Fig. 1

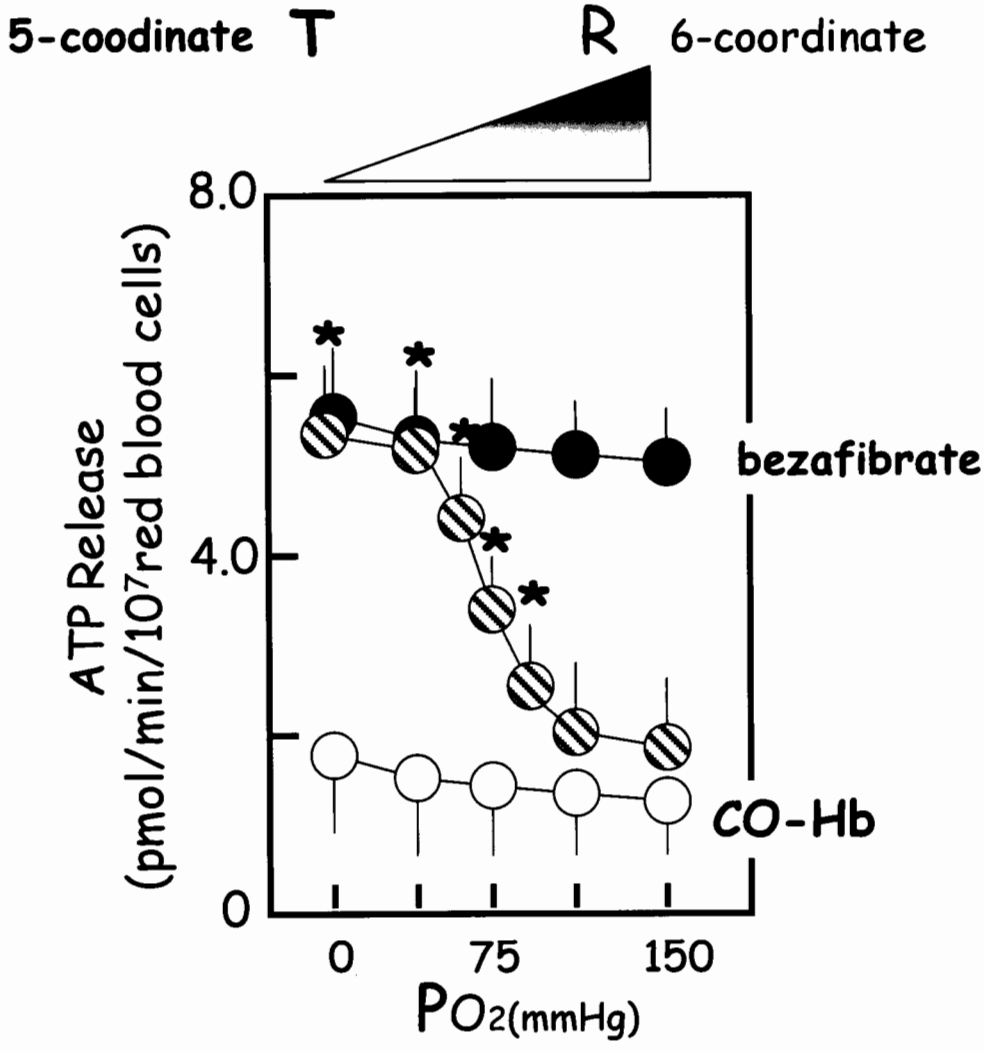

5-coodinate
T
R
6-coordinate
8.0
4.0
0
ATP Release
(pmol/min/10⁷red blood cells)
bezafibrate
CO-Hb
0
75
150
PO2(mmHg)

Fig. 2

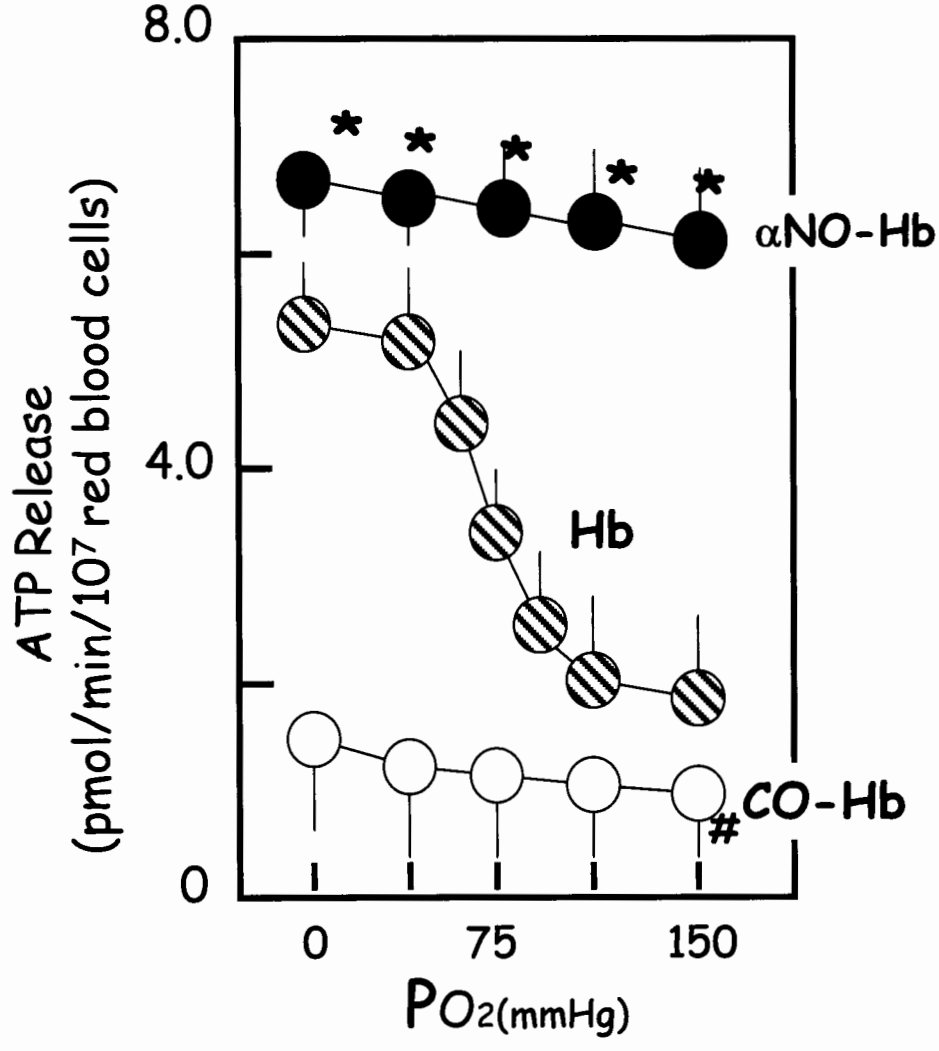

8.0
4.0
0
ATP Release
(pmol/min/10⁷ red blood cells)
αNO-Hb
Hb
#CO-Hb
0
75
150
PO2(mmHg)

Fig. 3

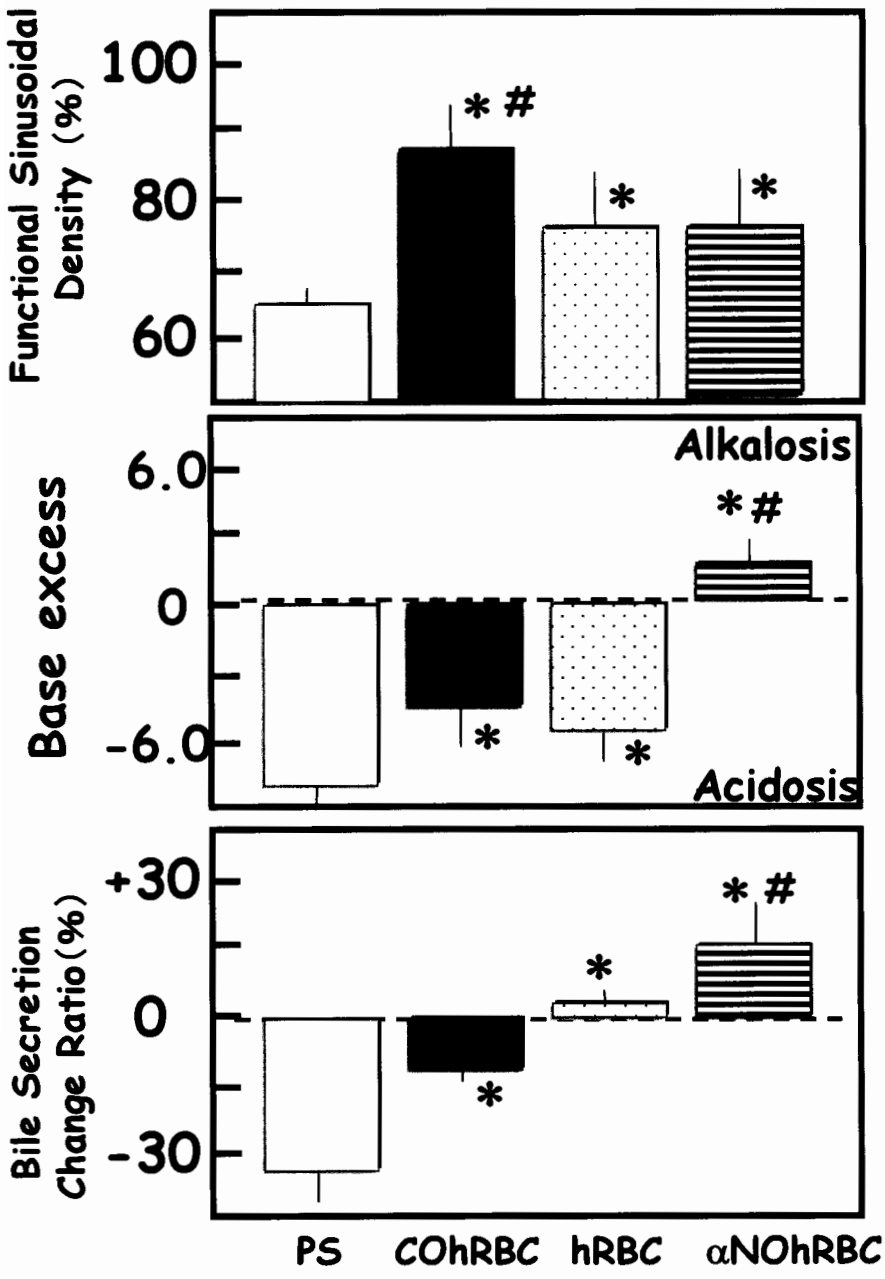

Functional Sinusoidal Density (%)
100
80
60
* #
*
*
Base excess
6.0
0
-6.0
Alkalosis
Acidosis
* #
*
*
Bile Secretion Change Ratio(%)
+30
0
-30
* #
*
*
PS
COhRBC
hRBC
αNOhRBC

Fig. 4

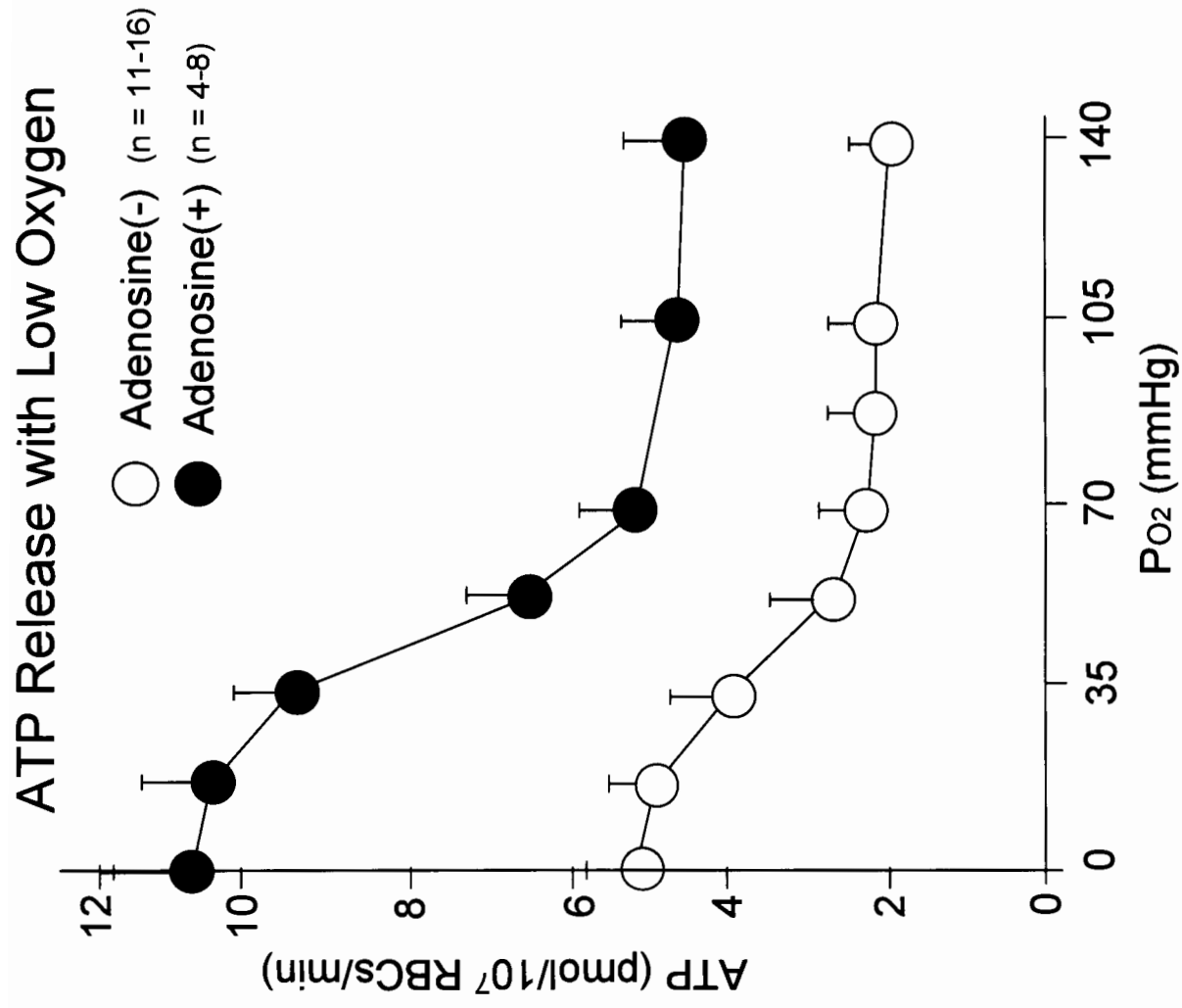
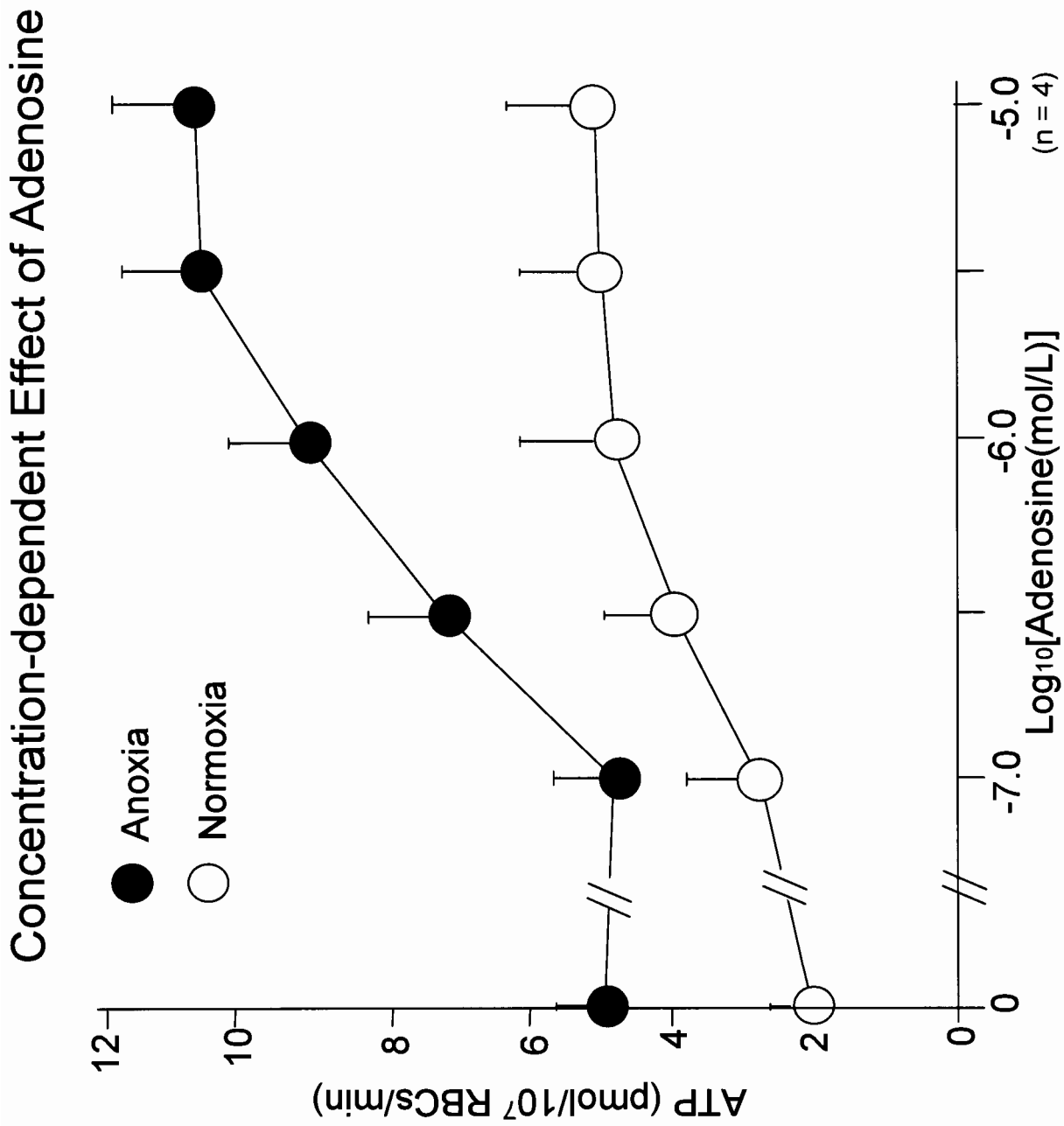

ATP Release with Low Oxygen
Adenosine(-) (n = 11-16)
Adenosine(+) (n = 4-8)
ATP (pmol/10⁷ RBCs/min)
0
2
4
6
8
10
12
0
35
70
105
140
PO2 (mmHg)

Fig. 5


Concentration-dependent Effect of Adenosine
Anoxia
Normoxia
ATP (pmol/10⁷ RBCs/min)
12
10
8
6
4
2
0
0
-7.0
-6.0
-5.0
(n = 4)
Log10[Adenosine(mol/L)]

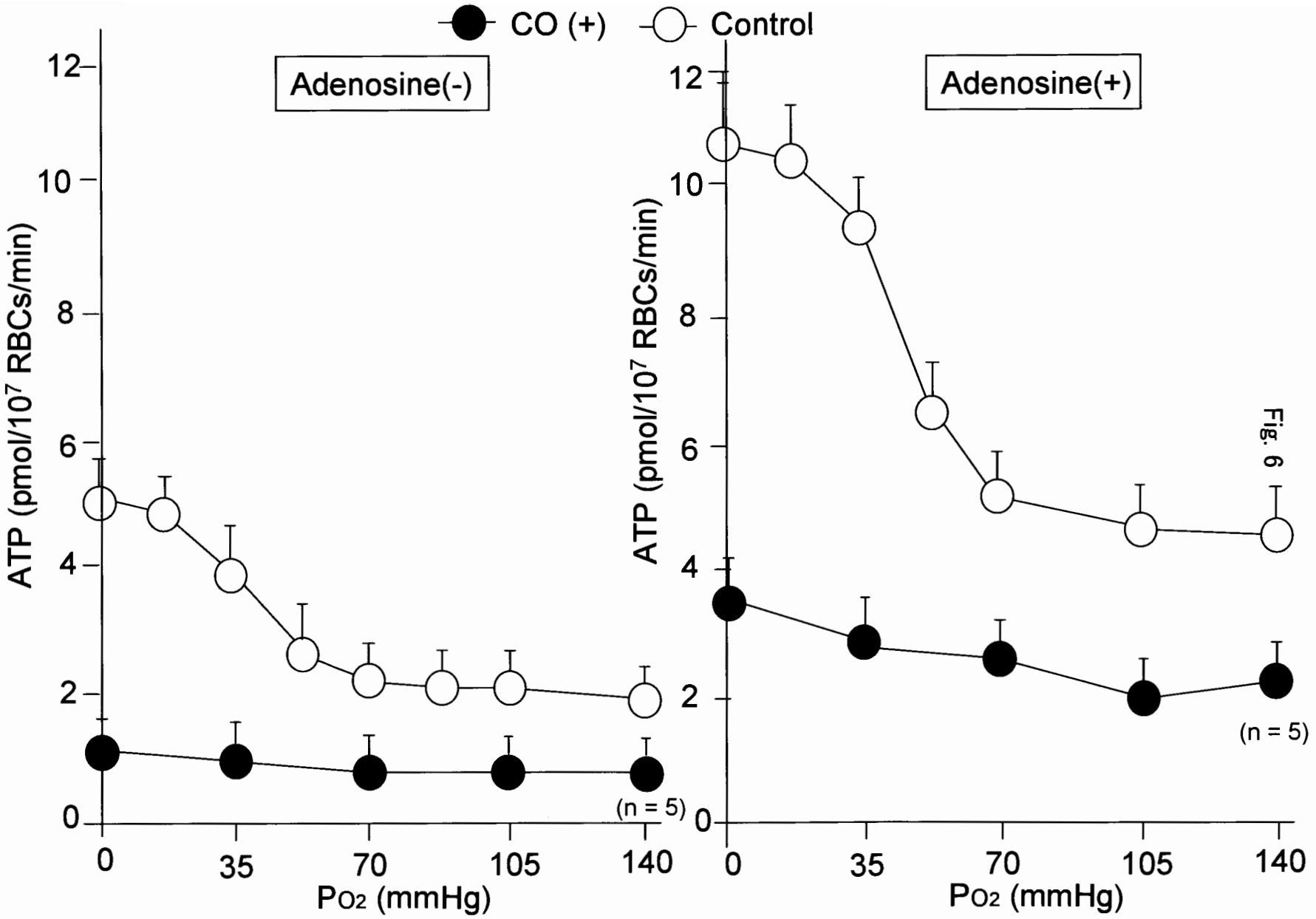

CO (+)
Control
Adenosine(-)
Adenosine(+)
ATP (pmol/10^7 RBCs/min)
PO2 (mmHg)
0
2
4
6
8
10
12
0
35
70
105
140
(n = 5)
(n = 5)

Fig. 6

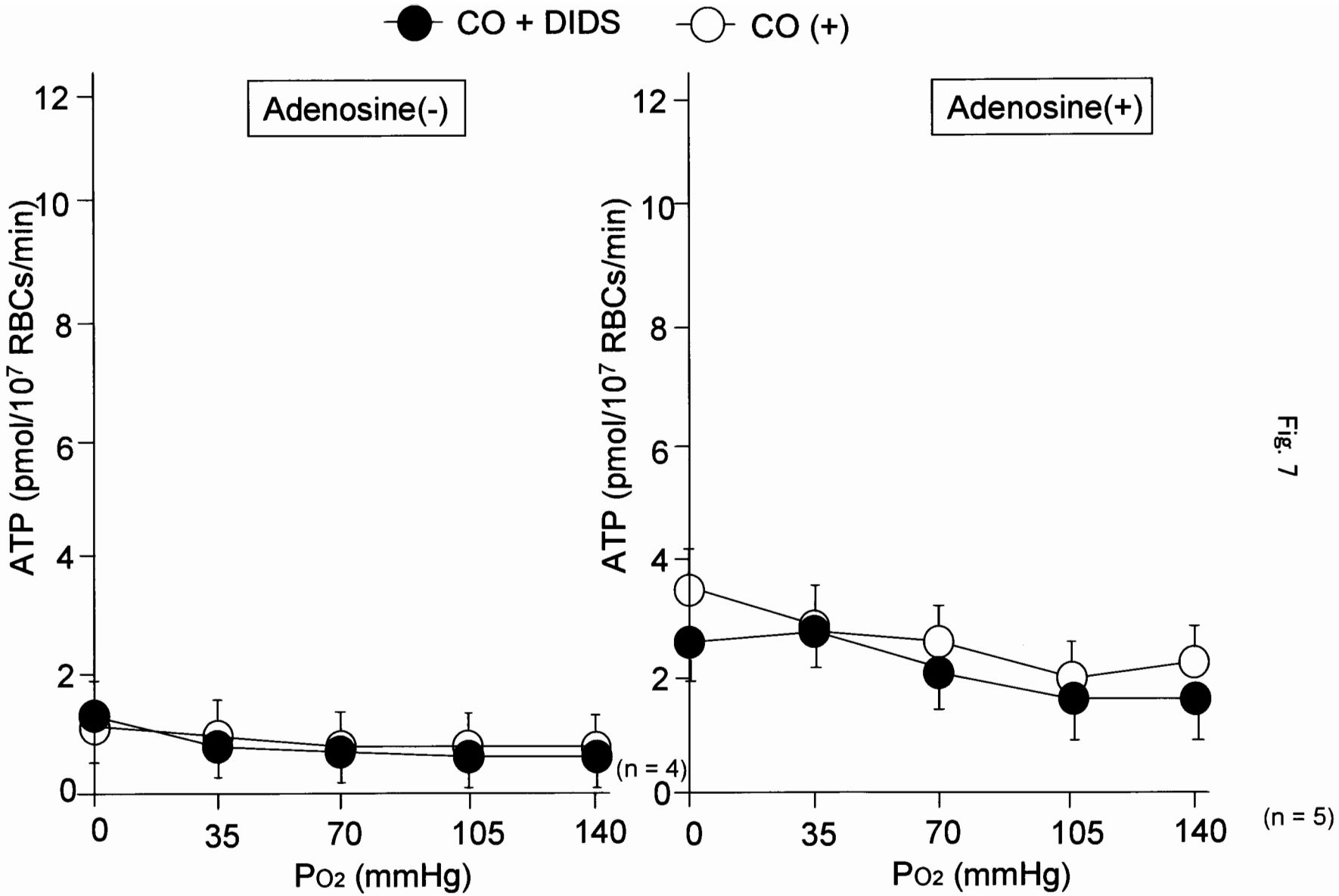

CO + DIDS
CO (+)
Adenosine(-)
Adenosine(+)
ATP (pmol/10⁷ RBCs/min)
PO2 (mmHg)
0
2
4
6
8
10
12
0
35
70
105
140
(n = 4)
(n = 5)

Fig. 7

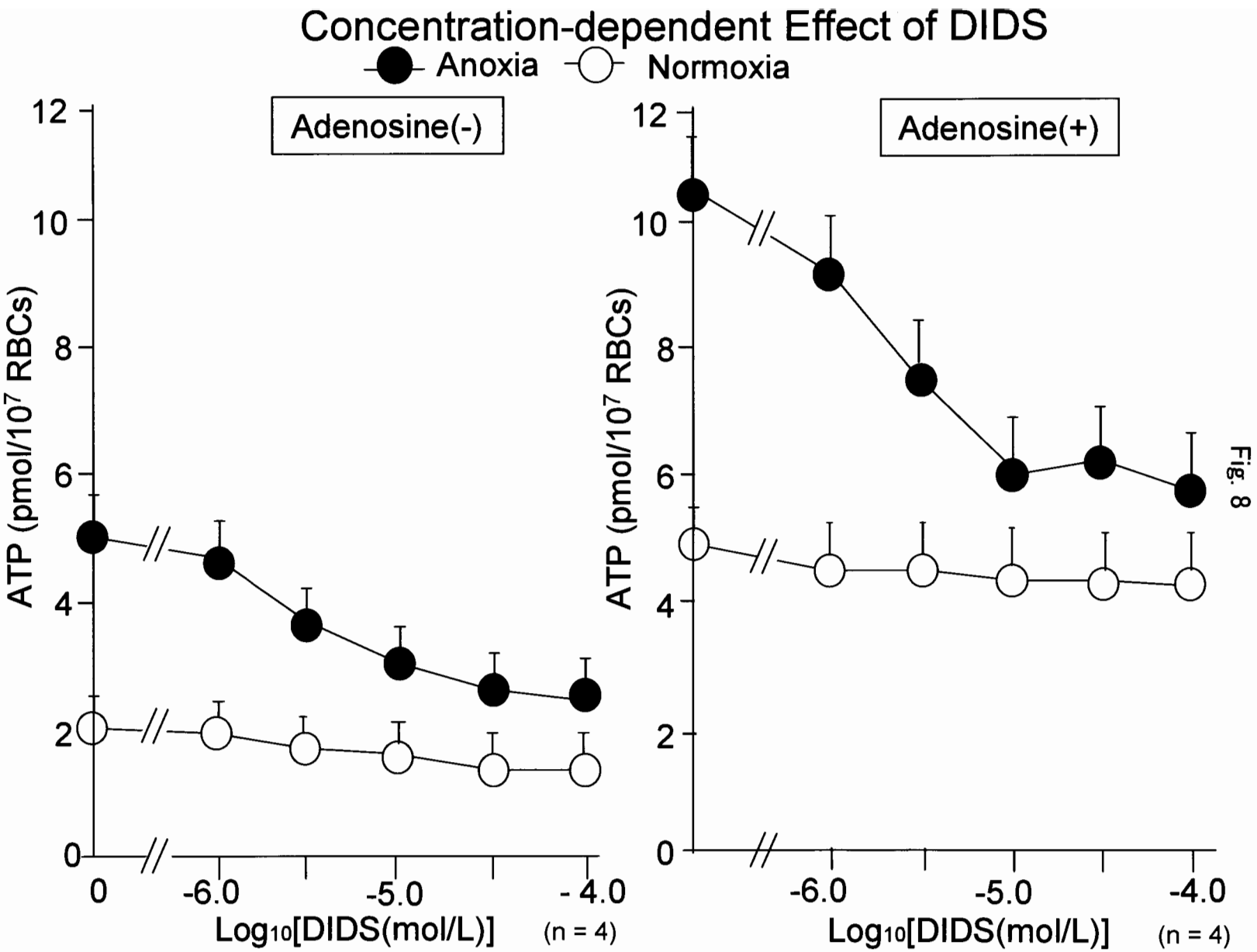

Concentration-dependent Effect of DIDS
Anoxia
Normoxia
Adenosine(-)
Adenosine(+)
ATP (pmol/10^7 RBCs)
12
10
8
6
4
2
0
0
-6.0
-5.0
- 4.0
Log10[DIDS(mol/L)]
(n = 4)

Fig. 8

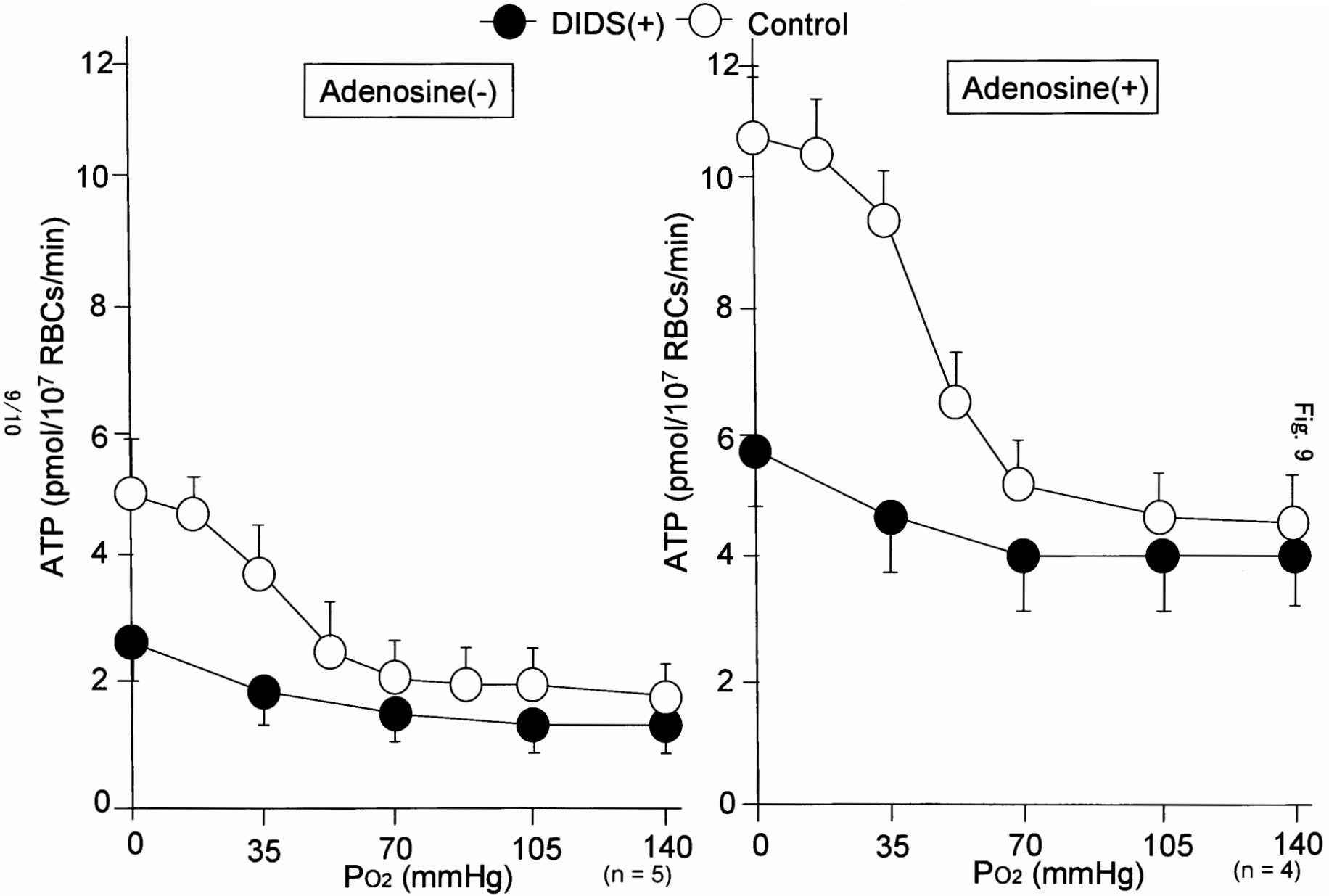
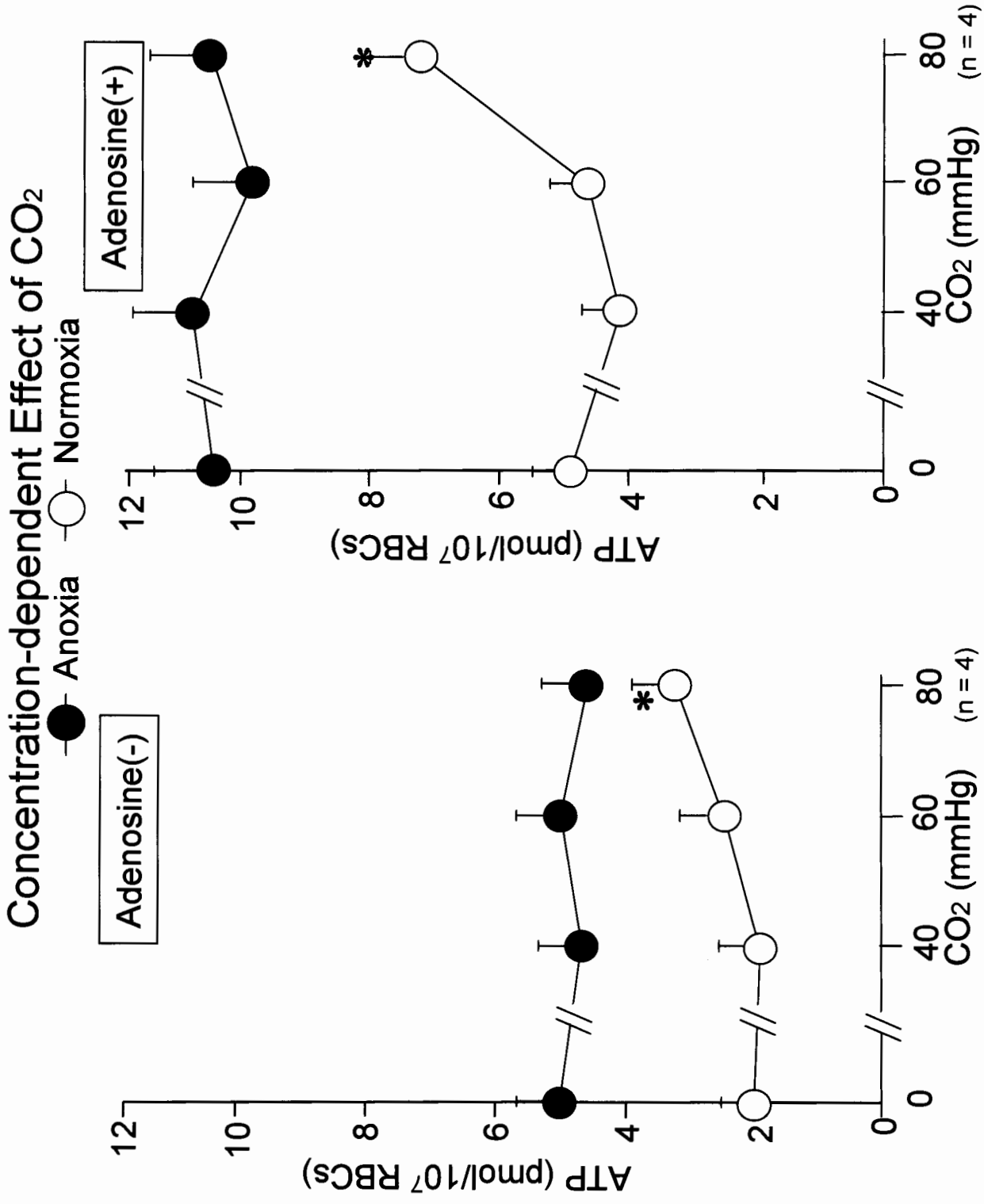

DIDS(+)
Control
Adenosine(-)
Adenosine(+)
ATP (pmol/10^7 RBCs/min)
PO2 (mmHg)
0
2
4
6
8
10
12
0
35
70
105
140
(n = 5)
(n = 4)

Fig. 9

Fig. 10


Concentration-dependent Effect of CO_2
Anoxia
Normoxia
Adenosine(-)
Adenosine(+)
ATP (pmol/10⁷ RBCs)
CO_2 (mmHg)
(n = 4)
*