

Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.

eTable 1. Baseline Characteristics According to Treatment Group (Per-protocol Analysis)

	Atropine combined Patching Group	Patching Group
	(n = 48)	(n = 48)
Sex, No. (%)		
Male	23 (48)	26 (54)
Female	25 (52)	22 (46)
Age at enrollment, No. (%)		
3 to <7	45 (94)	45 (94)
7 to <13	3 (6)	3 (6)
Mean (SD), year	5.08 (1.60)	4.90 (1.59)
Amblyopia cause, No. (%)		
Strabismus	7 (15)	9 (19)
Anisometropia	28 (58)	30 (63)
Mixed	13 (27)	9 (19)
Type of Strabismus ^a, No. (%)		
Esotropia	11 (55)	10(56)
Exotropia	9 (45)	8 (44)
Duration of prior amblyopia treatment ^b, No. (%)		
0	43 (90)	44 (92)
1 to 15	3 (6)	3 (6)
16 to 30	2 (4)	1 (2)
Distance VA ^c in AE, No. (%)		
0.2 (20/100)	4 (8)	9 (19)
0.16 (20/125)	15 (31)	20 (42)
0.1 (20/200)	18 (38)	11 (23)
0.05 (20/400)	7 (15)	4 (8)
0.04 (20/500)	4 (8)	4 (8)
Mean (SD)		
LogMAR	0.99 (0.22)	0.93 (0.24)
Snellen equivalent	20/200	20/200 +3
Distance VA ^c in FE, No. (%)		
1.0 (20/20)	20 (42)	15 (31)
0.8 (20/25)	14 (29)	16 (33)
0.6 (20/32)	8 (17)	10 (21)
0.5 (20/40)	3 (6)	0 (0)
0.4 (20/50)	3 (6)	7 (15)
Mean (SD)		
LogMAR	0.11 (0.12)	0.14 (0.14)
Snellen equivalent	20/32 +4	20/32 +3
Interocular VA difference, mean (SD), line	8.86 (2.52)	7.87 (2.49)
AE refractive error ^d, mean (SD), D	6.14 (2.30)	6.76 (2.46)
FE refractive error ^d, mean (SD), D	2.59 (2.17)	3.29 (2.17)

SD = standard deviation; VA = visual acuity; AE = amblyopic eye; FE = fellow eye; logMAR = logarithm of the minimum angle of resolution; D = diopter.

a. Type of strabismus includes subjects with strabismic amblyopia or mixed amblyopia, thus the total number of strabismus type is not 96.

b. Prior amblyopia treatment only refers to spectacle wear. The duration of treatment is expressed in days.

c. The distance visual acuity is measured by Standard Logarithm Visual Acuity Chart, in parentheses approximate Snellen equivalent is provided.

d. Spherical equivalent in diopters.

eTable 2. Patient Adherence to the Prescribed Treatment (Intention-to-treat Analysis)

	First 3 months			Second 3 months			Total 6 months		
	AP group (n=53)	P group (n=55)	P value	AP group (n=53)	P group (n=55)	P value	AP group (n=53)	P group (n=55)	P value
Patching time, No. (%)									
Excellent	36 (68)	37 (67)	.76	31 (58)	22 (40)	.11	32 (60)	29 (53)	.33
Moderate	12 (23)	9 (16)		9 (17)	16 (29)		16 (30)	17 (31)	
Poor	5 (9)	9 (16)		13 (25)	17 (31)		5 (9)	9 (16)	
Use of Atropine, No. (%)									
Excellent	38 (72)	—	—	40 (75)	—	—	40 (75)	—	—
Moderate	15 (28)	—		8 (15)	—		10 (19)	—	
Poor	0 (0)	—		5 (9)	—		3 (6)	—	

AP group = atropine combined patching group; P group = patching group.

eTable 3. Primary and Secondary Outcomes (Per-protocol Analysis)

Outcome	AP Group	P Group	Mean Difference / RR (95% CI)	P Value
	(n =48)	(n =48)		
Primary outcome				
Change in AE VA at 6 months, mean (SD)				
LogMAR	0.73 (0.21)	0.58 (0.23)	0.15 (0.06, 0.24)	.001
Line	7.3 (2.1)	5.8 (2.3)	1.5 (0.6, 2.4)	.001
Secondary outcomes				
Change in AE VA at 3 months, mean (SD)				
LogMAR	0.56 (0.23)	0.42 (0.23)	0.14 (0.05, 0.23)	.004
Line	5.6 (2.3)	4.2 (2.3)	1.4 (0.5, 2.3)	.004
AE VA \geq20/32 at 6 months, No. (%)	29 (60)	19 (40)	1.53 (0.86, 2.72)	.15
FE VA decrease \geq1 line at 6 months^a, No. (%)	0 (0)	0 (0)	—	—

AP group = atropine combined patching group; P group = patching group; AE = amblyopic eye; VA = visual acuity; SD = standard deviation; FE = fellow eye; logMAR = logarithm of the minimum angle of resolution; RR = relative risk; CI = confidence interval.

a. The number in both groups is zero, so the relative risk cannot be calculated.

eTable 4. Adjusted Analysis for Primary and Secondary Outcomes (Intention-to-treat analysis)

Outcome	AP Group	P Group	Adjusted Mean Difference / Adjusted RR ^a (95% CI)	P Value
	(n =53)	(n =55)		
Primary outcome				
Change in AE VA at 6 months, mean (SD)				
LogMAR	0.72 (0.20)	0.58 (0.22)	0.14 (0.05, 0.22)	.002
Line	7.2 (2.0)	5.8 (2.2)	1.4 (0.5, 2.2)	.002
Secondary outcomes				
Change in AE VA at 3 months, mean (SD)				
LogMAR	0.54 (0.24)	0.41 (0.22)	0.13 (0.04, 0.22)	.004
Line	5.4 (2.4)	4.1 (2.2)	1.3 (0.4, 2.2)	.004
AE VA ≥20/32 at 6 months, No. (%)	32 (60)	22 (40)	1.48 (0.85, 2.59)	.17
FE VA decrease ≥1 line at 6 months^b, No. (%)	0 (0)	0 (0)	—	—

AP group = atropine combined patching group; P group = patching group; AE = amblyopic eye; VA = visual acuity; SD = standard deviation; FE = fellow eye; logMAR = logarithm of the minimum angle of resolution; RR = relative risk; CI = confidence interval.

a. The mean difference and RR were adjusted for age, sex, and cause of amblyopia.

b. The number in both groups is zero, so the relative risk cannot be calculated.

eTable 5. Adjusted Analysis for Primary and Secondary Outcomes (Per-protocol Analysis)

Outcome	AP Group	P Group	Adjusted Mean Difference / Adjusted RR ^a (95% CI)	P Value
	(n =48)	(n =48)		
Primary outcome				
Change in AE VA at 6 months, mean (SD)				
LogMAR	0.73 (0.21)	0.58 (0.23)	0.15 (0.06, 0.24)	.001
Line	7.3 (2.1)	5.8 (2.3)	1.5 (0.6, 2.4)	.001
Secondary outcomes				
Change in AE VA at 3 months, mean (SD)				
LogMAR	0.56 (0.23)	0.42 (0.23)	0.14 (0.04, 0.23)	.005
Line	5.6 (2.3)	4.2 (2.3)	1.4 (0.4, 2.3)	.005
AE VA ≥20/32 at 6 months, No. (%)	29 (60)	19 (40)	1.57 (0.88, 2.82)	.13
FE VA decrease ≥1 line at 6 months^b, No. (%)	0 (0)	0 (0)	—	—
<p>AP group = atropine combined patching group; P group = patching group; AE = amblyopic eye; VA = visual acuity; SD = standard deviation; FE = fellow eye; logMAR = logarithm of the minimum angle of resolution; RR = relative risk; CI = confidence interval.</p> <p>a. The mean difference and RR were adjusted for age, sex, and cause of amblyopia.</p> <p>b. The number in both groups is zero, so the relative risk cannot be calculated.</p>				

eTable 6. Visual Acuity in the Amblyopic Eye at the Primary Outcome Examination

	Intention-to-treat Analysis		Per-protocol Analysis	
	Atropine combined patching Group	Patching Group	Atropine combined patching Group	Patching Group
	(n=53)	(n=55)	(n=48)	(n=48)
Change of lines in AE VA at 6 months, No. (%)				
0	0 (0)	1 (2)	0 (0)	1 (2)
+1	0 (0)	1 (2)	0 (0)	1 (2)
+2	0 (0)	0 (0)	0 (0)	0 (0)
+3	0 (0)	5 (9)	0 (0)	4 (8)
+4	2 (4)	4 (7)	2 (4)	4 (8)
+5	11 (21)	11 (20)	9 (19)	10 (21)
+6	15 (28)	22 (40)	13 (27)	19 (40)
+7	5 (9)	5 (9)	5 (10)	4 (8)
+8	11 (21)	2 (4)	10 (21)	1 (2)
+9	2 (4)	0 (0)	2 (4)	0 (0)
+10	2 (4)	2 (4)	2 (4)	2 (4)
+11	4 (8)	1 (2)	4 (8)	1 (2)
+12	1 (2)	0 (0)	1 (2)	0 (0)
+13	0 (0)	0 (0)	0 (0)	0 (0)
+14	0 (0)	1 (2)	0 (0)	1 (2)
Mean (SD), line	7.2 (2.0)	5.8 (2.2)	7.3 (2.1)	5.8 (2.3)
Distribution of AE VA ^a at 6 months, No. (%)				
0.8 (20/25)	2 (4)	6 (11)	1 (2)	4 (8)
0.7 (20/30)	23 (43)	10 (18)	21 (44)	9 (19)
0.6 (20/32)	7 (13)	6 (11)	7 (15)	6 (13)
0.5 (20/40)	10 (19)	9 (16)	9 (19)	8 (17)
0.4 (20/50)	2 (4)	12 (22)	2 (4)	11 (23)
0.3 (20/63)	8 (15)	4 (7)	7 (15)	3 (6)
0.25 (20/80)	0 (0)	0 (0)	0 (0)	0 (0)
0.2 (20/100)	0 (0)	2 (4)	0 (0)	2 (4)
0.16 (20/125)	0 (0)	6 (11)	0 (0)	5 (10)
0.1 (20/200)	1 (2)	0 (0)	1 (2)	0 (0)
Mean (SD)				
LogMAR	0.26 (0.17)	0.34 (0.22)	0.26 (0.17)	0.35 (0.21)
Snellen equivalent	20/40 +2	20/50 +3	20/40 +2	20/50 +2
AE = amblyopic eye; VA = visual acuity; SD = standard deviation; logMAR = logarithm of the minimum angle of resolution.				
a. The visual acuity is measured by Standard Logarithm Visual Acuity Chart, in parentheses approximate Snellen equivalent is provided.				

eTable 7. Visual Acuity in the Fellow Eye at 6 months (Intention-to-treat Analysis)

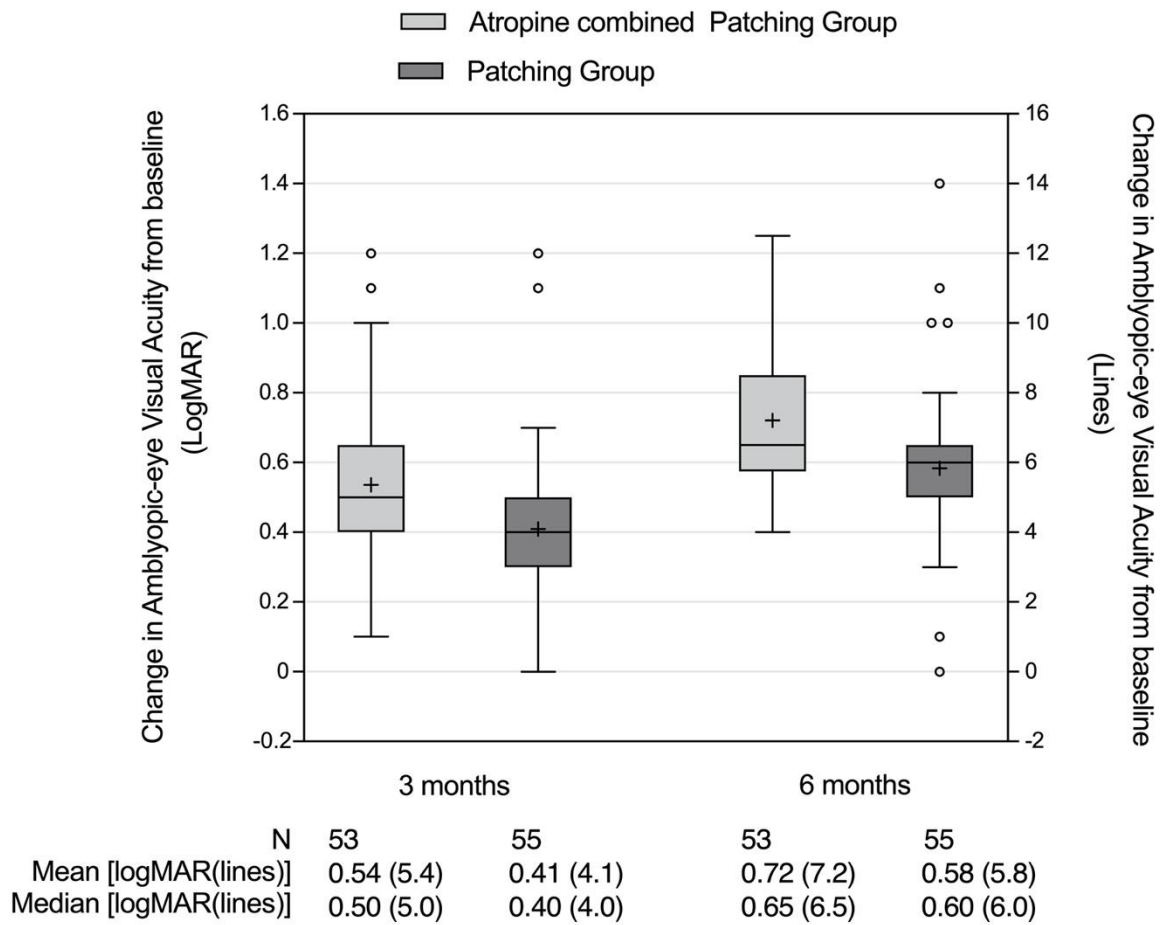
	Atropine combined Patching Group	Patching Group
	(n=53)	(n=55)
Change of lines in FE VA at 6 months, No. (%)		
-0.5	3 (6)	2 (4)
0	29 (55)	24 (44)
+0.5	11 (21)	9 (16)
+1	4 (8)	12 (22)
+1.5	2 (4)	2 (4)
+2	1 (2)	3 (5)
+2.5	3 (6)	1 (2)
+3	0 (0)	2 (4)
Mean (SD) ^a , line	0.40 (0.73)	0.62 (0.83)
Distribution of FE VA ^b at 6 months, No. (%)		
1.0 (20/20)	27 (51)	28 (51)
0.8 (20/25)	12 (23)	16 (29)
0.7 (20/30)	11 (21)	4 (7)
0.6 (20/32)	3 (6)	1 (2)
0.5 (20/40)	0 (0)	5 (9)
0.4 (20/50)	0 (0)	1 (2)
Mean (SD)		
LogMAR	0.06 (0.07)	0.07 (0.10)
Snellen equivalent	20/25 +2	20/25 +1

FE = fellow eye; VA = visual acuity; SD = standard deviation; logMAR = logarithm of the minimum angle of resolution.

a. For the difference of mean change in FE VA from baseline to month 6 between atropine combined patching group and patching group, $p = .16$.

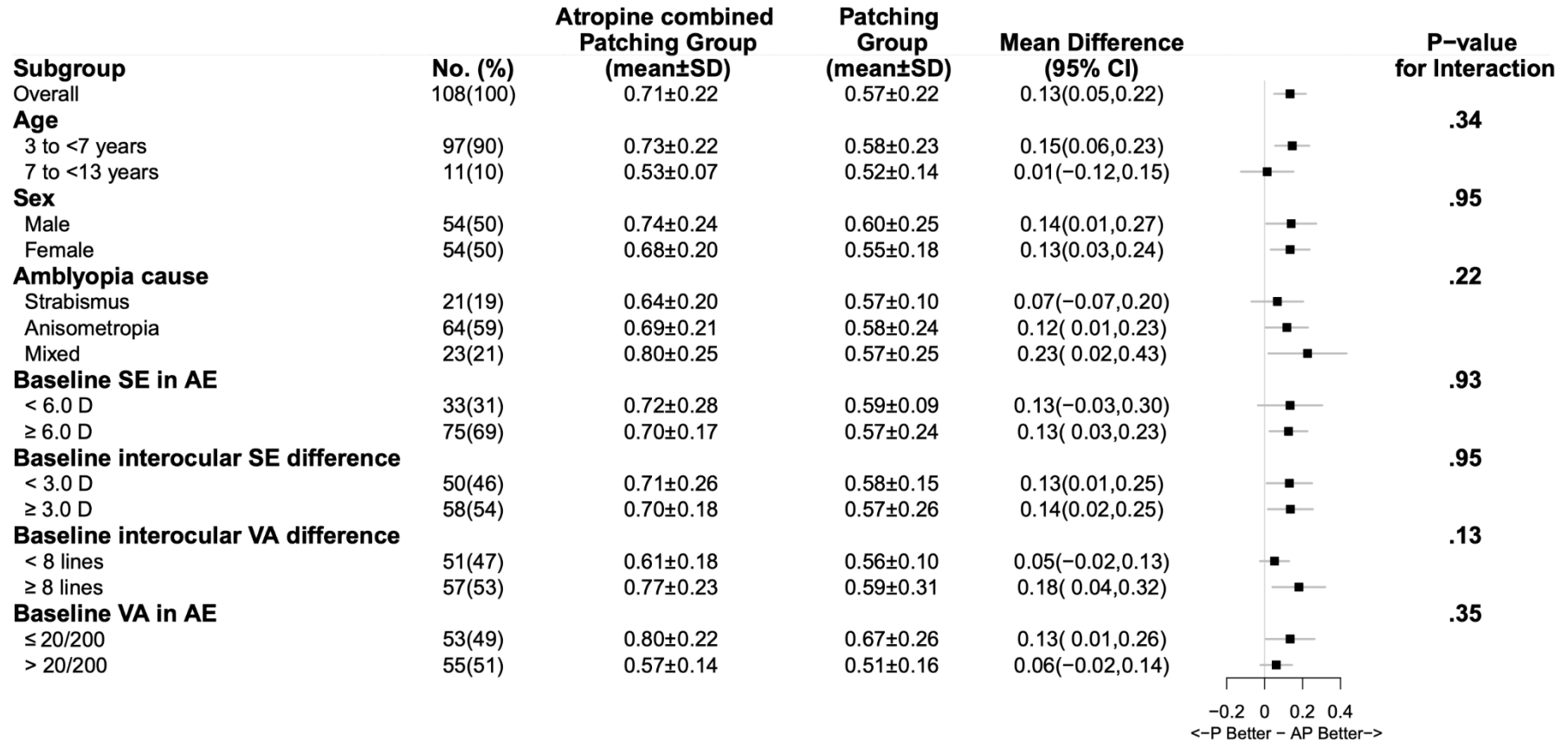
b. The visual acuity is measured by Standard Logarithm Visual Acuity Chart, in parentheses approximate Snellen equivalent is provided.

eFigure 1. Change of Amblyopic-eye Visual Acuity at 3 Months and 6 Months



eFigure 1. According to intention-to-treat analysis, changes in amblyopic-eye visual acuity of the two groups at 3 months and 6 months are shown. The light gray box represents the atropine combined patching group and the dark gray box represents the patching group. The lower and upper ends of the box indicate the first and the third quartiles of the data. The line in the box is the median, which is the second quartile. The “+” indicates the mean. The whisker shown is 1.5 times the interquartile range and the circles plotted beyond the whiskers are outlier data.

eFigure 2. Subgroup Analysis* of Change in Amblyopic-eye Visual Acuity at 6 Months (Intention-to-treat analysis)



eFigure 2. No significant interaction was found between the treatment groups and the baseline characteristics. SE = spherical equivalent; AE = amblyopic eye; D = diopter; VA = visual acuity; SD = standard deviation; CI = confidence interval. *Since subgroup analysis was not pre-specified, the results of it should be considered exploratory.