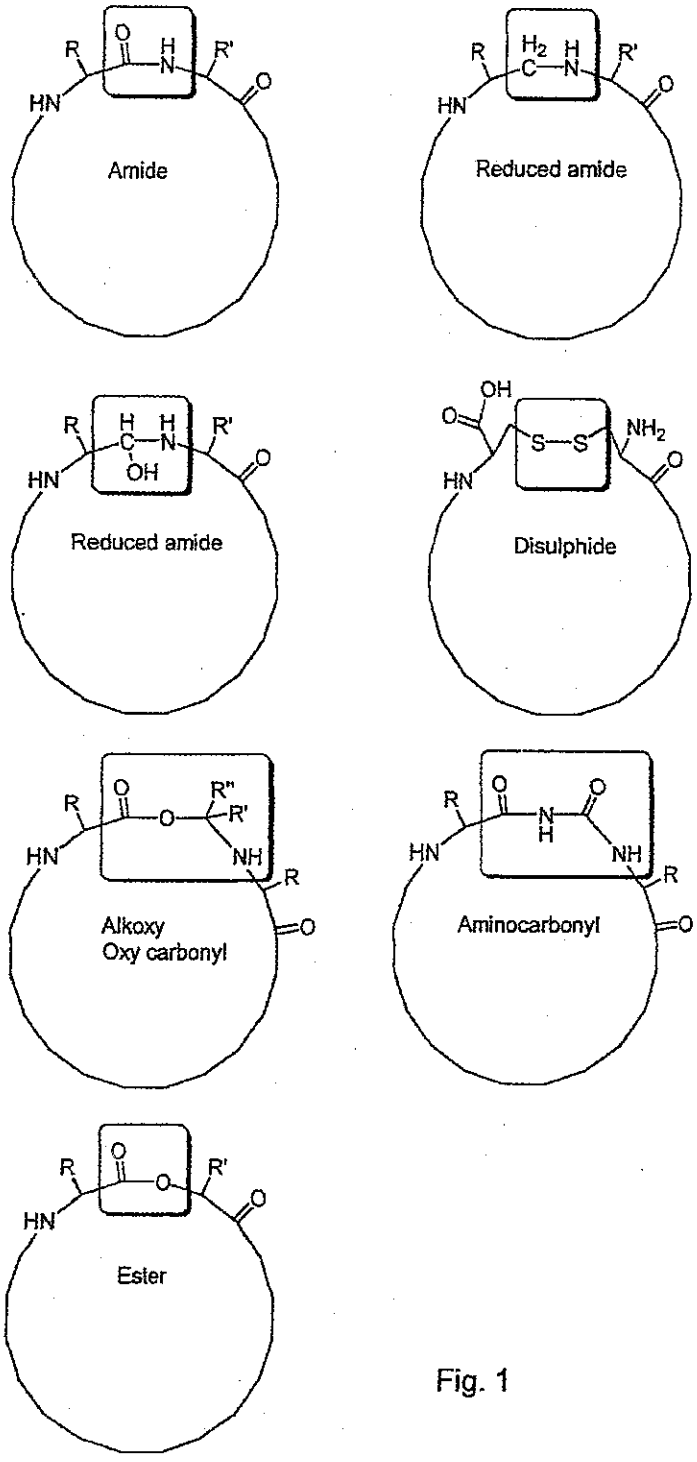

Amide
Reduced amide
Reduced amide
Disulphide
Alkoxy
Oxy carbonyl
Aminocarbonyl
Ester

Fig. 1

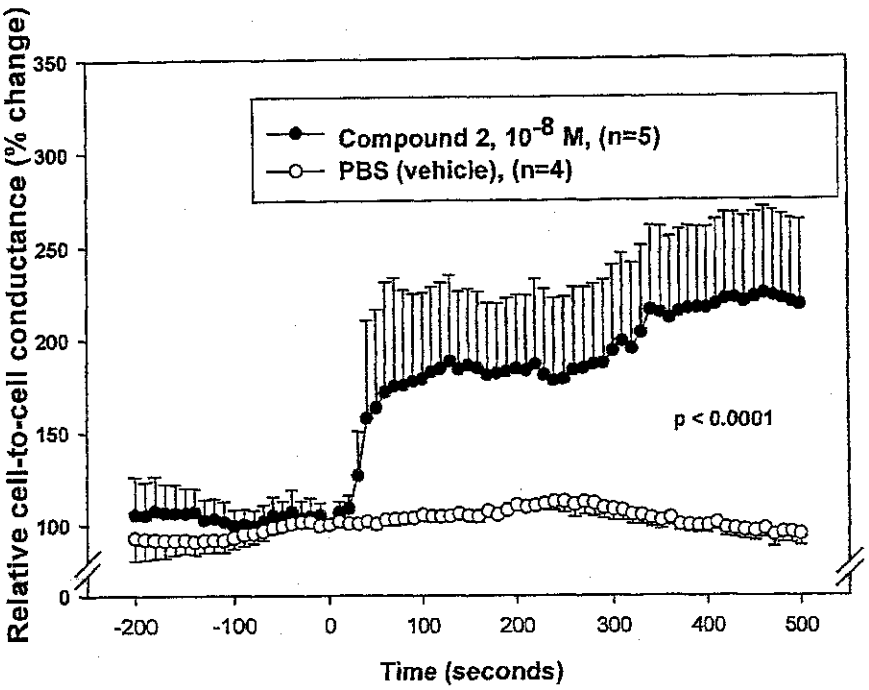

Relative cell-to-cell conductance (% change)
350
300
250
200
150
100
0
Compound 2, 10-8 M, (n=5)
PBS (vehicle), (n=4)
p < 0.0001
-200
-100
0
100
200
300
400
500
Time (seconds)

Fig. 2

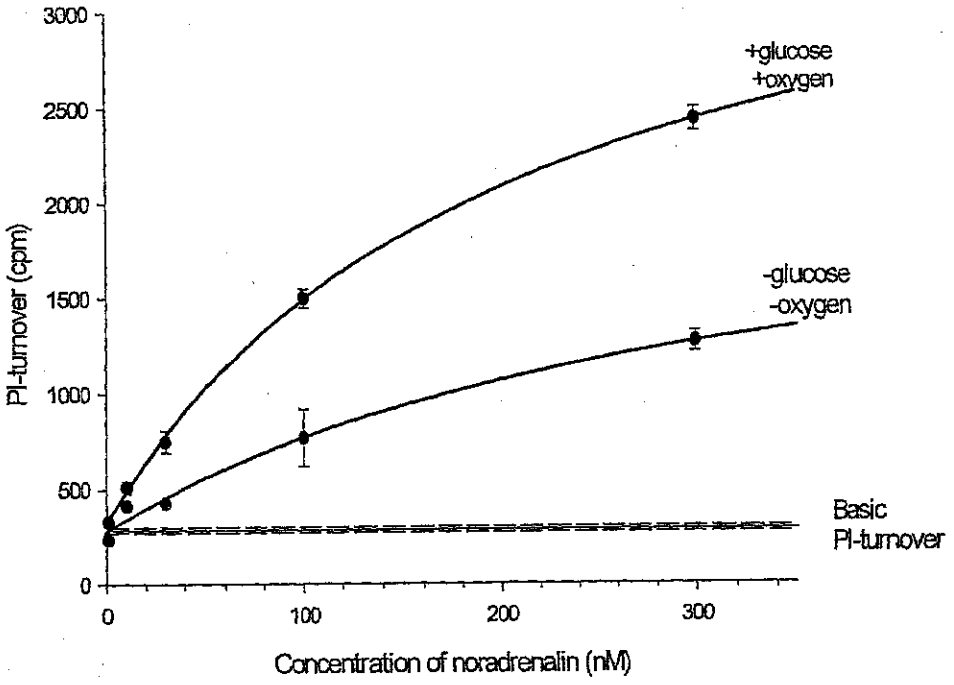

3000
2500
2000
1500
1000
500
0
PI-turnover (cpm)
0
100
200
300
Concentration of noradrenalin (nM)
+glucose
+oxygen
-glucose
-oxygen
Basic
PI-turnover

Fig. 3

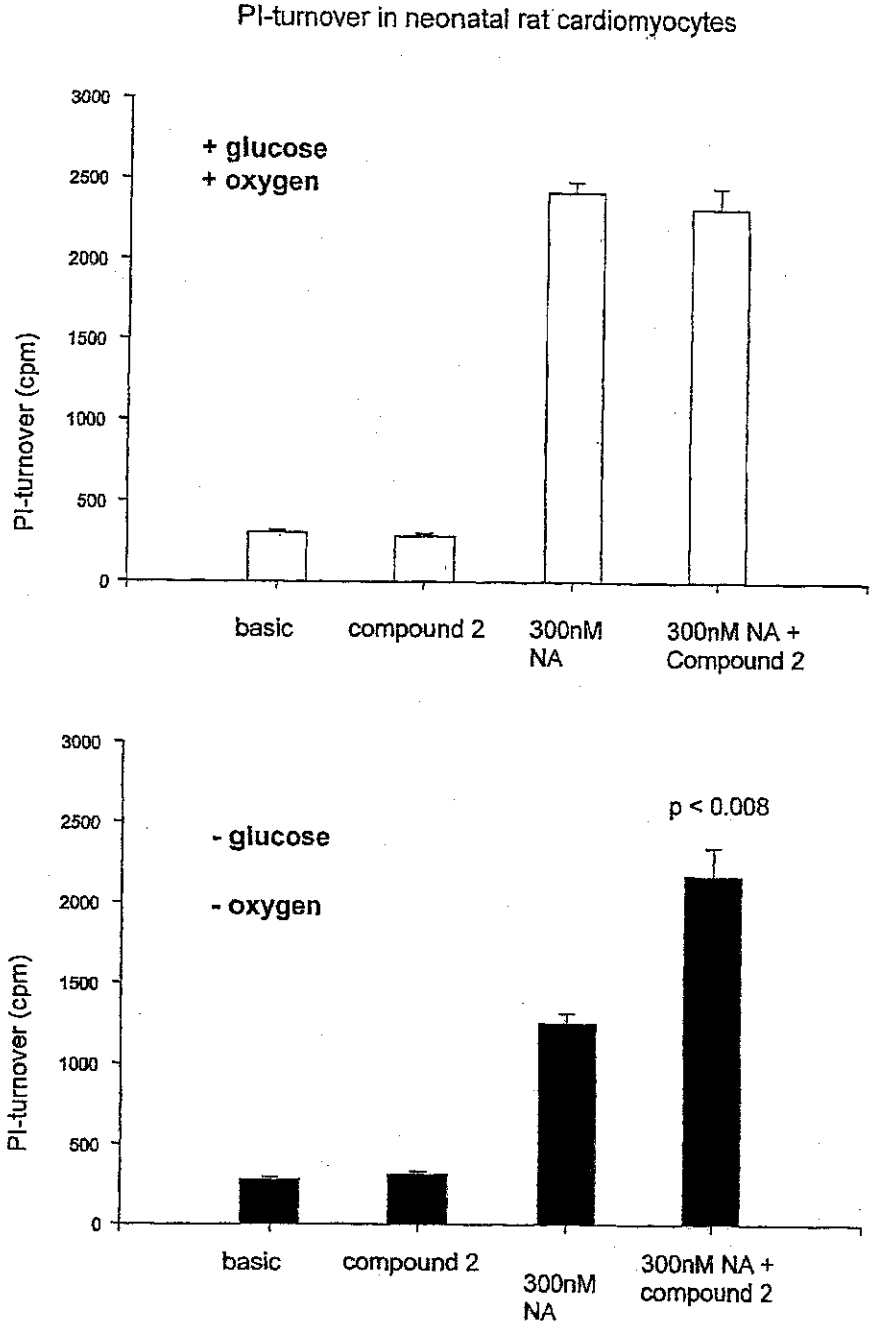
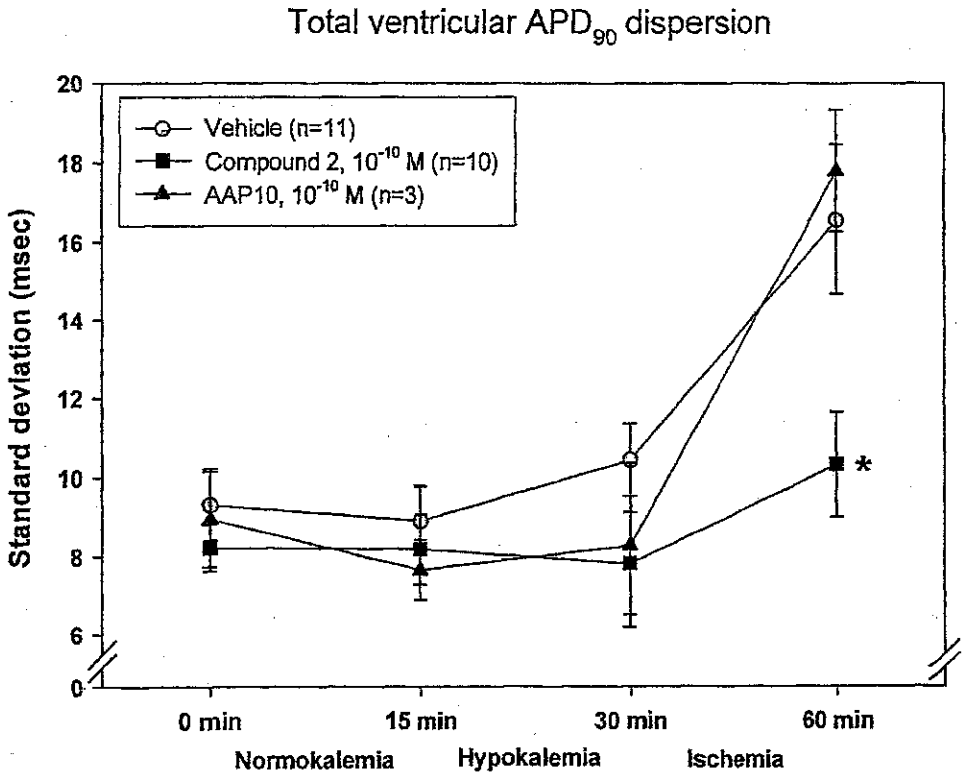

PI-turnover in neonatal rat cardiomyocytes
+ glucose
+ oxygen
PI-turnover (cpm)
3000
2500
2000
1500
1000
500
0
basic
compound 2
300nM NA
300nM NA + Compound 2
- glucose
- oxygen
p < 0.008
PI-turnover (cpm)
3000
2500
2000
1500
1000
500
0
basic
compound 2
300nM NA
300nM NA + compound 2

Fig. 4



*: p<0.05 *versus* vehicle

Fig. 5

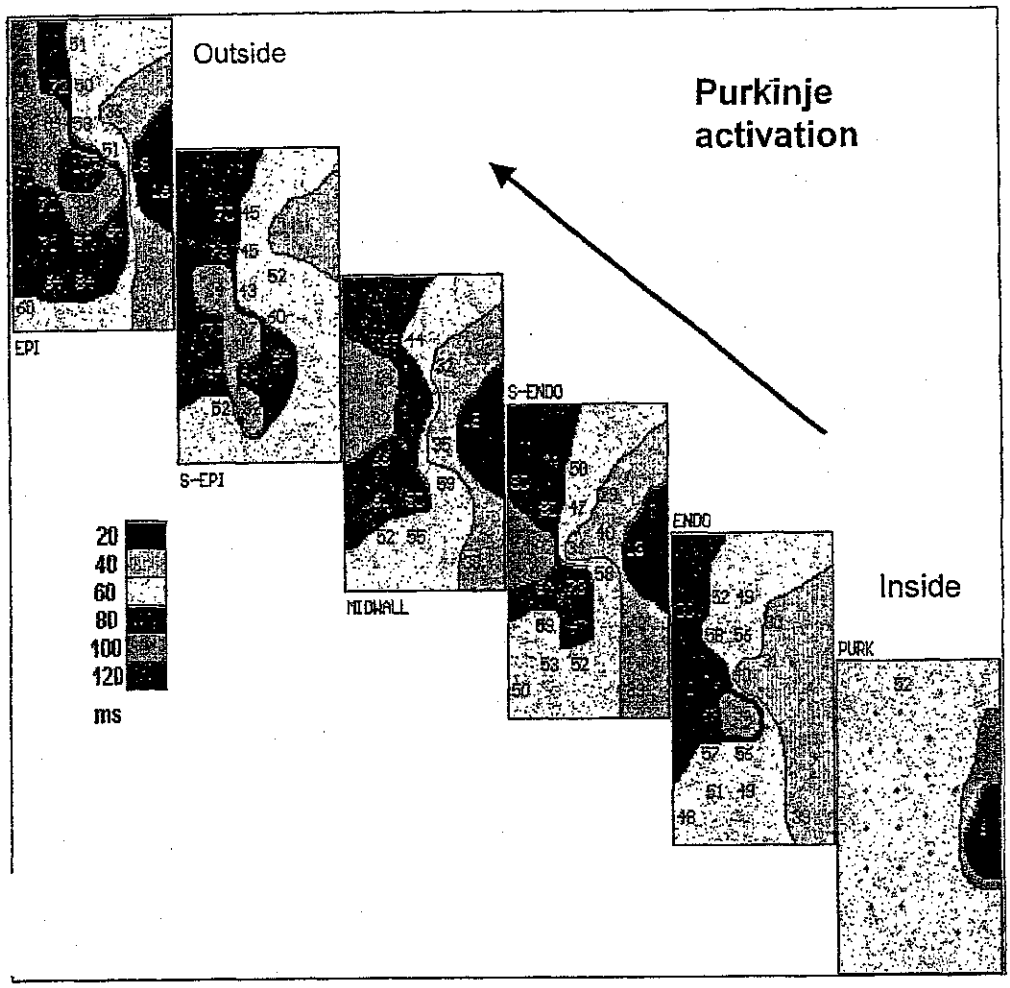

Outside
Purkinje activation
Inside
EPI
S-EPI
MIDWALL
S-ENDO
ENDO
PURK
20
40
60
80
100
120
ms

Fig. 6

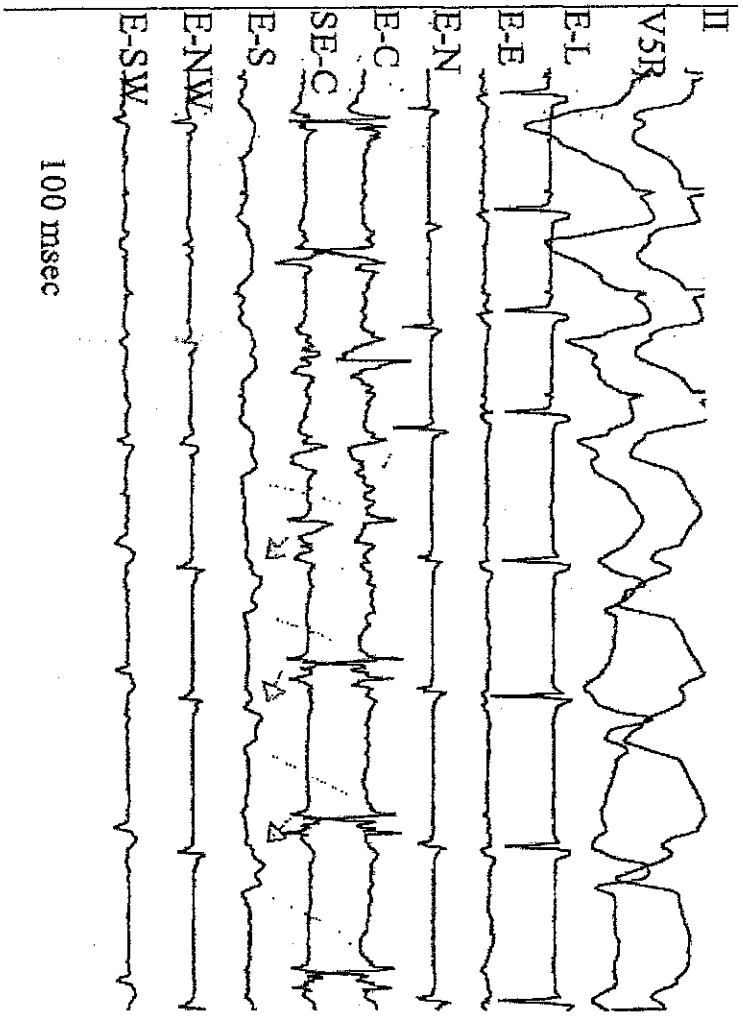


Fig. 7

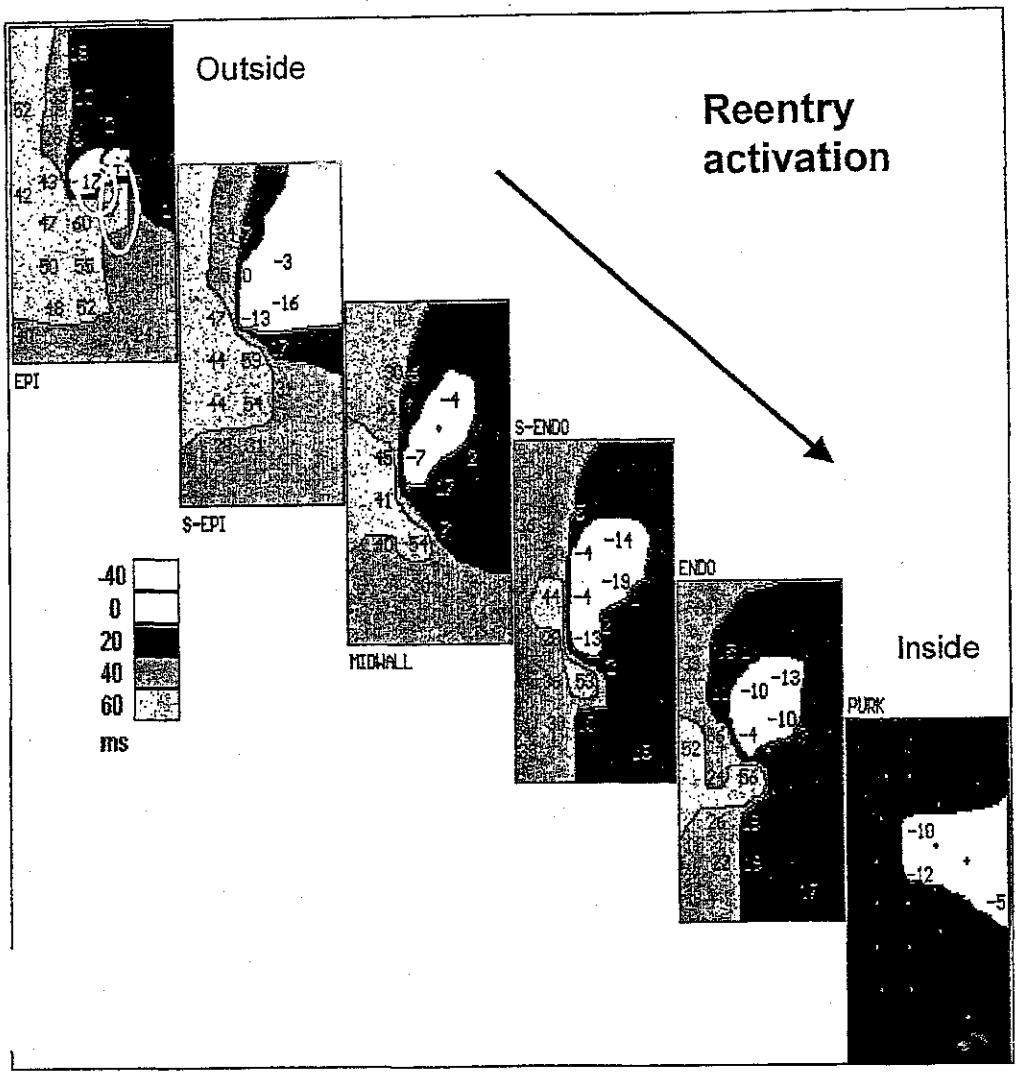

Outside
Reentry activation
Inside
EPI
S-EPI
MIDWALL
S-ENDO
ENDO
PURK
-40
0
20
40
60
ms

Fig. 8

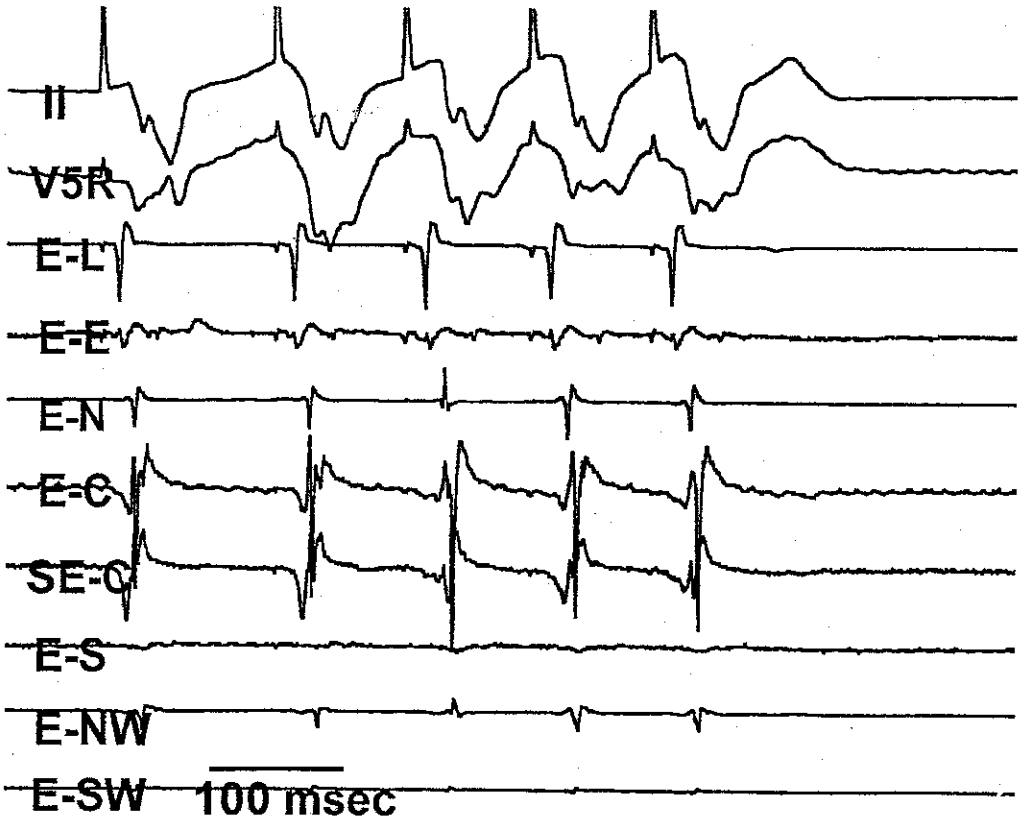


Fig. 9

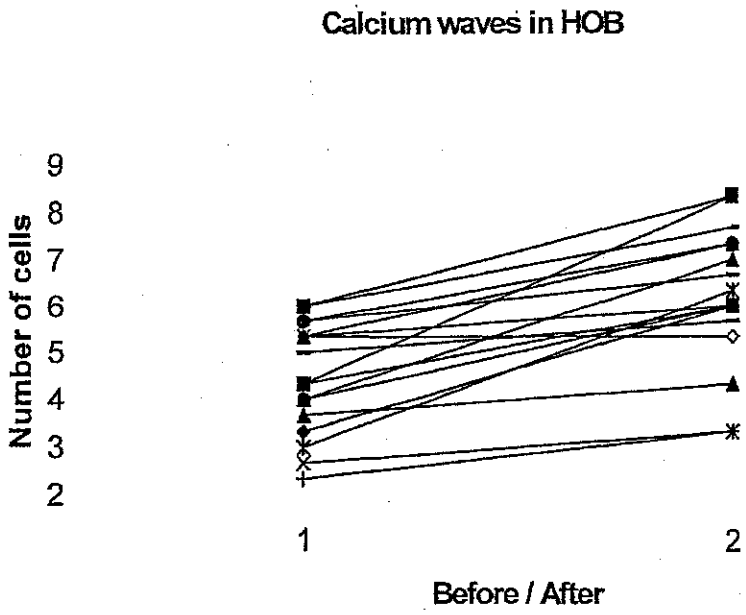

Calcium waves in HOB
Number of cells
9
8
7
6
5
4
3
2
1
2
Before / After

Fig. 10

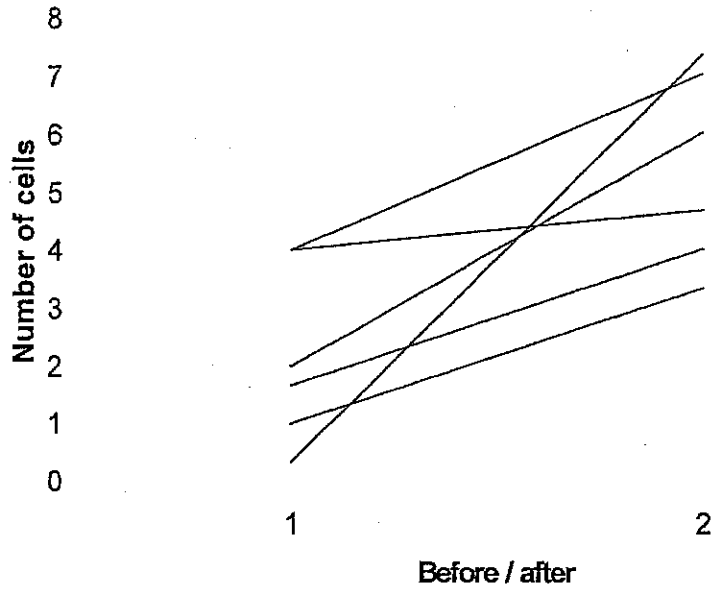

Calcium waves in ROS after 48hr. in 3-6% O_2
Number of cells
0
1
2
3
4
5
6
7
8
1
2
Before / after

Fig. 11

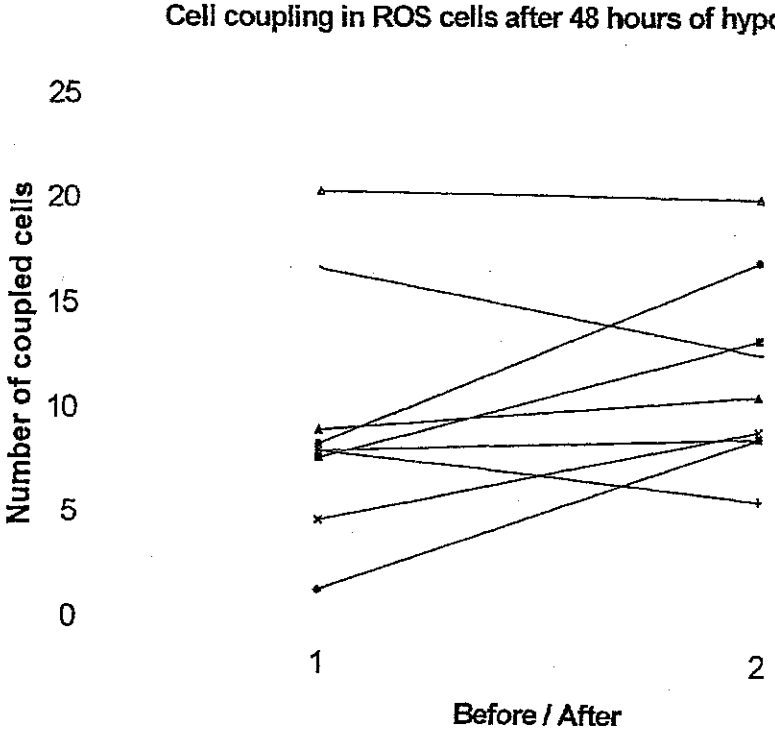

Cell coupling in ROS cells after 48 hours of hypoxia
Number of coupled cells
25
20
15
10
5
0
1
2
Before / After

Fig. 12

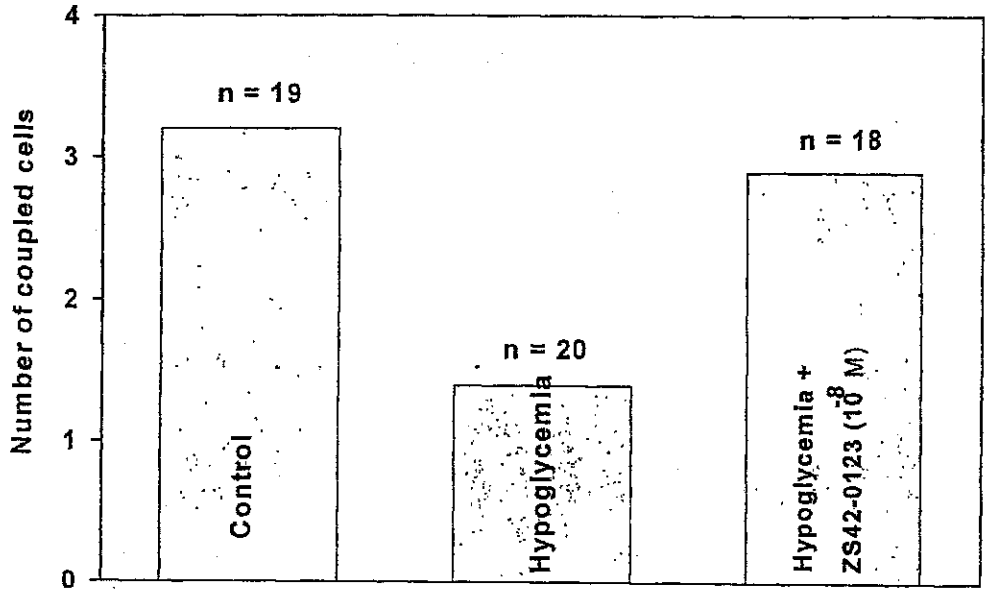

Number of coupled cells
0
1
2
3
4
n = 19
n = 20
n = 18
Control
Hypoglycemia
Hypoglycemia + ZS42-0123 (10^{-8} M)

Fig. 13

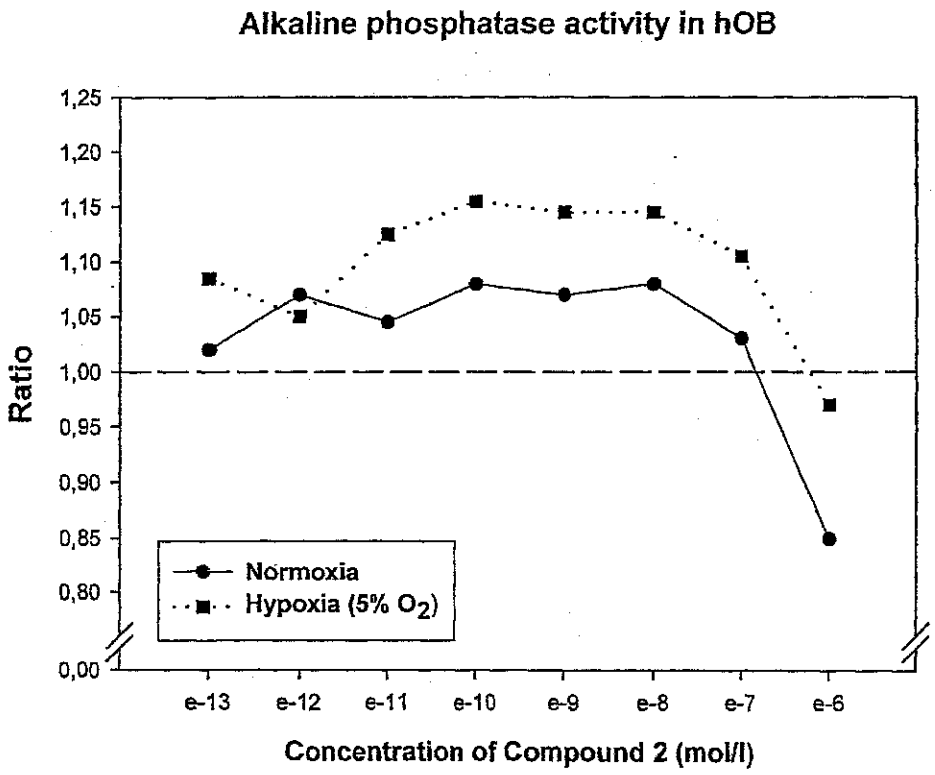

Alkaline phosphatase activity in hOB
Ratio
1,25
1,20
1,15
1,10
1,05
1,00
0,95
0,90
0,85
0,80
0,00
Normoxia
Hypoxia (5% O2)
e-13
e-12
e-11
e-10
e-9
e-8
e-7
e-6
Concentration of Compound 2 (mol/l)

Fig. 14

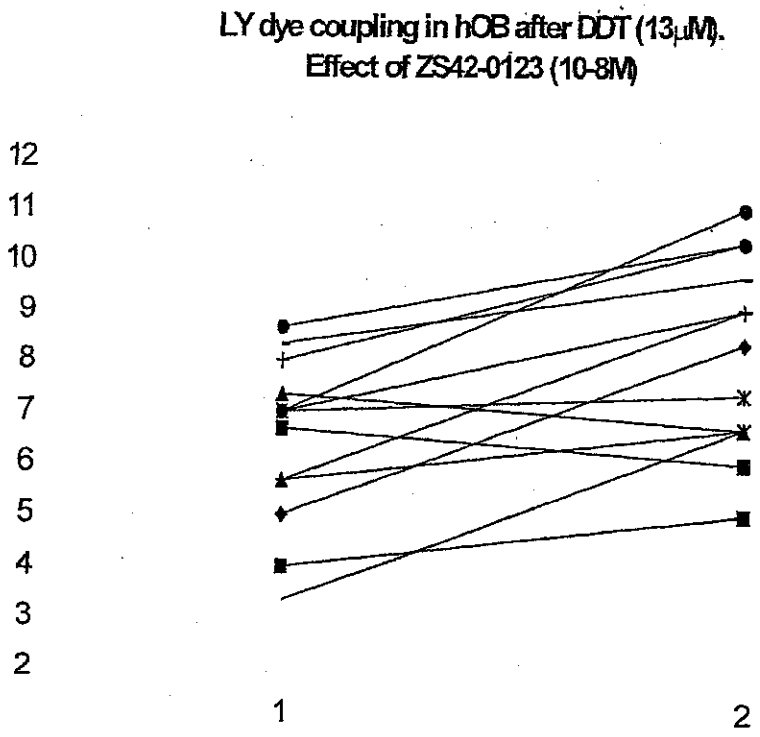

LY dye coupling in hOB after DDT (13μM).
Effect of ZS42-0123 (10-8M)
12
11
10
9
8
7
6
5
4
3
2
1
2

Fig. 15