FIGURE 1

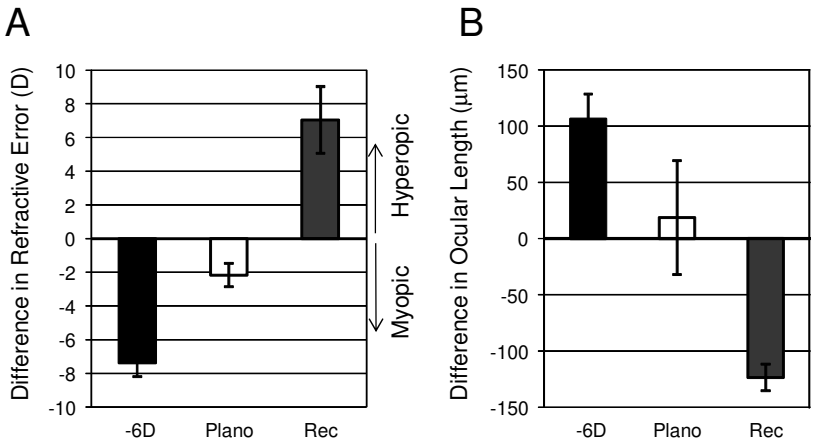

A
Difference in Refractive Error (D)
10
8
6
4
2
0
-2
-4
-6
-8
-10
-6D
Plano
Rec
Hyperopic
Myopic
B
Difference in Ocular Length (µm)
150
100
50
0
-50
-100
-150
-6D
Plano
Rec

FIGURE 2

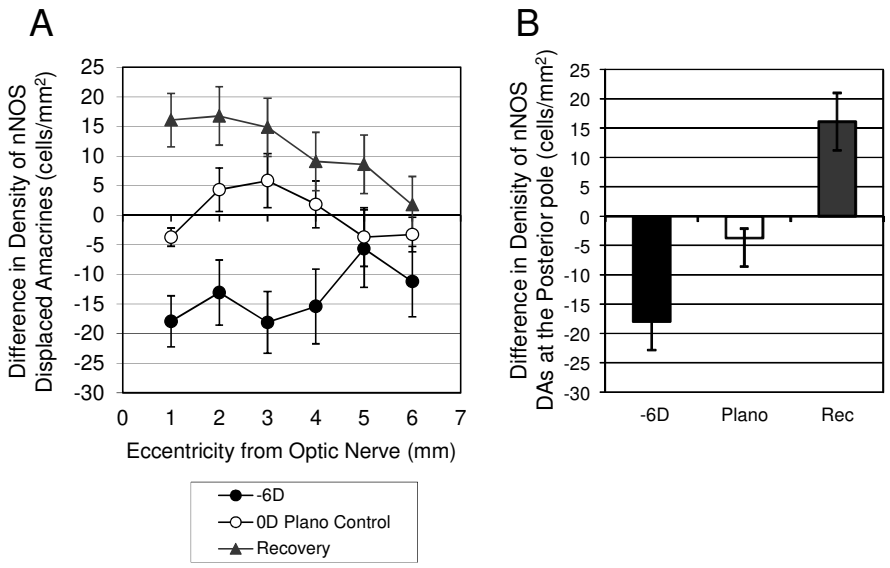

A
Difference in Density of nNOS Displaced Amacrines (cells/mm²)
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
0 1 2 3 4 5 6 7
Eccentricity from Optic Nerve (mm)
-6D
0D Plano Control
Recovery
B
Difference in Denisity of nNOS DAs at the Posterior pole (cells/mm²)
25
20
15
10
5
0
-5
-10
-15
-20
-25
-30
-6D
Plano
Rec

FIGURE 3

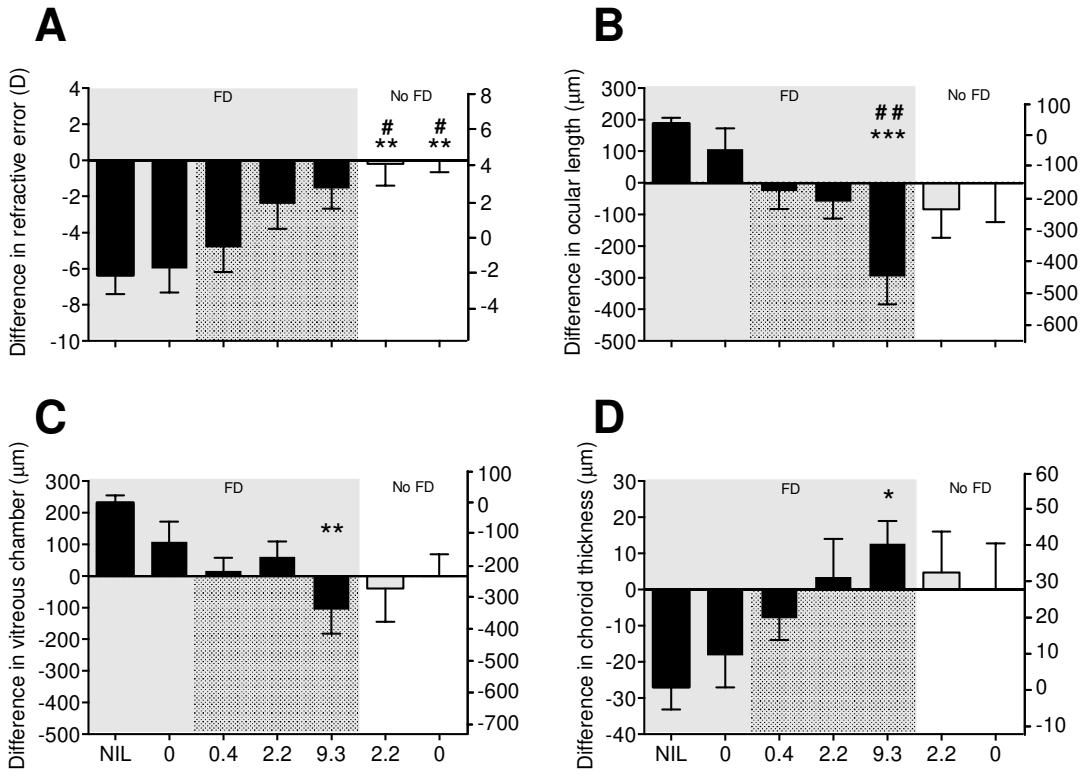
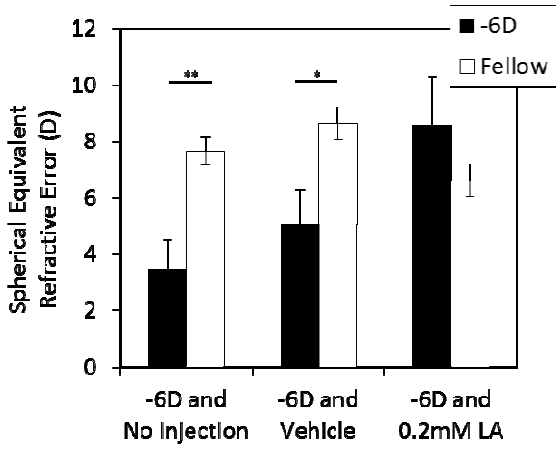

A
B
C
D
FD
No FD
Difference in refractive error (D)
Difference in ocular length (µm)
Difference in vitreous chamber (µm)
Difference in choroid thickness (µm)
NIL
0
0.4
2.2
9.3
2.2
0

FIGURE 4

A


-6D
Fellow
Spherical Equivalent Refractive Error (D)
12
10
8
6
4
2
0
**
*
-6D and No Injection
-6D and Vehicle
-6D and 0.2mM LA

B

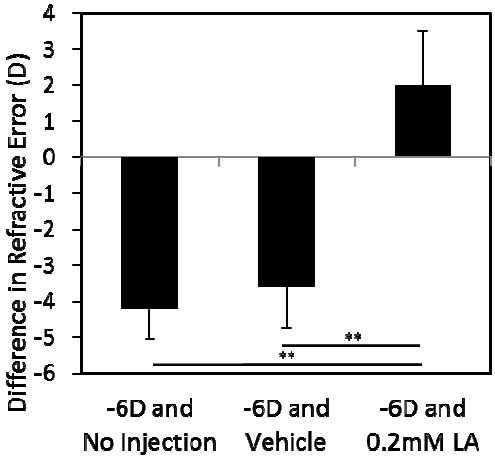

Difference in Refractive Error (D)
4
3
2
1
0
-1
-2
-3
-4
-5
-6
**
**
-6D and No Injection
-6D and Vehicle
-6D and 0.2mM LA

FIGURE 5

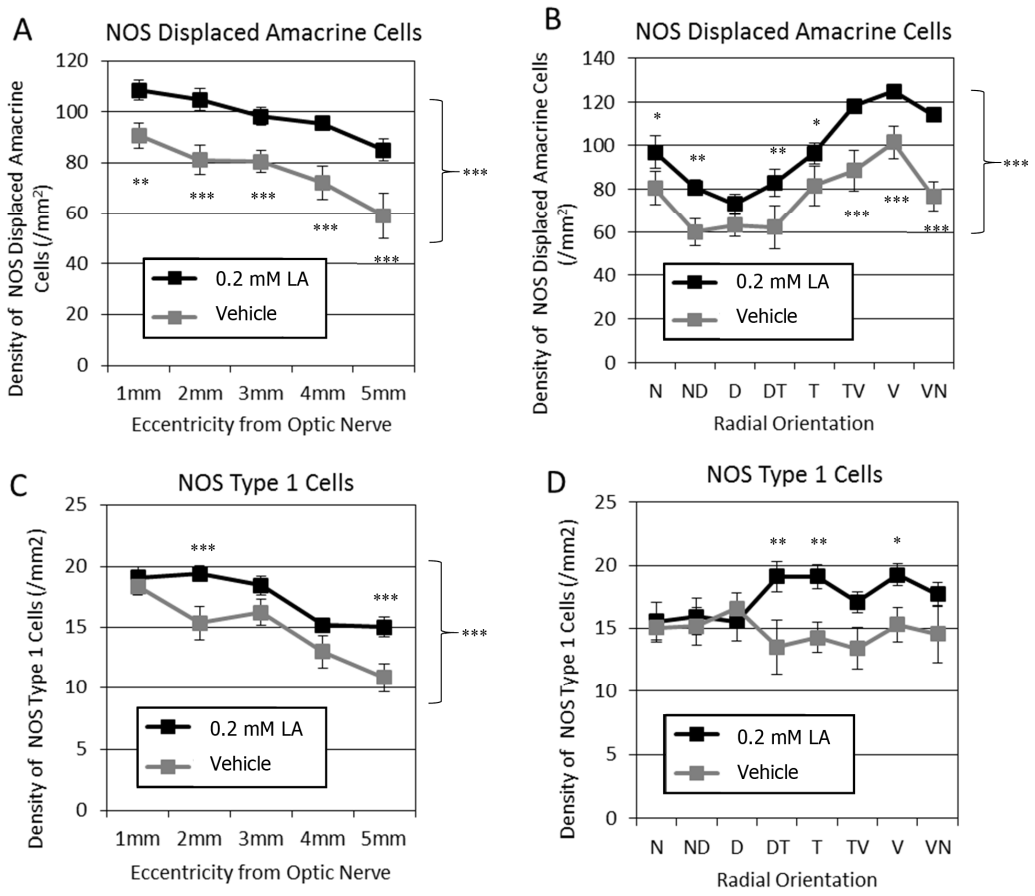

A
NOS Displaced Amacrine Cells
Density of NOS Displaced Amacrine Cells (/mm²)
120
100
80
60
40
20
0
1mm 2mm 3mm 4mm 5mm
Eccentricity from Optic Nerve
0.2 mM LA
Vehicle
**
***
***
***
***
***
B
NOS Displaced Amacrine Cells
Density of NOS Displaced Amacrine Cells (/mm²)
140
120
100
80
60
40
20
0
N ND D DT T TV V VN
Radial Orientation
0.2 mM LA
Vehicle
*
**
**
*
***
***
***
C
NOS Type 1 Cells
Density of NOS Type 1 Cells (/mm2)
25
20
15
10
5
0
1mm 2mm 3mm 4mm 5mm
Eccentricity from Optic Nerve
0.2 mM LA
Vehicle
***
***
***
D
NOS Type 1 Cells
Density of NOS Type 1 Cells (/mm2)
25
20
15
10
5
0
N ND D DT T TV V VN
Radial Orientation
0.2 mM LA
Vehicle
**
**
*

FIGURE 6

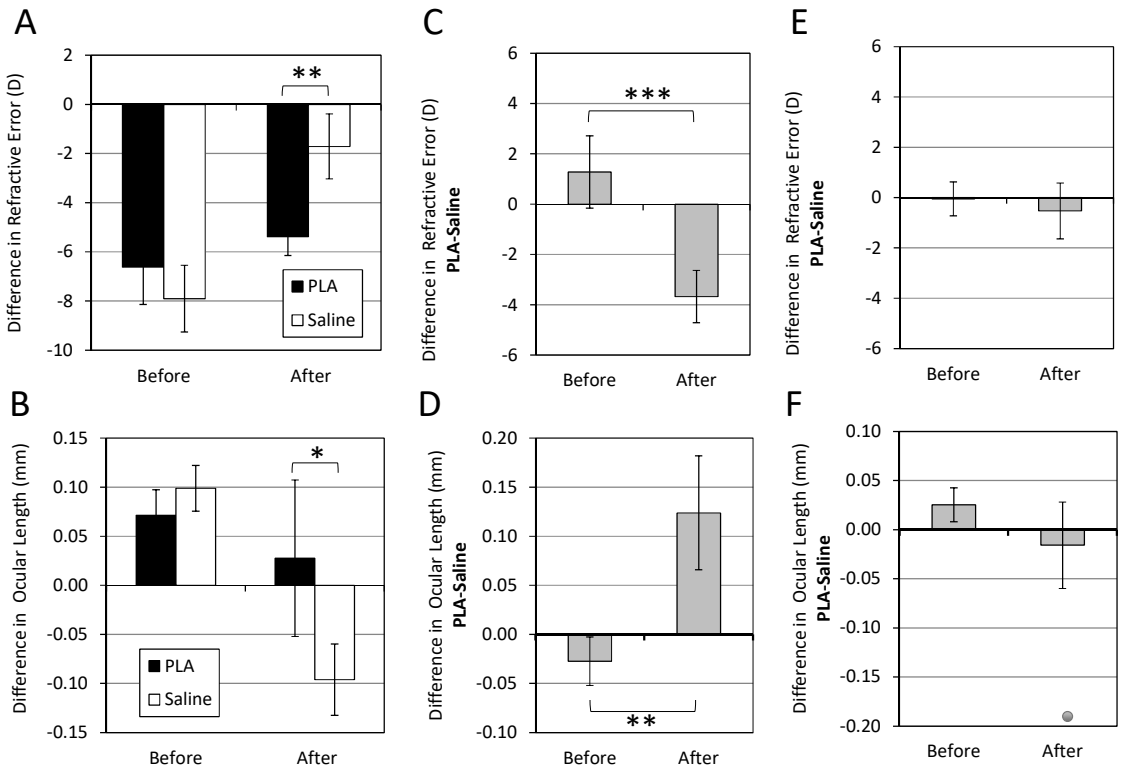

A
B
C
D
E
F
Difference in Refractive Error (D)
Difference in Ocular Length (mm)
Difference in Refractive Error (D) PLA-Saline
Difference in Ocular Length (mm) PLA-Saline
PLA
Saline
Before
After
**
*
***
**

FIGURE 7

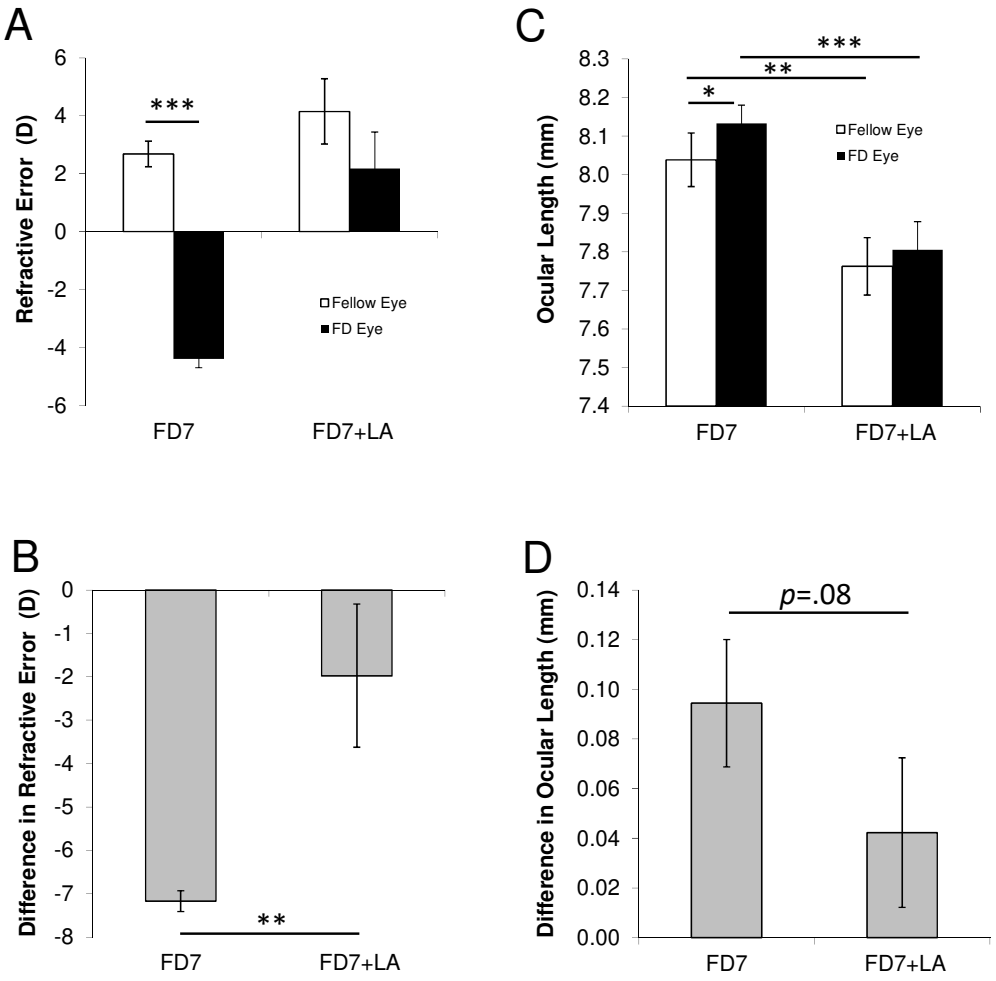

A
Refractive Error (D)
6
4
2
0
-2
-4
-6
***
Fellow Eye
FD Eye
FD7
FD7+LA
C
Ocular Length (mm)
8.3
8.2
8.1
8.0
7.9
7.8
7.7
7.6
7.5
7.4
***
**
*
Fellow Eye
FD Eye
FD7
FD7+LA
B
Difference in Refractive Error (D)
0
-1
-2
-3
-4
-5
-6
-7
-8
**
FD7
FD7+LA
D
Difference in Ocular Length (mm)
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
p=.08
FD7
FD7+LA

FIGURE 8

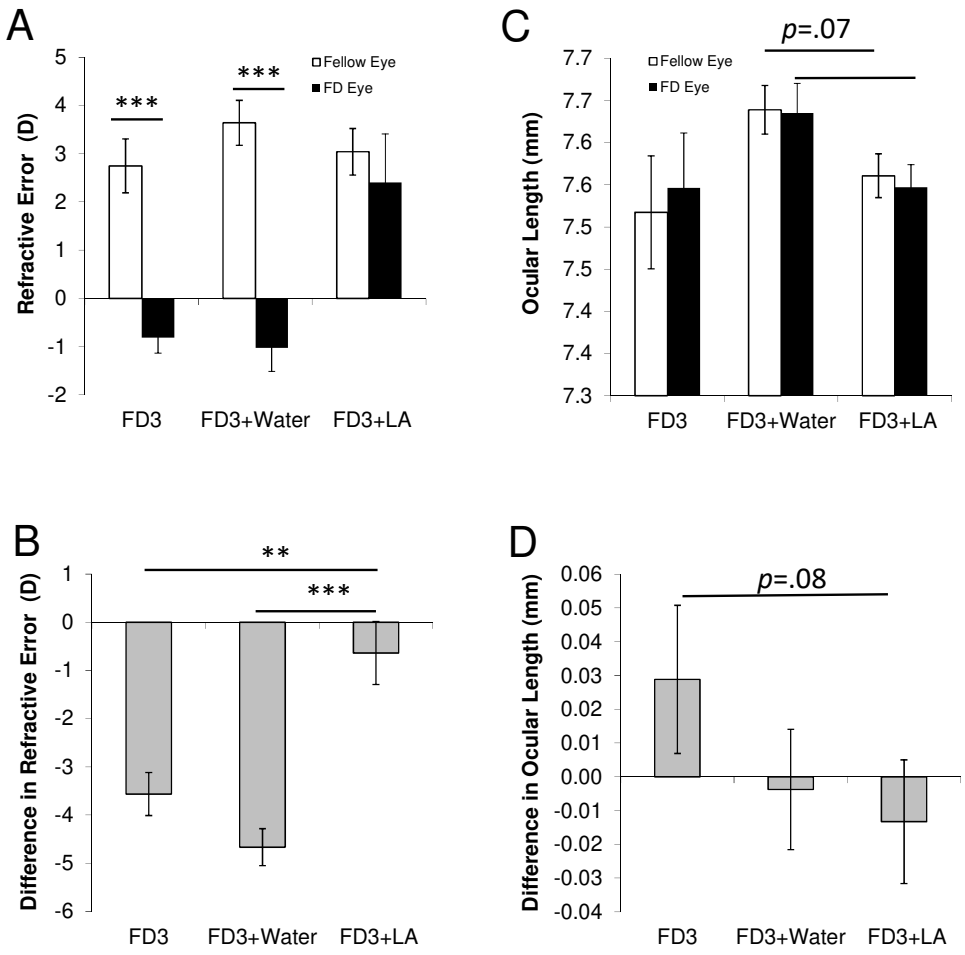

A
Refractive Error (D)
5
4
3
2
1
0
-1
-2
***
***
Fellow Eye
FD Eye
FD3
FD3+Water
FD3+LA
C
Ocular Length (mm)
7.7
7.7
7.6
7.6
7.5
7.5
7.4
7.4
7.3
p=.07
Fellow Eye
FD Eye
FD3
FD3+Water
FD3+LA
B
Difference in Refractive Error (D)
1
0
-1
-2
-3
-4
-5
-6
**
***
FD3
FD3+Water
FD3+LA
D
Difference in Ocular Length (mm)
0.06
0.05
0.04
0.03
0.02
0.01
0.00
-0.01
-0.02
-0.03
-0.04
p=.08
FD3
FD3+Water
FD3+LA

FIGURE 9

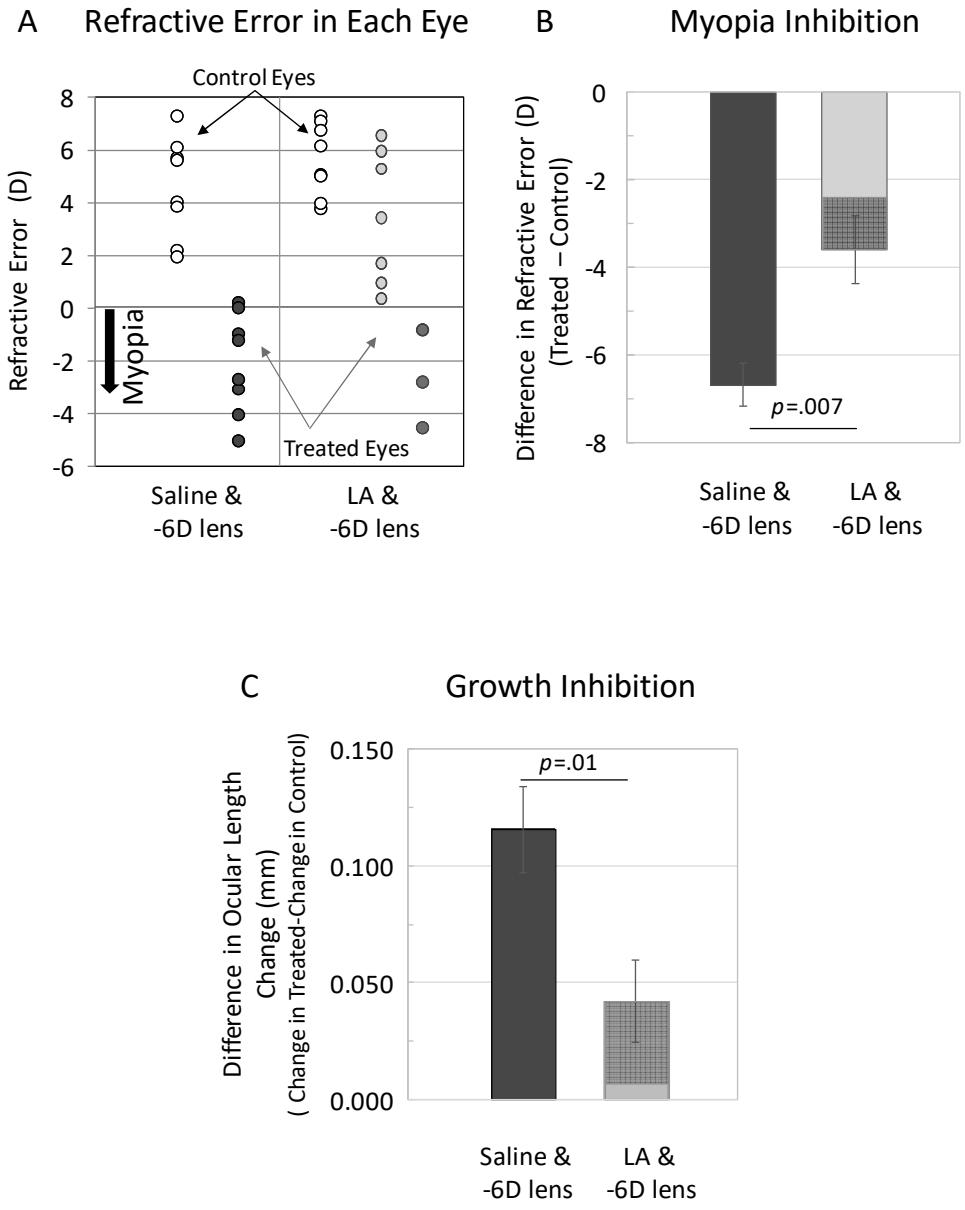
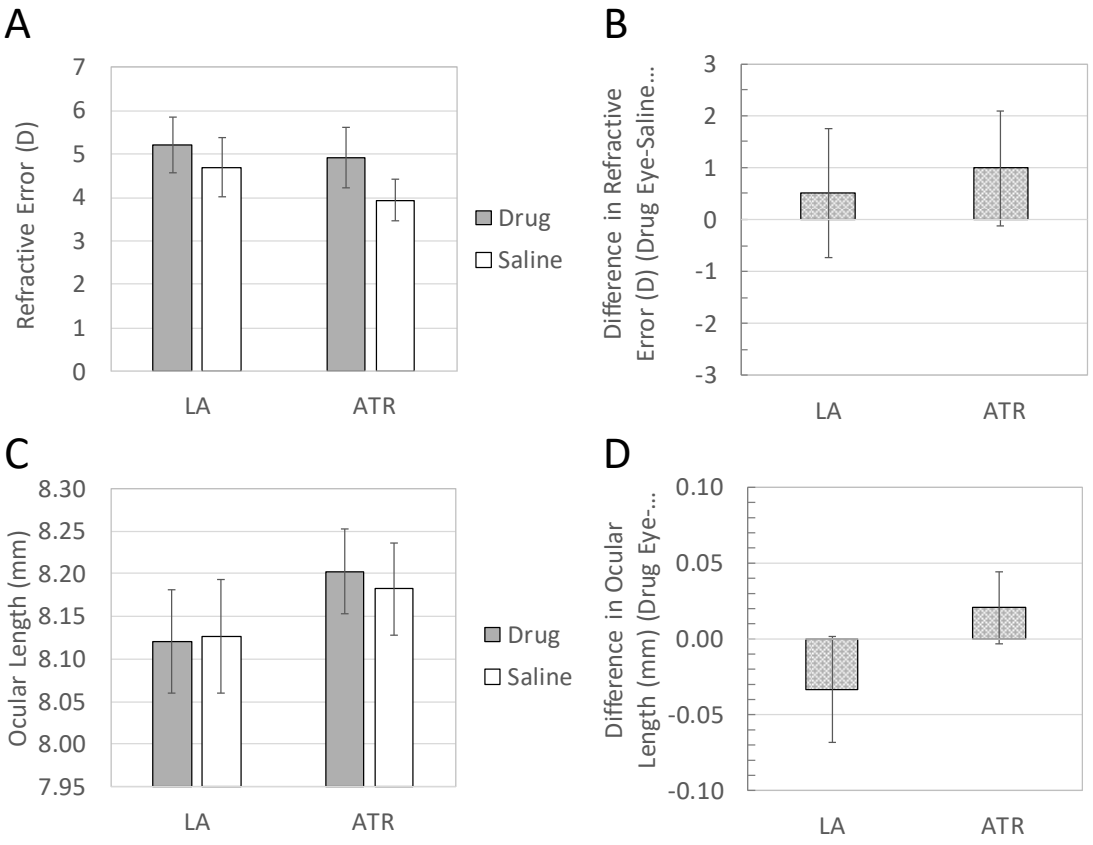

A
Refractive Error in Each Eye
Control Eyes
Refractive Error (D)
8
6
4
2
0
-2
-4
-6
Myopia
Treated Eyes
Saline &
-6D lens
LA &
-6D lens
B
Myopia Inhibition
Difference in Refractive Error (D)
(Treated – Control)
0
-2
-4
-6
-8
p=.007
Saline &
-6D lens
LA &
-6D lens
C
Growth Inhibition
Difference in Ocular Length
Change (mm)
(Change in Treated-Change in Control)
0.150
0.100
0.050
0.000
p=.01
Saline &
-6D lens
LA &
-6D lens

FIGURE 10


A
Refractive Error (D)
7
6
5
4
3
2
1
0
LA
ATR
Drug
Saline
B
Difference in Refractive Error (D) (Drug Eye-Saline...
3
2
1
0
-1
-2
-3
LA
ATR
C
Ocular Length (mm)
8.30
8.25
8.20
8.15
8.10
8.05
8.00
7.95
LA
ATR
Drug
Saline
D
Difference in Ocular Length (mm) (Drug Eye-...
0.10
0.05
0.00
-0.05
-0.10
LA
ATR