**Supplementary file 3.** Dark-adapted ffERG responses: individual meta-analyses, heterogeneity statistics, sensitivity analyses, and risk of bias across studies.

**Any AMD vs. healthy control**

**A-wave amplitude: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | -17,40 | -40,89 | 6,09 | 38,84 |
| Walter et al. 1999 | -17,00 | -35,72 | 1,72 | 61,16 |
|  |  |  |  |  |
| Pooled | -17,16 | -31,79 | -2,52 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | NAN | NAN |  |
| Cochran's Q | 0,00 |  |  |  |
| Chi2, p | 0,98 |  |  |  |
| tau2 | 0,00 |  |  |  |

**A-wave amplitude: sensitivity analysis**

Analysis is not possible/meaningful when <3 studies are available.

**A-wave amplitude: risk of bias across studies**

Analysis is not possible/meaningful when <3 studies are available.

**A-wave implicit time: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 0,00 | -0,09 | 0,09 | 37,61 |
| Ronan et al. 2006 | 0,04 | -4,46 | 4,54 | 28,59 |
| Walter et al. 1999 | 7,00 | 4,31 | 9,69 | 33,80 |
|  |  |  |  |  |
| Pooled | 2,38 | -2,53 | 7,29 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 92,33 | 80,80 | 96,93 |  |
| Cochran's Q | 26,06 |  |  |  |
| Chi2, p | 0,00 |  |  |  |
| tau2 | 16,67 |  |  |  |

**A-wave implicit time: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Forshaw et al. 2020 | 3,76 | -3,04 | 10,57 | 6,78 | 85,26 |
| Ronan et al. 2006 | 3,37 | -3,49 | 10,22 | 26,06 | 96,16 |
| Walter et al. 1999 | 0,00 | -0,09 | 0,09 | 0,00 | 0,00 |

**A-wave implicit time: risk of bias across studies**





**B-wave amplitude: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | -17,85 | -58,64 | 22,94 | 22,90 |
| Ronan et al. 2006 | -16,29 | -42,01 | 9,43 | 41,33 |
| Walter et al. 1999 | -50,00 | -79,25 | -20,75 | 35,76 |
|  |  |  |  |  |
| Pooled | -28,70 | -51,40 | -6,01 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 37,54 | 0,00 | 80,32 |  |
| Cochran's Q | 3,20 |  |  |  |
| Chi2, p | 0,20 |  |  |  |
| tau2 | 152,05 |  |  |  |

**B-wave amplitude: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Forshaw et al. 2020 | -32,40 | -65,40 | 0,61 | 2,88 | 65,24 |
| Ronan et al. 2006 | -37,20 | -68,04 | -6,35 | 1,58 | 36,53 |
| Walter et al. 1999 | -16,73 | -38,49 | 5,03 | 0,00 | 0,00 |

**B-wave amplitude: risk of bias across studies**





**B-wave implicit time: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 0,00 | -0,09 | 0,09 | 37,61 |
| Ronan et al. 2006 | 0,04 | -4,46 | 4,54 | 28,59 |
| Walter et al. 1999 | 7,00 | 4,31 | 9,69 | 33,80 |
|  |  |  |  |  |
| Pooled | 2,38 | -2,53 | 7,29 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 92,33 | 80,80 | 96,93 |  |
| Cochran's Q | 26,06 |  |  |  |
| Chi2, p | 0,00 |  |  |  |
| tau2 | 16,67 |  |  |  |

**B-wave implicit time: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Forshaw et al. 2020 | 3,76 | -3,04 | 10,57 | 6,78 | 85,26 |
| Ronan et al. 2006 | 3,37 | -3,49 | 10,22 | 26,06 | 96,16 |
| Walter et al. 1999 | 0,00 | -0,09 | 0,09 | 0,00 | 0,00 |

**B-wave implicit time: risk of bias across studies**





**Early AMD vs. healthy control**

**A-wave amplitude: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 4,20 | -21,32 | 29,72 | 47,83 |
| Walter et al. 1999 | -10,70 | -35,14 | 13,74 | 52,17 |
|  |  |  |  |  |
| Pooled | -3,57 | -21,22 | 14,08 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | NAN | NAN |  |
| Cochran's Q | 0,68 |  |  |  |
| Chi2, p | 0,41 |  |  |  |
| tau2 | 0,00 |  |  |  |

**A-wave amplitude: sensitivity analysis**

Analysis is not possible/meaningful when <3 studies are available.

**A-wave amplitude: risk of bias across studies**

Analysis is not possible/meaningful when <3 studies are available.

**A-wave implicit time: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 0,65 | -2,51 | 3,81 | 51,59 |
| Walter et al. 1999 | 10,70 | 5,98 | 15,42 | 48,41 |
|  |  |  |  |  |
| Pooled | 5,52 | -4,33 | 15,36 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 91,69 | 71,04 | 97,62 |  |
| Cochran's Q | 12,03 |  |  |  |
| Chi2, p | 0,00 |  |  |  |
| tau2 | 46,30 |  |  |  |

**A-wave implicit time: sensitivity analysis**

Analysis is not possible/meaningful when <3 studies are available.

**A-wave implicit time: risk of bias across studies**

Analysis is not possible/meaningful when <3 studies are available.

**B-wave amplitude: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 7,45 | -63,54 | 78,44 | 19,87 |
| Ronan et al. 2006 | 12,00 | -23,35 | 47,35 | 80,13 |
|  |  |  |  |  |
| Pooled | 11,10 | -20,55 | 42,74 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | NAN | NAN |  |
| Cochran's Q | 0,01 |  |  |  |
| Chi2, p | 0,91 |  |  |  |
| tau2 | 0,00 |  |  |  |

**B-wave amplitude: sensitivity analysis**

Analysis is not possible/meaningful when <3 studies are available.

**B-wave amplitude: risk of bias across studies**

Analysis is not possible/meaningful when <3 studies are available.

**B-wave implicit time: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 0,00 | -0,26 | 0,26 | 99,80 |
| Ronan et al. 2006 | -2,30 | -7,96 | 3,36 | 0,20 |
|  |  |  |  |  |
| Pooled | 0,00 | -0,26 | 0,25 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | NAN | NAN |  |
| Cochran's Q | 0,63 |  |  |  |
| Chi2, p | 0,43 |  |  |  |
| tau2 | 0,00 |  |  |  |

**B-wave implicit time: sensitivity analysis**

Analysis is not possible/meaningful when <3 studies are available.

**B-wave implicit time: risk of bias across studies**

Analysis is not possible/meaningful when <3 studies are available.

**Late AMD vs. healthy control**

**A-wave amplitude: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | -27,80 | -53,23 | -2,37 | 42,74 |
| Walter et al. 1999 | -20,10 | -42,07 | 1,87 | 57,26 |
|  |  |  |  |  |
| Pooled | -23,39 | -40,02 | -6,77 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | NAN | NAN |  |
| Cochran's Q | 0,20 |  |  |  |
| Chi2, p | 0,65 |  |  |  |
| tau2 | 0,00 |  |  |  |

**A-wave amplitude: sensitivity analysis**

Analysis is not possible/meaningful when <3 studies are available.

**A-wave amplitude: risk of bias across studies**

Analysis is not possible/meaningful when <3 studies are available.

**A-wave implicit time: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Dimopoulos et al. 2013 | 1,00 | 0,39 | 1,61 | 40,67 |
| Forshaw et al. 2020 | 1,50 | 0,77 | 2,23 | 36,10 |
| Ronan et al. 2006 | -0,28 | -1,54 | 0,98 | 21,01 |
| Walter et al. 1999 | 2,00 | -2,79 | 6,79 | 2,21 |
|  |  |  |  |  |
| Pooled | 0,93 | 0,21 | 1,66 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 49,35 | 0,00 | 83,23 |  |
| Cochran's Q | 5,92 |  |  |  |
| Chi2, p | 0,12 |  |  |  |
| tau2 | 0,24 |  |  |  |

**A-wave implicit time: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Dimopoulos et al. 2013 | 0,81 | -0,68 | 2,30 | 5,90 | 66,09 |
| Forshaw et al. 2020 | 0,59 | -0,43 | 1,61 | 3,48 | 42,51 |
| Ronan et al. 2006 | 1,21 | 0,75 | 1,68 | 1,17 | 0,00 |
| Walter et al. 1999 | 0,89 | 0,09 | 1,69 | 5,76 | 65,31 |

**A-wave implicit time: risk of bias across studies**





**B-wave amplitude: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | -29,95 | -74,71 | 14,81 | 27,71 |
| Ronan et al. 2006 | -26,21 | -53,92 | 1,50 | 72,29 |
|  |  |  |  |  |
| Pooled | -27,25 | -50,81 | -3,68 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | NAN | NAN |  |
| Cochran's Q | 0,02 |  |  |  |
| Chi2, p | 0,89 |  |  |  |
| tau2 | 0,00 |  |  |  |

**B-wave amplitude: sensitivity analysis**

Analysis is not possible/meaningful when <3 studies are available.

**B-wave amplitude: risk of bias across studies**

Analysis is not possible/meaningful when <3 studies are available.

**B-wave implicit time: meta-analysis and heterogeneity statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Dimopoulos et al. 2013 | 1,00 | 0,39 | 1,61 | 55,62 |
| Forshaw et al. 2020 | 1,15 | 0,19 | 2,11 | 22,33 |
| Ronan et al. 2006 | 0,80 | -0,63 | 2,23 | 9,97 |
| Walter et al. 1999 | 1,00 | -0,30 | 2,30 | 12,08 |
|  |  |  |  |  |
| Pooled | 1,01 | 0,56 | 1,47 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | 0,00 | 0,00 |  |
| Cochran's Q | 0,17 |  |  |  |
| Chi2, p | 0,98 |  |  |  |
| tau2 | 0,00 |  |  |  |

**B-wave implicit time: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Dimopoulos et al. 2013 | 1,03 | 0,35 | 1,71 | 0,16 | 0,00 |
| Forshaw et al. 2020 | 0,97 | 0,46 | 1,49 | 0,07 | 0,00 |
| Ronan et al. 2006 | 1,04 | 0,56 | 1,51 | 0,07 | 0,00 |
| Walter et al. 1999 | 1,02 | 0,53 | 1,50 | 0,17 | 0,00 |

**B-wave implicit time: risk of bias across studies**



