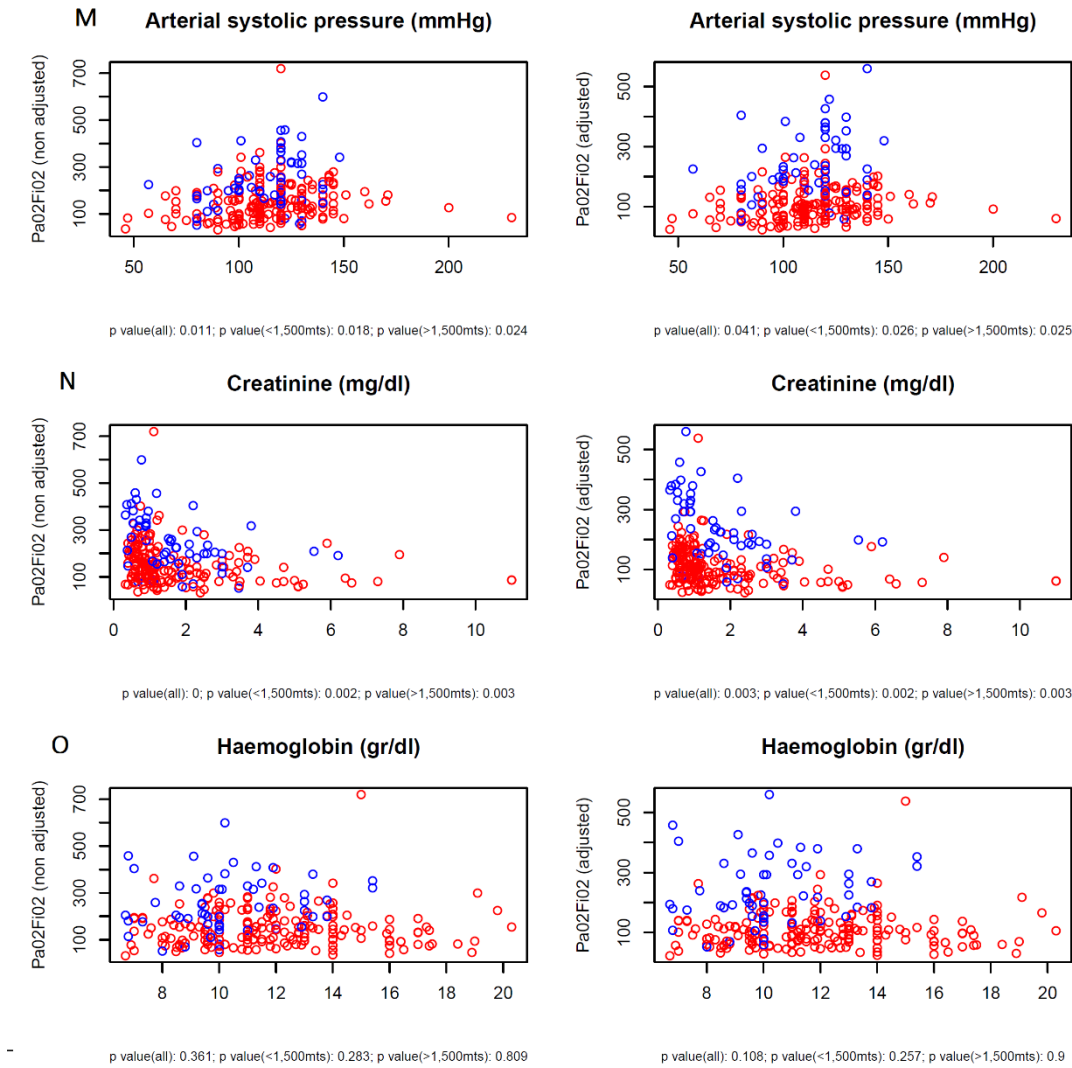
Supplement. figure 1. Correlation between PaO2FiO2 adjusted and non-adjusted by altitude above the sea level

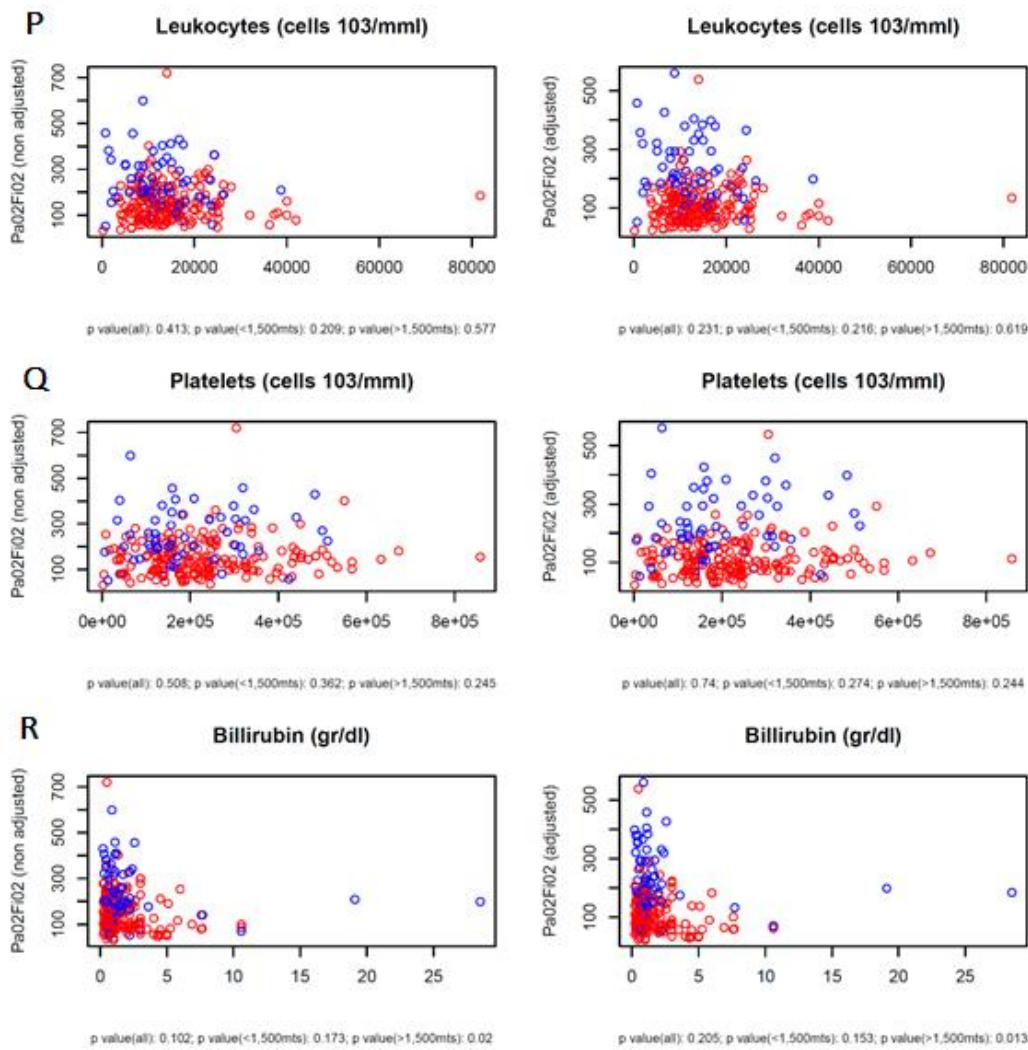


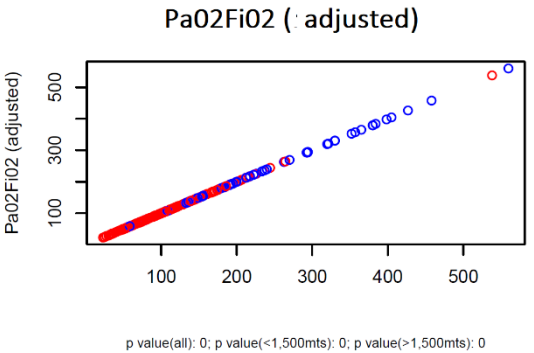
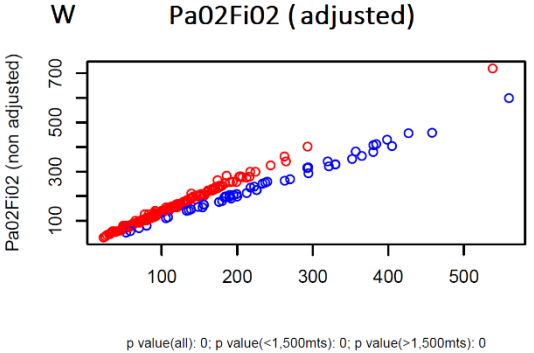
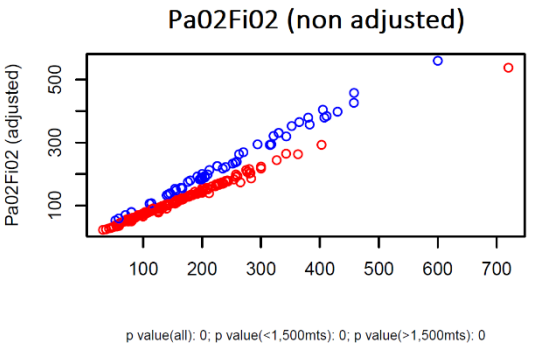
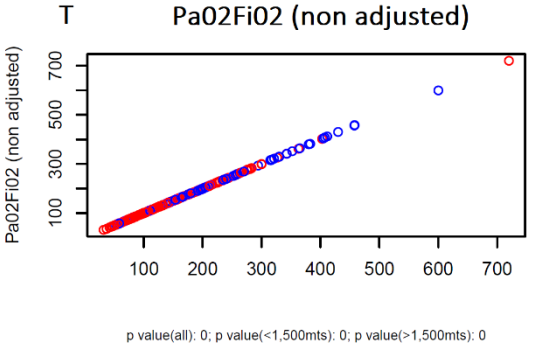
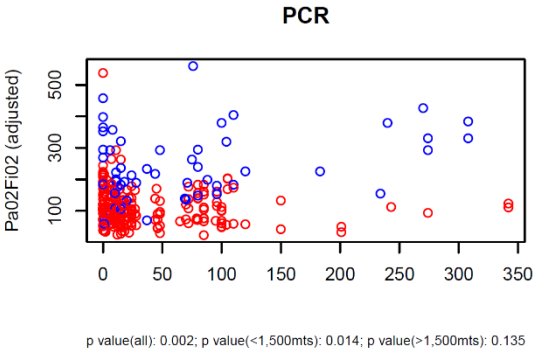
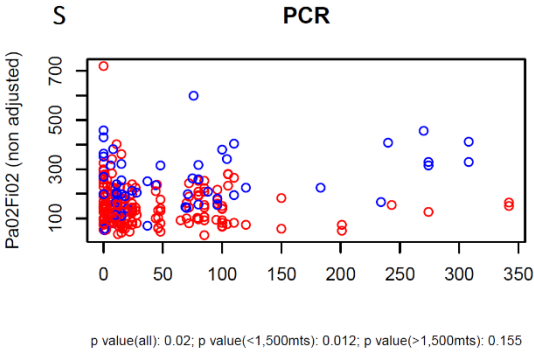












Supplementary table 1: Univariate between high vs lowlanders

	All patients (n=249)	≥1,500m (n=194)	<1,500m (n=55)	P value
Female	102(0.41)	79(0.41)	23(0.42)	1.000
Body mass index (kg/m ²)	25.25(22.89,28.4)	24.86(22.67,27.98)	26.31(23.69,30.04)	0.073
Age (years old)	60(43,72)	57(39.5,72)	65(53,71)	0.256
APACHE II	18(12,26)	18(12.25,25)	22(12,29)	0.120
Length of mechanical ventilation (days)	4(1,8)	5(2,8)	1(1,6)	0.001
Length of ICU stay (days)	8(4,14)	8(4,13)	9(5,15)	0.336
Length of hospital stay (days)	18(9,30)	18(9,28.75)	20(11.5,39.5)	0.161
Comorbidities				
Chronic obstructive pulmonary disease	52(0.21)	37(0.19)	15(0.27)	0.257
Diabetes	41(0.16)	27(0.14)	14(0.25)	0.067
Chronic heart failure	48(0.19)	38(0.2)	10(0.18)	0.968
Chronic renal failure	40(0.16)	30(0.15)	10(0.18)	0.782
Current solid cancer	21(0.08)	9(0.05)	12(0.22)	0.000
Current hemato-oncologic cancer	10(0.04)	8(0.04)	2(0.04)	1.000
Respiratory variables				
Tidal volumen (ml)	480(420,500)	480(420,500)	480(410,500)	0.710
Tidal volumen per kilogram (ml/kg)	6.9±1.67	7±1.71	6.55±1.45	0.053
Peak pressure (mmHg)	22(19,27)	23(18.25,27)	22(20,25)	0.952
Plateau pressure(mmHg)	18(14,22)	18.5(14,22)	18(15,20.5)	0.896
PEEP (mmHg)	6(5,8)	6(5,8)	6(5,8)	0.755
Respiratory rate (rpm)	18(15,20)	18(14,20)	17(16,20)	0.485
PaO ₂ /FiO ₂ non-adjusted	154(100,216.67)	140(94.71,190.83)	226(171.33,325.62)	0.000
PaO ₂ /FiO ₂ adjusted	111.94(73.98,174.39)	100.71(69.95,138.76)	222.32(166.01,320.55)	0.000
PaCO ₂ (mmHg)	34(29,42)	34(29,41)	38(32,45)	0.015
Systemic variables				
Arterial systolic pressure (mmHg)	115(100,128)	113(100,127.75)	120(100,126.5)	0.865
Arterial pH	7.35(7.29,7.42)	7.34(7.29,7.41)	7.35(7.29,7.44)	0.407
Haemoglobin (gr/dl)	11.2(9.6,13)	11.5(9.8,13.47)	10(9.14,11.45)	0.000
Platelets (cells				

Supplementary table 2. Cochran-Mantel-Haenszel test (PaO₂FiO₂ and mortality stratified according to altitude above sea level)

PaO ₂ FiO ₂		>=1,500mts		<1,500mts	
not adjusted	All patients	Survivors	Non survivors	Survivors	Non survivors
<100	59	30	24	2	3
100-149	59	31	23	5	0
150-199	52	36	7	6	3
200-300	53	30	6	8	9
>300	26	6	1	16	3
adjusted	All patients	Survivors	Non survivors	Survivors	Non survivors
<100	100	52	43	2	3
100-149	66	48	12	6	0
150-199	40	22	5	7	6
200-300	27	11	0	10	6
>300	16	0	1	12	3

(a) No adjusted PaO₂FiO₂

Cochran-Mantel-Haenszel $M^2 = 16.428$, df = 4, p-value = 0.002495

(b) Adjusted PaO₂FiO₂

Cochran-Mantel-Haenszel $M^2 = 19.097$, df = 4, p-value = 0.0007523