**Supplementary materials**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **NO.** | **Name** | **Gender** | **Age** | **OD** | **OS** | **BCVA** **OD/OS** | **VA** **OD/OS** | **Refraction-Error OD/OS** | **EEG scaling** | **Patching history(y)** |
| **1** | TZR | M | 8 | AST | AST | 0/0 | 0.38/0.34 | +1.75/-3.50\*180+2.00/-4.00\*175 | Y | N |
| **2** | XXQC | F | 10 | MA | MA | 0.18/0.12 | 0.48/0.58 | -0.75/-2.25\*180-0.25/-3.25\*180 | N | N |
| **3** | YZH | M | 7 | MA | MA | 0.2/0.18 | 0.48/0.46 | +5.00/-2.50\*5 +5.50/-2.50\*160 | Y | N |
| **4** | DHB | M | 14 | MA | MA | 0.1/0.1 | 0.32/0.36 | +1.50/-5.50\*180 +1.75/-6.00\*180 | Y | Y/5.5 |
| **5** | PZX | M | 8 | AST | AST | 0/0 | 0.12/0.18 | +1.00/-1.75\*180+1.50/-2.25\*10 | N | N |
| **6** | ZDY | M | 8 | None | MA | 0.04/0.24 | 0.5/0.44 | +3.75/-2.75\*175+4.25/-2.75\*170 | Y | Y/4.6 |
| **7** | WJ | F | 11 | MA | None | 0.3/0.3 | 0.6/0.6 | +0.75/-5.50\*175-1.50/-1.00\*180 | Y | N |
| **8** | LWX | F | 7 | None | MA | 0.02/0.14 | 0.2/0.24 | +3.75/-2.50\*10+3.50/-3.75\*180 | Y | N |
| **9** | FRH | M | 11 | None | MA | 0.22/0.1 | 0.44/0.32 | -0.75/-1.00\*175 0/-2.00\*170 | Y | Y/5.4 |
| **10** | HCB | M | 12 | AST | AST | -0.08/0.04 | 0.34/0.16 | +1.25/-2.00\*5+1.50/-3.00\*170  | N | N |
| **11** | LEL | F | 8 | AST | AST | 0/0 | 0.1/0.1 | +1.25/-2.75\*180+1.25/-1.75\*180  | Y | N |
| **12** | LYJ | F | 9 | AST | AST | 0.04/0.02 | 0.62/0.6 | -2.50/-3.50\*170 -2.75/-3.25\*180 | Y | N |
| **13** | CRQ | M | 8 | AST | AST | 0.02/0.08 | 0.42/0.46 | +2.00/-2.75\*180 +2.00/-3.50\*175 | Y | N |
| **14** | QYZ | F | 9 | AST | AST | 0.04/0.04 | 0.58/0.74 | +2.50/-6.00\*180+2.50/-6.00\*172 | Y | N |
| **15** | ZY | F | 11 | None | MA | 0/0.18 | 0.24/0.24 | +2.50/-2.50\*175+3.00/-3.00\*180 | Y | N |
| **16** | LHW | M | 8 | None | MA | 0.02/0.12 | 0.3/0.66 | +1.75/-3.00\*5+2.00/-6.00\*175 | Y | Y/2.25 |
| **17** | LXY | F | 10 | MA | MA | 0.2/0.28 | 0.3/0.44 | +3.00/-1.50\*165 -4.00/-2.25\*10 | Y | Y/1.7 |
| **18** | WF | M | 22 | MA | MA | 0.38/0.12 | 0.56/0.5 | +2.00/-4.75\*70 -3.25/-2.75\*100 | Y | N |
| **19** | ZXF | M | 9 | AST | AST | 0/0 | 0.12/0.1 | +1.25/-2.50\*180+0.50/-1.50\*175 | Y | N |
| **20** | YZQ | F | 11 | AST | AST | -0.06/-0.06 | 0.34/0.54 | +0.75/-2.50\*175-1.00/-3.25\*5 | N | N |
| **21** | KAR | M | 9 | AST | AST | 0.02/0 | 0.12/0.22 | +2.25/-3.50\*5+2.75/-2.75\*170 | Y | N |
| **22** | ZYM | F | 26 | MA | None | 0.08/-0.08 | 0.94/0.6 | -3.75/-3.75\*18 -3.25/ | N | N |
| **23** | ZXN | M | 25 | MA | MA | 0.30/0.20 | 0.34/0.22 | +6.50/-2.75\*95+5.75/-2.00\*80 | Y | N |

***Table S1. Clinical details of the participants.*** *Both BCVA and VA were reported in the form of LogMAR. Note: M: male, F: female, OD: right eye, OS: left eye. AST:* *astigmatism without amblyopia, MA: meridional amblyopia. None: not accordant with the inclusion criteria. Y: Yes, N: No.*



***Figure S1. Individual CSF result for participants in the AST group (A) and MA group (B).***