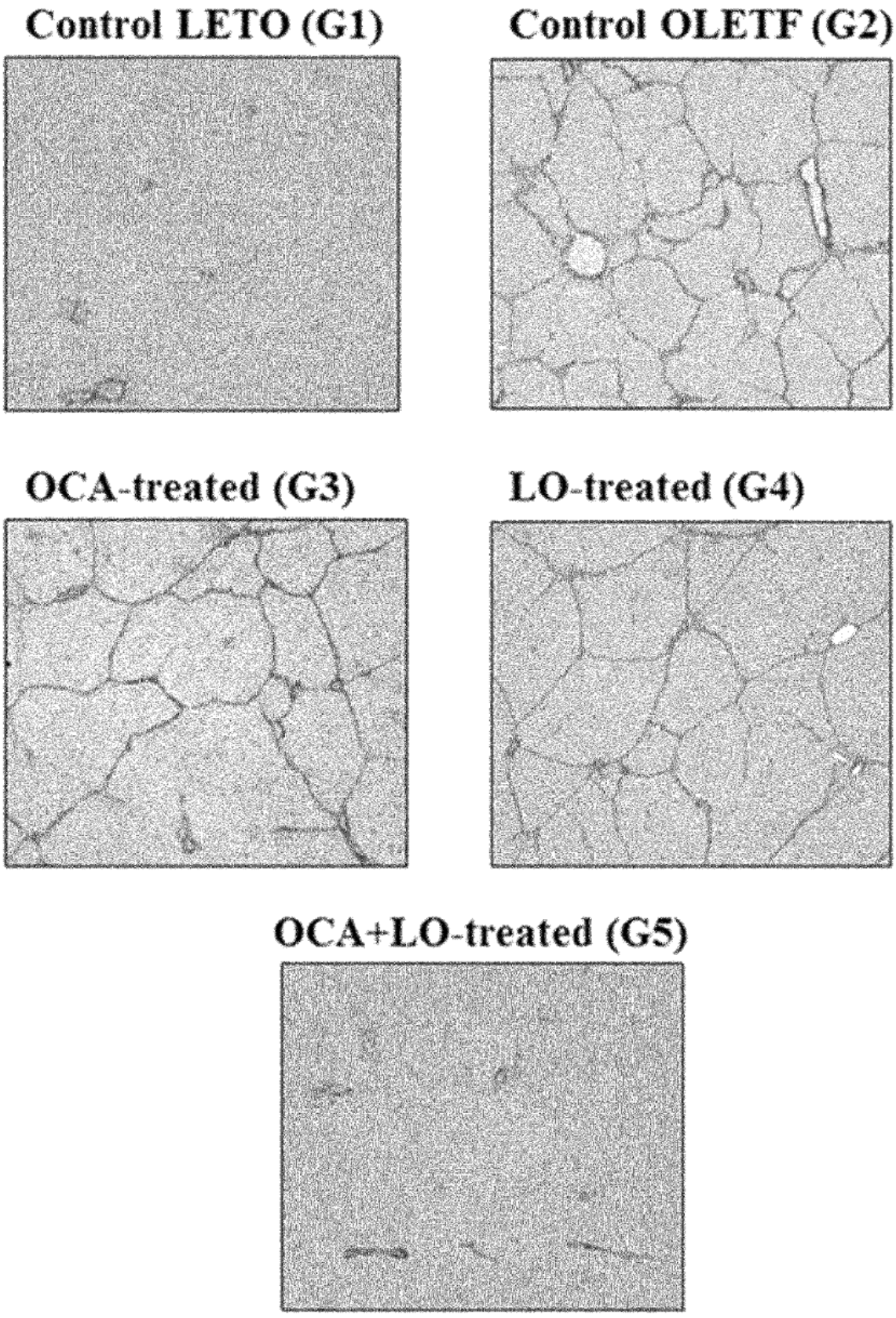
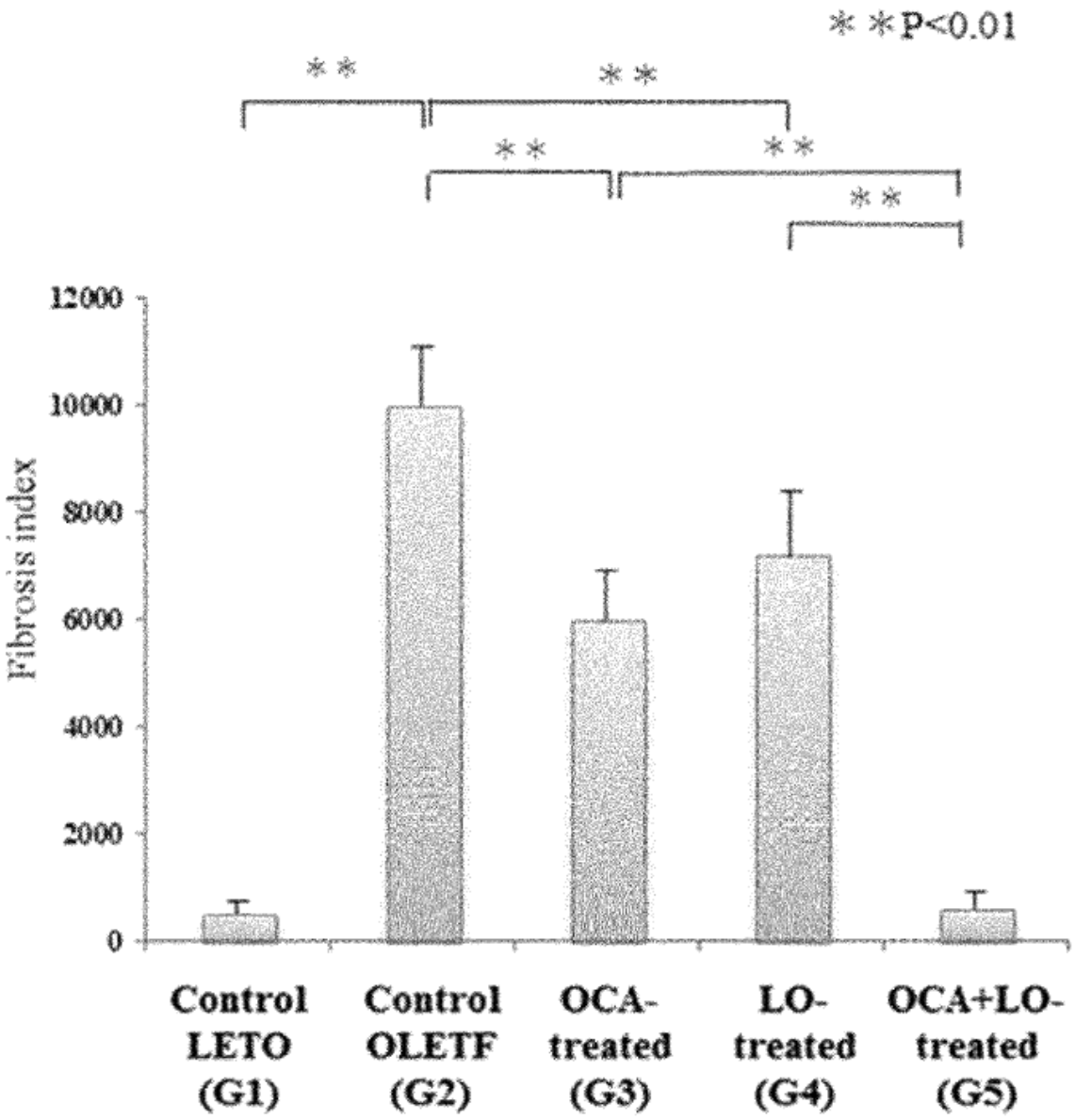
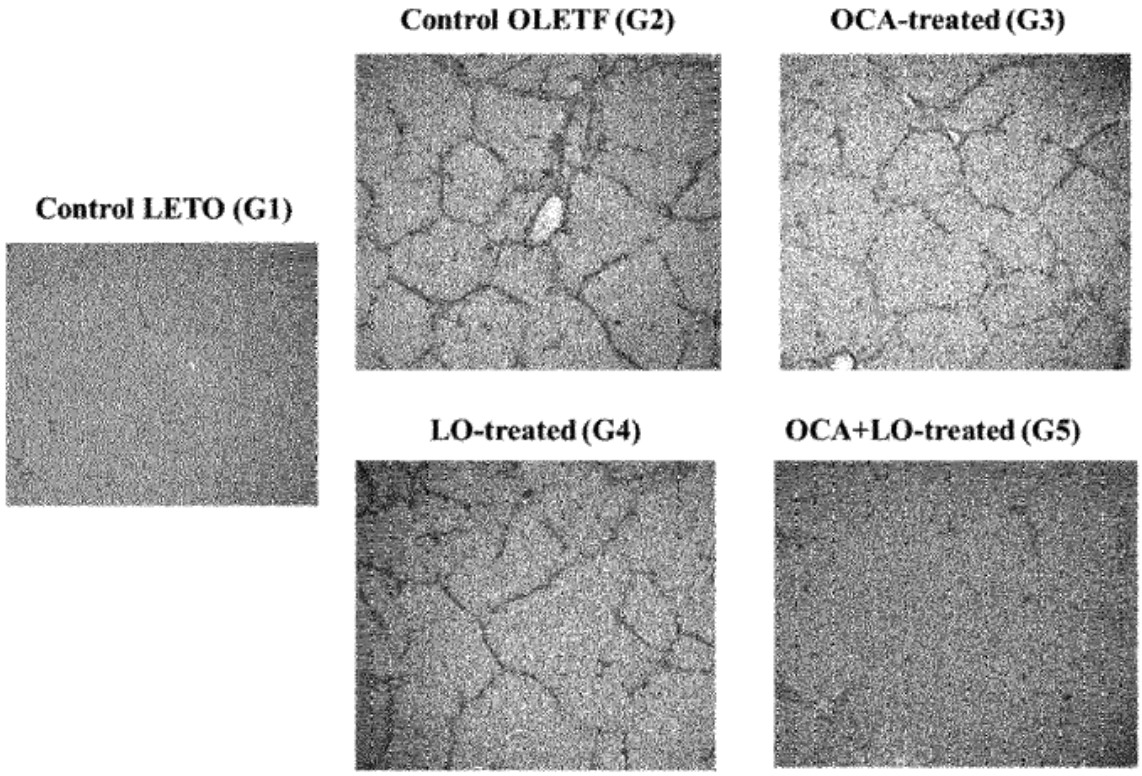
[Fig. 1]


Control LETO (G1)
Control OLETF (G2)
OCA-treated (G3)
LO-treated (G4)
OCA+LO-treated (G5)

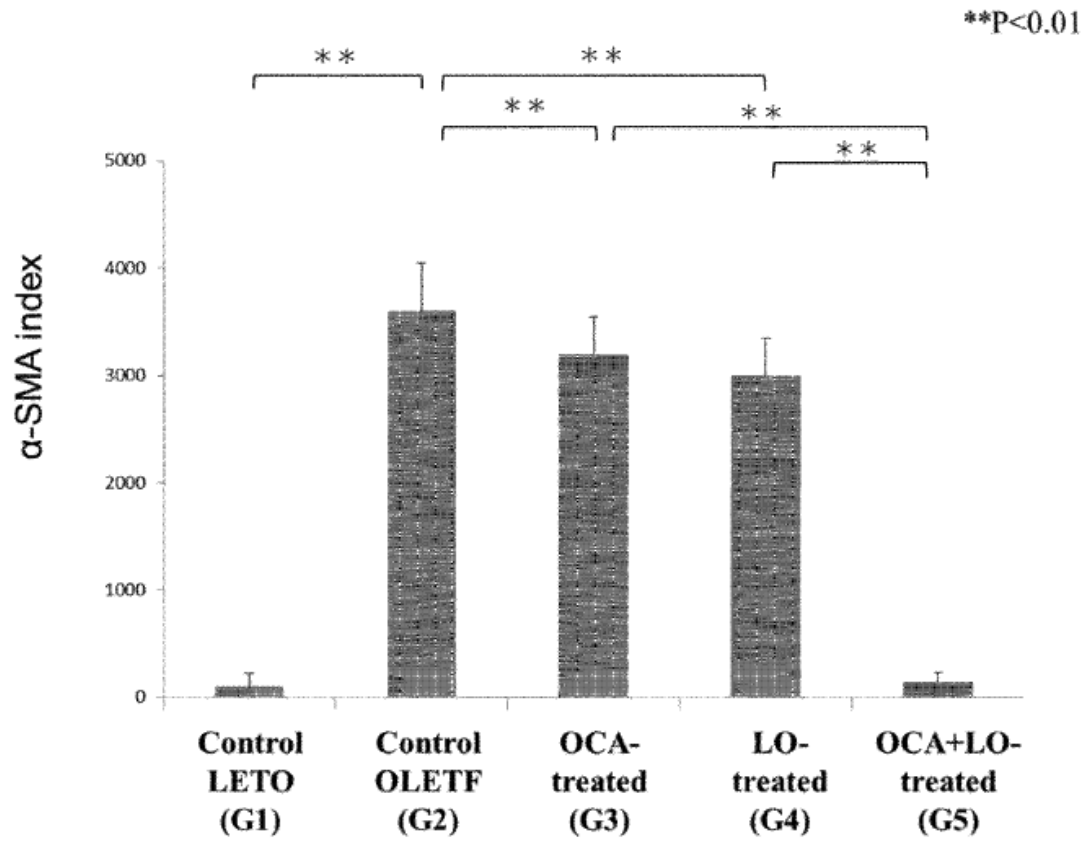
[Fig. 2]


**P<0.01
**
**
**
**
**
Fibrosis index
12000
10000
8000
6000
4000
2000
0
Control LETO (G1)
Control OLETF (G2)
OCA-treated (G3)
LO-treated (G4)
OCA+LO-treated (G5)

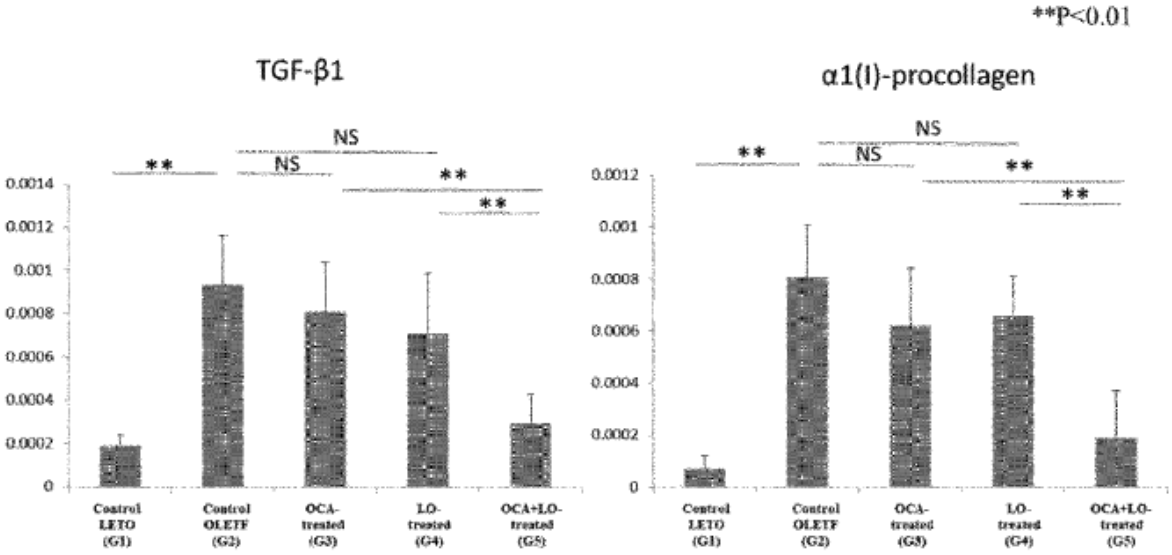
[Fig. 3]


Control LETO (G1)
Control OLETF (G2)
OCA-treated (G3)
LO-treated (G4)
OCA+LO-treated (G5)

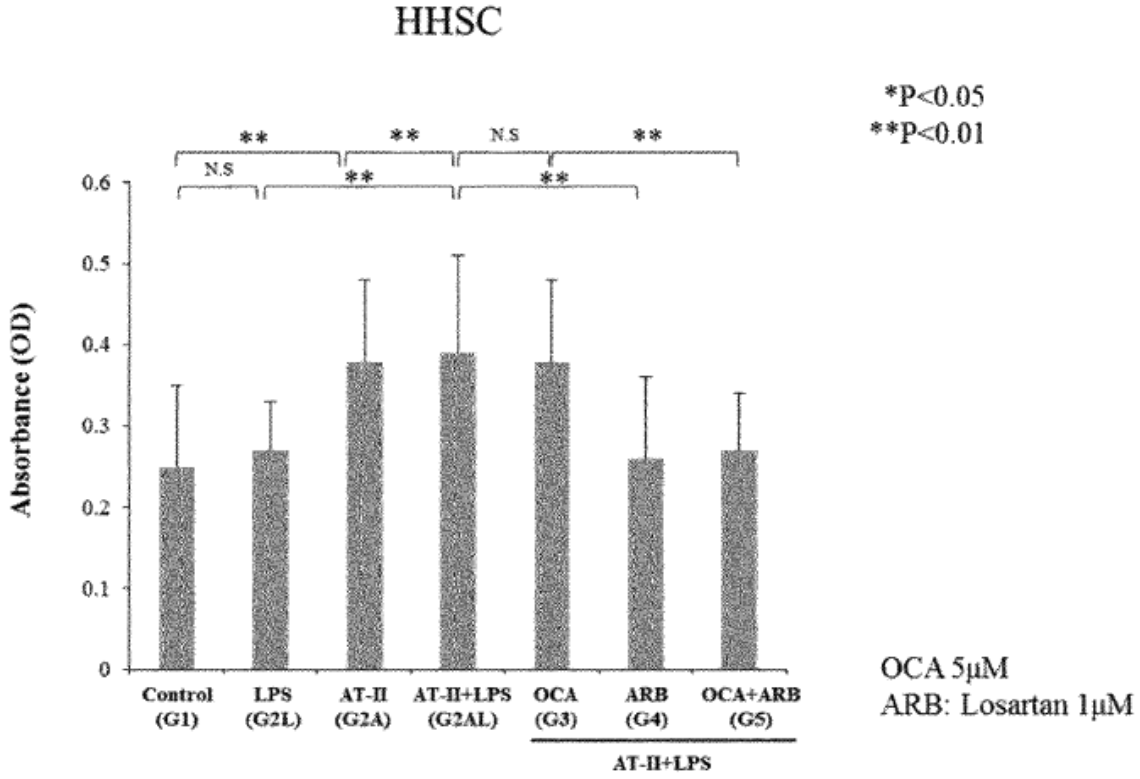
[Fig. 4]


**P<0.01
**
**
**
**
**
α-SMA index
5000
4000
3000
2000
1000
0
Control LETO (G1)
Control OLETF (G2)
OCA-treated (G3)
LO-treated (G4)
OCA+LO-treated (G5)

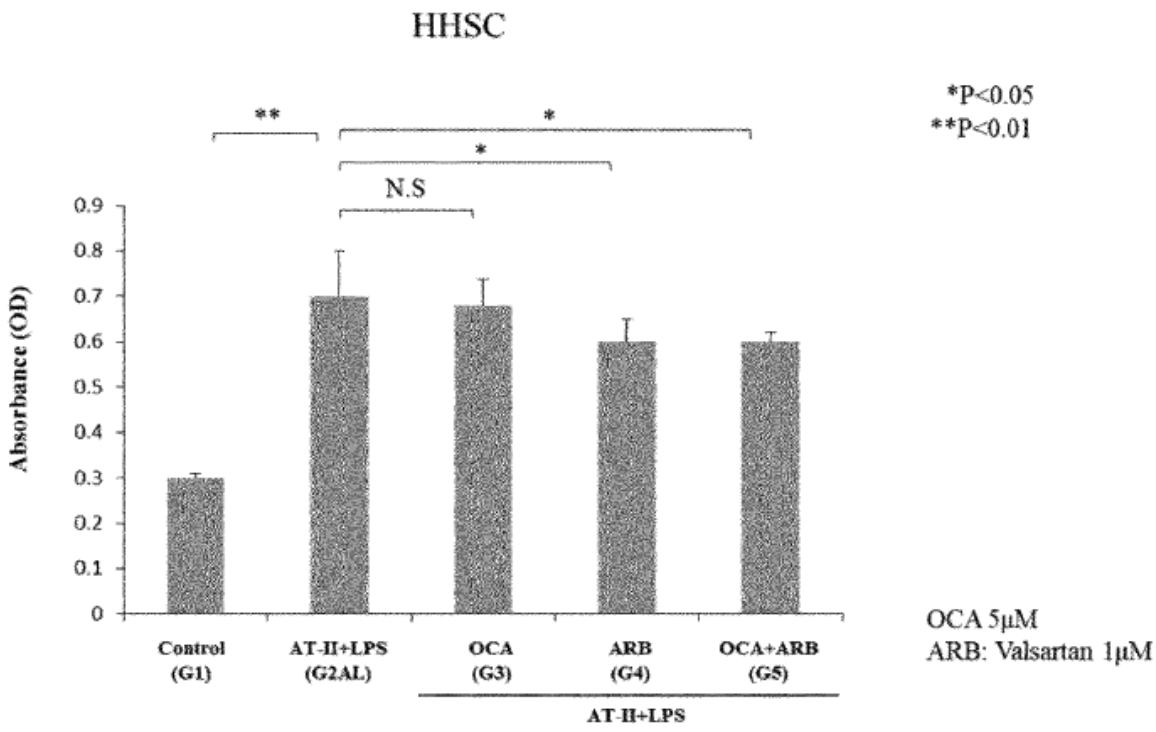
[Fig. 5]


**P<0.01
TGF-β1
α1(I)-procollagen
NS
**
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
Control LETO (G1)
Control OLETF (G2)
OCA-treated (G3)
LO-treated (G4)
OCA+LO-treated (G5)

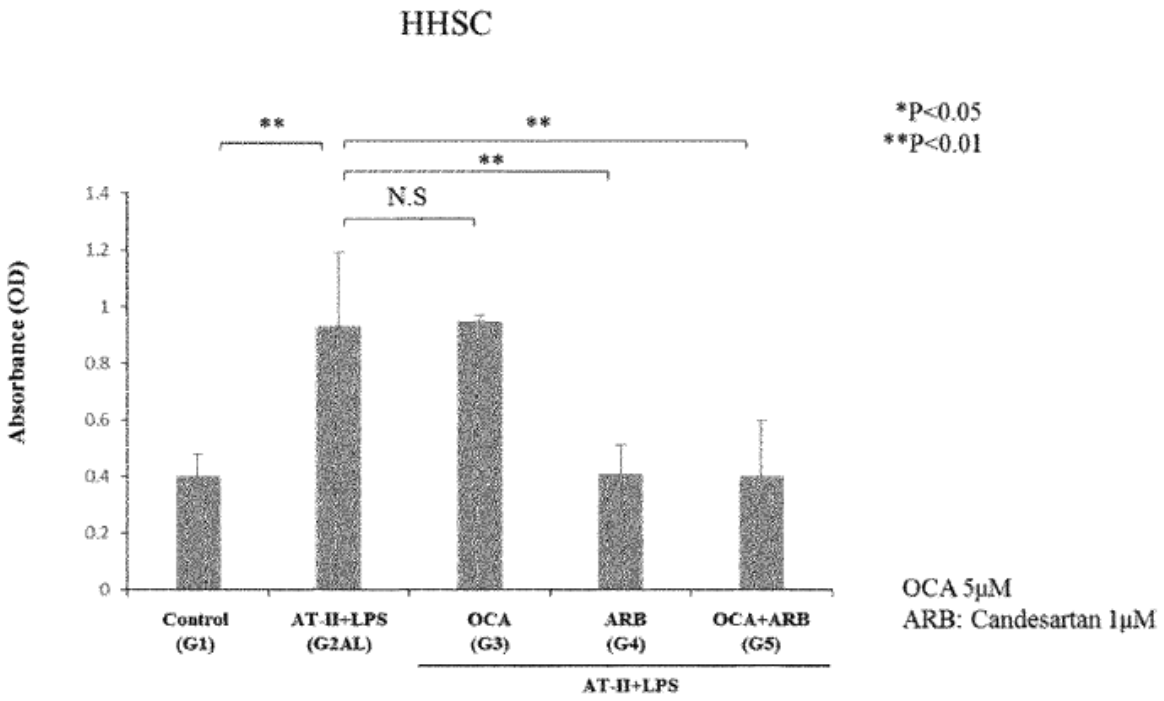
[Fig. 6]


HHSC
*P<0.05
**P<0.01
N.S
**
Absorbance (OD)
0.6
0.5
0.4
0.3
0.2
0.1
0
Control (G1)
LPS (G2L)
AT-II (G2A)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
OCA 5μM
ARB: Losartan 1μM

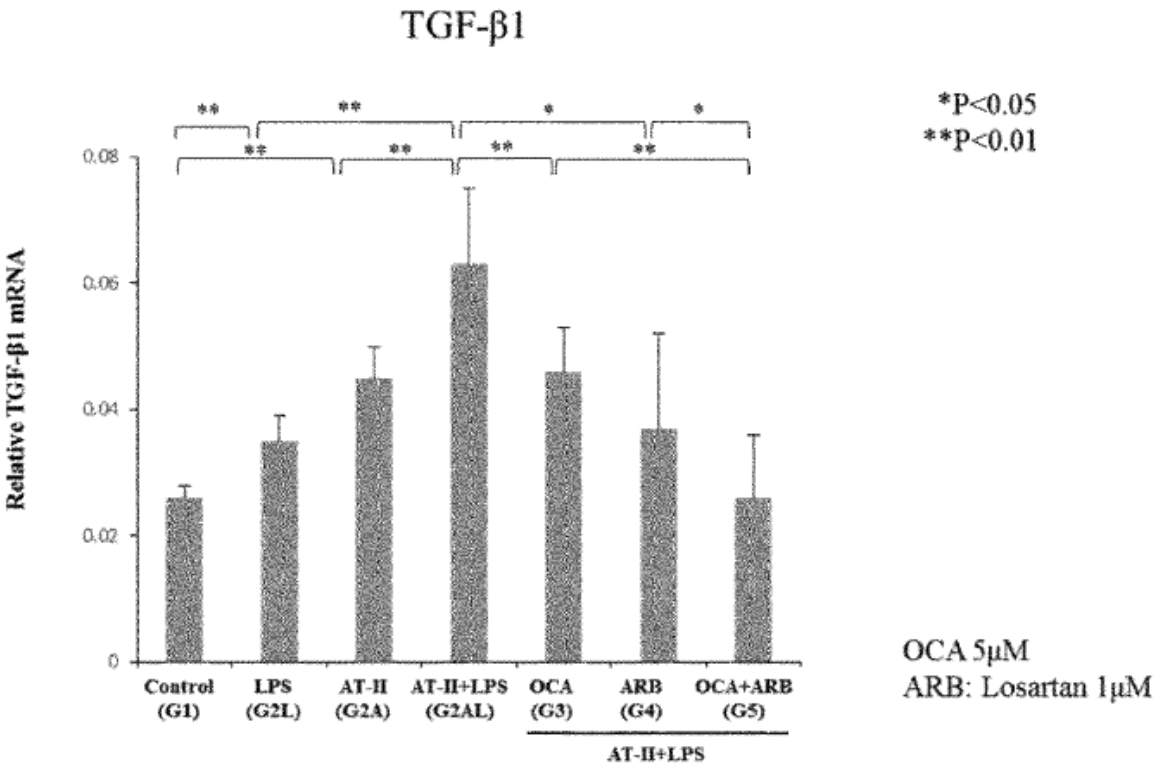
[Fig. 7]


HHSC
*P<0.05
**P<0.01
**
*
*
N.S
Absorbance (OD)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Control (G1)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
OCA 5μM
ARB: Valsartan 1μM

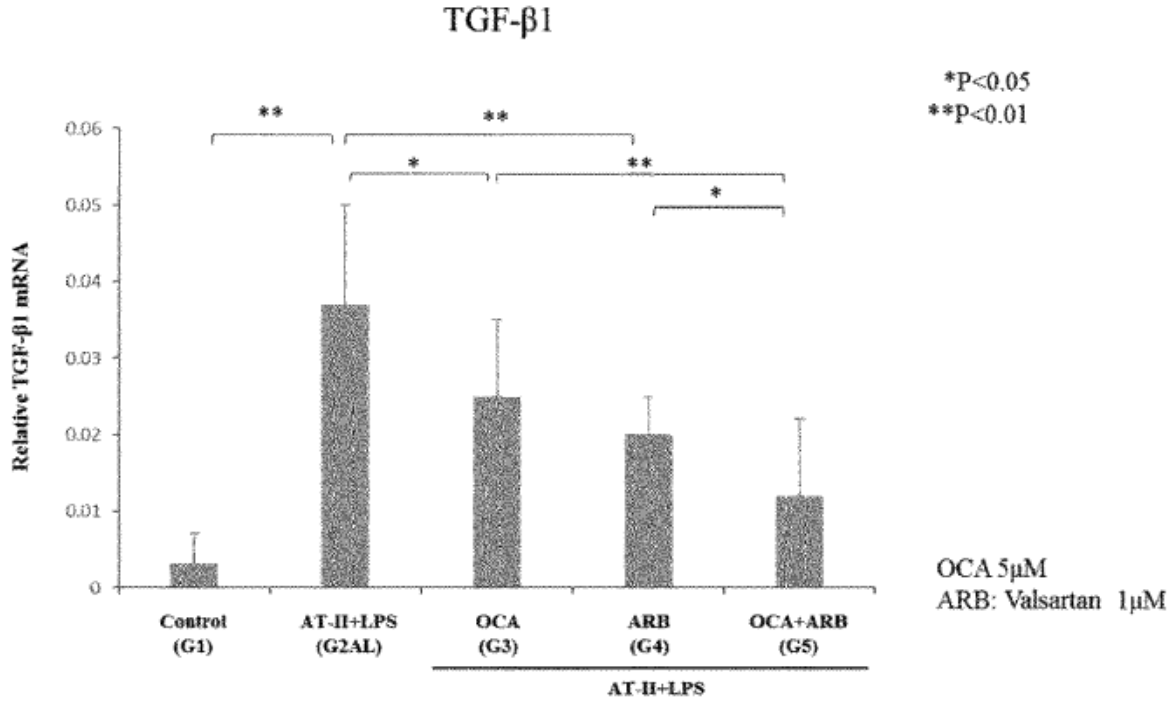
[Fig. 8]


HHSC
*P<0.05
**P<0.01
**
**
**
N.S
Absorbance (OD)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Control (G1)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
OCA 5μM
ARB: Candesartan 1μM

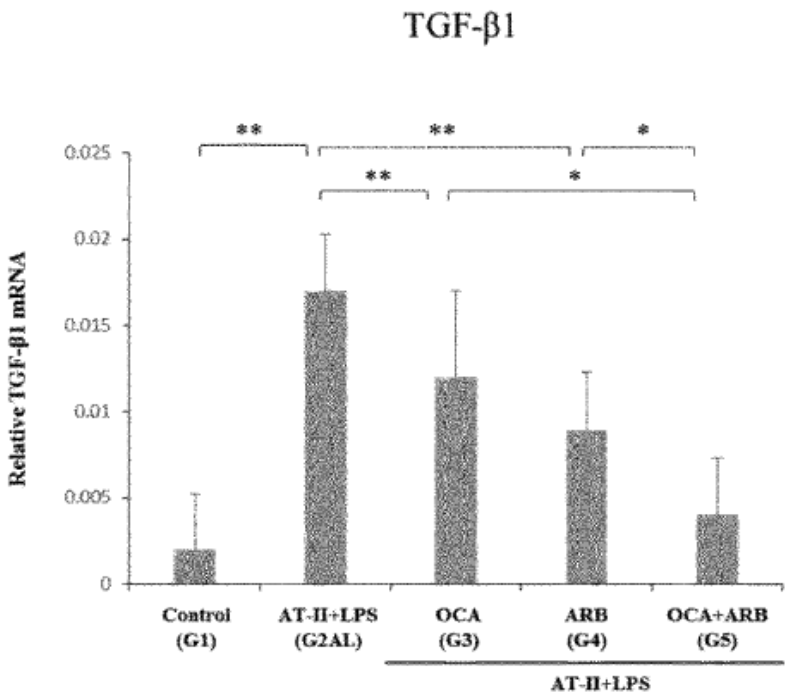
[Fig. 9]


TGF-β1
Relative TGF-β1 mRNA
0.08
0.06
0.04
0.02
0
**
**
*
*
**
**
**
**
Control (G1)
LPS (G2L)
AT-II (G2A)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
*P<0.05
**P<0.01
OCA 5μM
ARB: Losartan 1μM

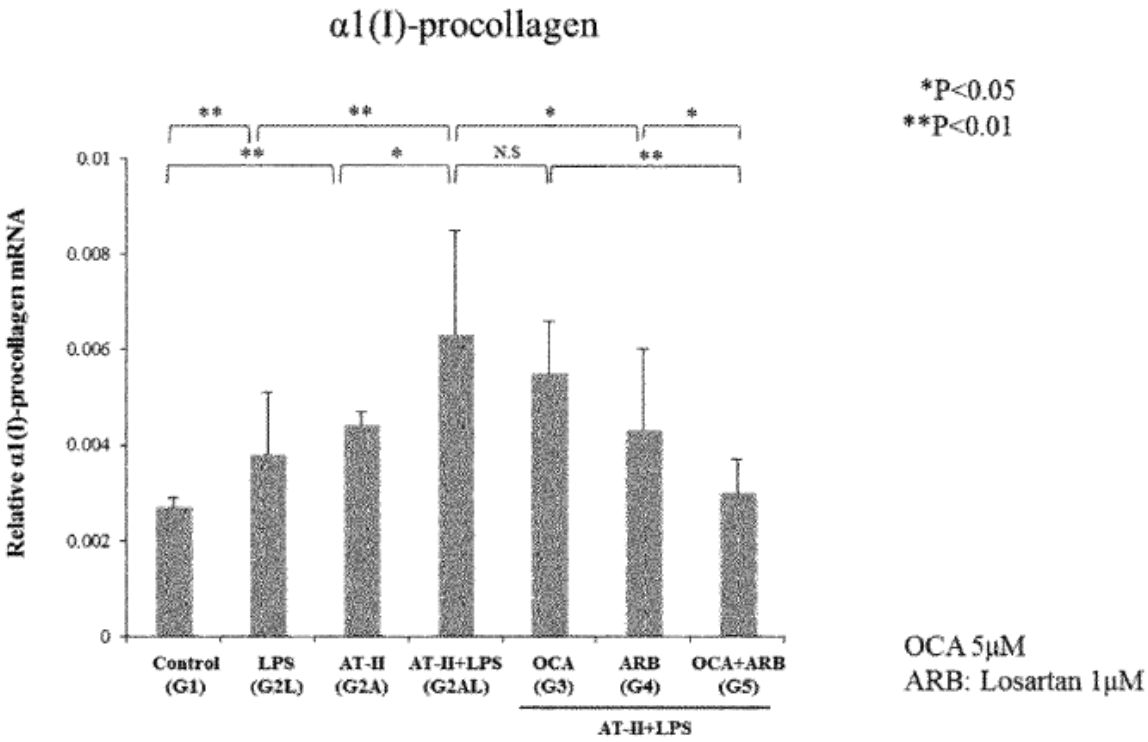
[Fig. 10]


TGF-β1
Relative TGF-β1 mRNA
0.06
0.05
0.04
0.03
0.02
0.01
0
**
**
*
**
*
Control (G1)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
*P<0.05
**P<0.01
OCA 5μM
ARB: Valsartan 1μM

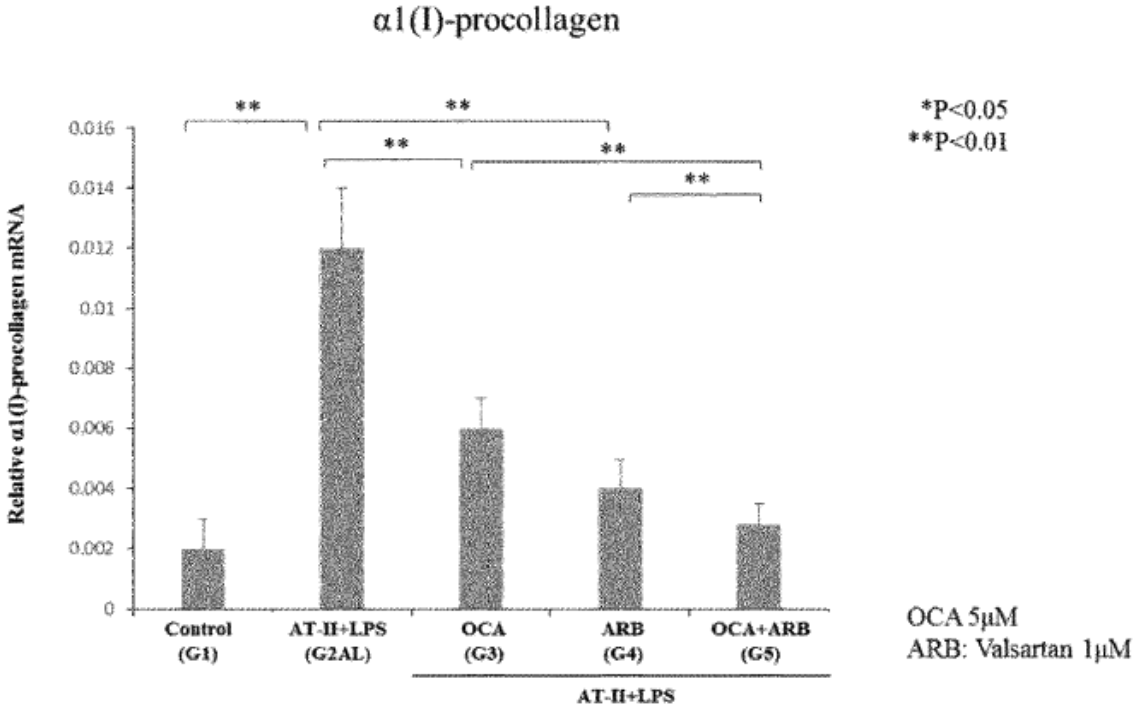
[Fig. 11]


TGF-β1
*P<0.05
**P<0.01
Relative TGF-β1 mRNA
0.025
0.02
0.015
0.01
0.005
0
**
**
*
**
*
Control (G1)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
OCA 5μM
ARB: Candesartan 1μM

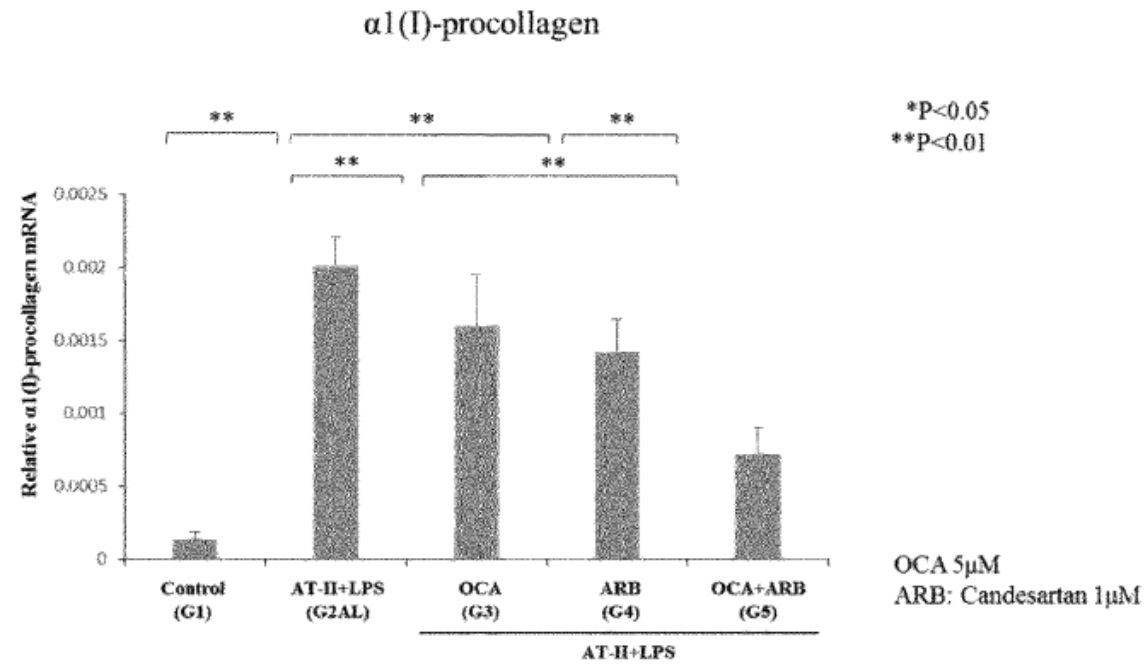
[Fig. 12]


α1(I)-procollagen
*P<0.05
**P<0.01
Relative α1(I)-procollagen mRNA
0.01
0.008
0.006
0.004
0.002
0
**
**
*
*
**
*
N.S
**
Control (G1)
LPS (G2L)
AT-II (G2A)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
OCA 5μM
ARB: Losartan 1μM

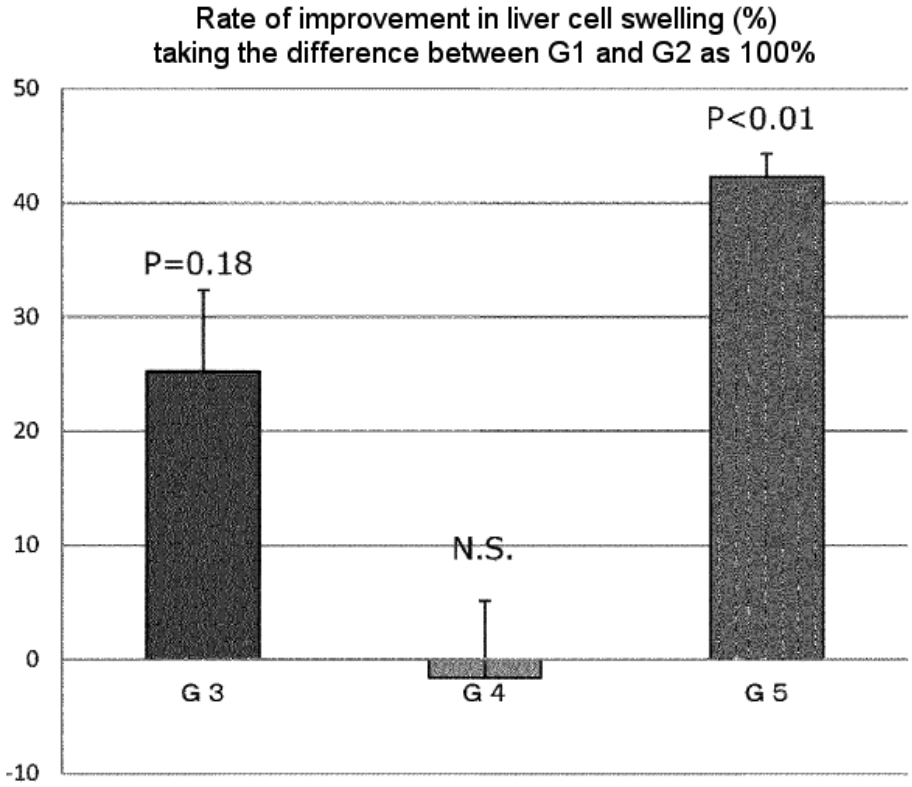
[Fig. 13]


α1(I)-procollagen
Relative α1(I)-procollagen mRNA
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
**
**
**
**
**
Control (G1)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
*P<0.05
**P<0.01
OCA 5μM
ARB: Valsartan 1μM

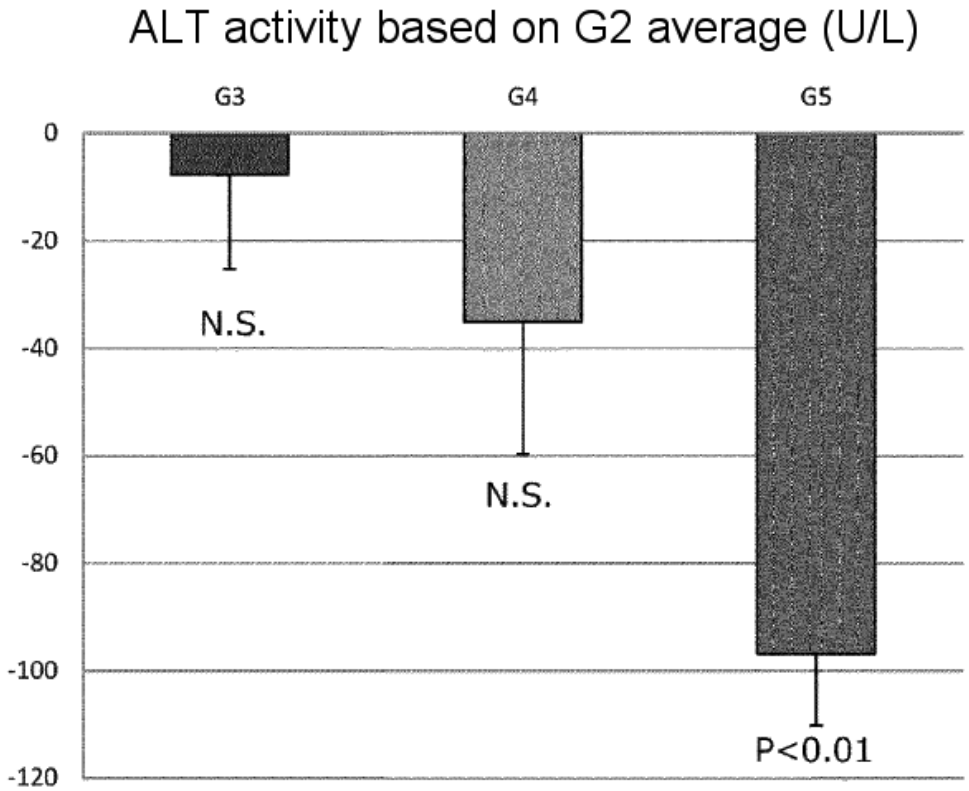
[Fig. 14]


α1(I)-procollagen
Relative α1(I)-procollagen mRNA
0.0025
0.002
0.0015
0.001
0.0005
0
**
**
**
**
**
Control (G1)
AT-II+LPS (G2AL)
OCA (G3)
ARB (G4)
OCA+ARB (G5)
AT-II+LPS
*P<0.05
**P<0.01
OCA 5μM
ARB: Candesartan 1μM

[Fig. 15]


Rate of improvement in liver cell swelling (%)
taking the difference between G1 and G2 as 100%
50
40
30
20
10
0
-10
P=0.18
N.S.
P<0.01
G 3
G 4
G 5

[Fig. 16]


ALT activity based on G2 average (U/L)
G3
G4
G5
0
-20
-40
-60
-80
-100
-120
N.S.
N.S.
P<0.01