**Supplementary file 2.** Light-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 (%) |
| Dimopoulos et al. 2013 | 2,00 | -4,06 | 8,06 | 22,87 |
| Forshaw et al. 2020 | -2,90 | -8,39 | 2,59 | 23,95 |
| Ronan et al. 2006 | -1,35 | -5,17 | 2,47 | 26,97 |
| Walter et al. 1999 | -11,40 | -15,66 | -7,14 | 26,21 |
|  |  |  |  |  |
| Pooled | -3,59 | -9,36 | 2,18 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 82,70 | 55,64 | 93,25 |  |
| Cochran's Q | 17,34 |  |  |  |
| Chi2, p | 0,00 |  |  |  |
| tau2 | 28,30 |  |  |  |

**A-wave amplitude: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Dimopoulos et al. 2013 | -5,25 | -11,76 | 1,27 | 12,70 | 84,25 |
| Forshaw et al. 2020 | -3,75 | -11,54 | 4,05 | 17,10 | 88,30 |
| Ronan et al. 2006 | -4,32 | -12,34 | 3,69 | 14,08 | 85,79 |
| Walter et al. 1999 | -1,04 | -3,83 | 1,75 | 1,43 | 0,00 |

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





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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Dimopoulos et al. 2013 | 1,00 | 0,50 | 1,50 | 39,14 |
| Forshaw et al. 2020 | 1,60 | 0,94 | 2,26 | 35,38 |
| Ronan et al. 2006 | -0,39 | -1,58 | 0,80 | 22,84 |
| Walter et al. 1999 | 2,00 | -2,80 | 6,80 | 2,63 |
|  |  |  |  |  |
| Pooled | 0,92 | 0,12 | 1,72 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 64,61 | 0,00 | 88,01 |  |
| Cochran's Q | 8,48 |  |  |  |
| Chi2, p | 0,04 |  |  |  |
| tau2 | 0,36 |  |  |  |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Dimopoulos et al. 2013 | 0,81 | -0,88 | 2,51 | 8,32 | 75,98 |
| Forshaw et al. 2020 | 0,53 | -0,63 | 1,68 | 4,66 | 57,08 |
| Ronan et al. 2006 | 1,24 | 0,81 | 1,66 | 2,12 | 5,75 |
| Walter et al. 1999 | 0,88 | 0,02 | 1,74 | 8,33 | 75,99 |

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





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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Dimopoulos et al. 2013 | -9,70 | -17,48 | -1,92 | 47,88 |
| Forshaw et al. 2020 | -10,10 | -27,76 | 7,56 | 9,28 |
| Ronan et al. 2006 | -14,96 | -25,86 | -4,06 | 24,35 |
| Walter et al. 1999 | -21,80 | -34,31 | -9,29 | 18,48 |
|  |  |  |  |  |
| Pooled | -13,25 | -18,63 | -7,87 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | 0,00 | 83,66 |  |
| Cochran's Q | 2,81 |  |  |  |
| Chi2, p | 0,42 |  |  |  |
| tau2 | 0,00 |  |  |  |

**B-wave amplitude: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Dimopoulos et al. 2013 | -16,52 | -23,97 | -9,07 | 1,27 | 0,00 |
| Forshaw et al. 2020 | -14,09 | -20,82 | -7,37 | 2,68 | 25,26 |
| Ronan et al. 2006 | -13,28 | -21,03 | -5,53 | 2,69 | 25,56 |
| Walter et al. 1999 | -11,32 | -17,28 | -5,36 | 0,61 | 0,00 |

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Dimopoulos et al. 2013 | 0,50 | 0,00 | 1,00 | 60,23 |
| Forshaw et al. 2020 | 1,02 | 0,11 | 1,93 | 18,41 |
| Ronan et al. 2006 | 0,52 | -0,83 | 1,87 | 8,40 |
| Walter et al. 1999 | 1,20 | 0,11 | 2,29 | 12,96 |
|  |  |  |  |  |
| Pooled | 0,69 | 0,30 | 1,08 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | 0,00 | 76,45 |  |
| Cochran's Q | 1,95 |  |  |  |
| Chi2, p | 0,58 |  |  |  |
| 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 | 0,97 | 0,35 | 1,59 | 0,61 | 0,00 |
| Forshaw et al. 2020 | 0,61 | 0,18 | 1,05 | 1,33 | 0,00 |
| Ronan et al. 2006 | 0,70 | 0,29 | 1,11 | 1,89 | 0,00 |
| Walter et al. 1999 | 0,61 | 0,19 | 1,03 | 0,97 | 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 | 0,20 | -5,71 | 6,11 | 34,03 |
| Ronan et al. 2006 | 2,60 | -3,09 | 8,29 | 35,37 |
| Walter et al. 1999 | -5,70 | -12,19 | 0,79 | 30,60 |
|  |  |  |  |  |
| Pooled | -0,76 | -5,46 | 3,94 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 45,28 | 0,00 | 83,78 |  |
| Cochran's Q | 3,65 |  |  |  |
| Chi2, p | 0,16 |  |  |  |
| tau2 | 7,81 |  |  |  |

**A-wave amplitude: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Forshaw et al. 2020 | -1,40 | -9,53 | 6,73 | 3,55 | 71,82 |
| Ronan et al. 2006 | -2,59 | -8,36 | 3,18 | 1,74 | 42,40 |
| Walter et al. 1999 | 1,44 | -2,66 | 5,54 | 0,33 | 0,00 |

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





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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 1,80 | 0,72 | 2,88 | 44,64 |
| Ronan et al. 2006 | -0,70 | -1,97 | 0,57 | 42,73 |
| Walter et al. 1999 | 2,20 | -2,97 | 7,37 | 12,63 |
|  |  |  |  |  |
| Pooled | 0,78 | -1,34 | 2,91 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 77,49 | 26,96 | 93,06 |  |
| Cochran's Q | 8,88 |  |  |  |
| Chi2, p | 0,01 |  |  |  |
| tau2 | 2,33 |  |  |  |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Forshaw et al. 2020 | -0,38 | -2,16 | 1,40 | 1,14 | 12,10 |
| Ronan et al. 2006 | 1,82 | 0,76 | 2,88 | 0,02 | 0,00 |
| Walter et al. 1999 | 0,57 | -1,88 | 3,02 | 8,59 | 88,36 |

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | -11,65 | -32,50 | 9,20 | 26,80 |
| Ronan et al. 2006 | -1,90 | -18,36 | 14,56 | 39,81 |
| Walter et al. 1999 | -21,30 | -39,62 | -2,98 | 33,39 |
|  |  |  |  |  |
| Pooled | -10,99 | -22,58 | 0,60 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 16,38 | 0,00 | 91,30 |  |
| Cochran's Q | 2,39 |  |  |  |
| Chi2, p | 0,30 |  |  |  |
| tau2 | 17,37 |  |  |  |

**B-wave amplitude: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Forshaw et al. 2020 | -11,16 | -30,16 | 7,83 | 2,38 | 58,06 |
| Ronan et al. 2006 | -17,10 | -30,86 | -3,33 | 0,46 | 0,00 |
| Walter et al. 1999 | -5,64 | -18,56 | 7,27 | 0,52 | 0,00 |

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Forshaw et al. 2020 | 0,75 | -0,48 | 1,98 | 47,72 |
| Ronan et al. 2006 | -0,30 | -1,88 | 1,28 | 29,55 |
| Walter et al. 1999 | 1,40 | -0,41 | 3,21 | 22,74 |
|  |  |  |  |  |
| Pooled | 0,59 | -0,28 | 1,46 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 2,65 | 0,00 | 89,87 |  |
| Cochran's Q | 2,05 |  |  |  |
| Chi2, p | 0,36 |  |  |  |
| tau2 | 0,02 |  |  |  |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Forshaw et al. 2020 | 0,49 | -1,17 | 2,15 | 1,93 | 48,08 |
| Ronan et al. 2006 | 0,96 | -0,06 | 1,98 | 0,34 | 0,00 |
| Walter et al. 1999 | 0,35 | -0,66 | 1,35 | 1,05 | 5,05 |

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





**Late AMD vs. healthy control**

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | WMD | LCI 95% | HCI 95% | weight (%) |
| Dimopoulos et al. 2013 | 4,00 | -3,27 | 11,27 | 22,68 |
| Forshaw et al. 2020 | -4,40 | -10,64 | 1,84 | 24,07 |
| Ronan et al. 2006 | -2,74 | -6,68 | 1,20 | 26,88 |
| Walter et al. 1999 | -14,30 | -18,70 | -9,90 | 26,37 |
|  |  |  |  |  |
| Pooled | -4,66 | -12,02 | 2,70 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 87,40 | 69,92 | 94,72 |  |
| Cochran's Q | 23,81 |  |  |  |
| Chi2, p | 0,00 |  |  |  |
| tau2 | 48,42 |  |  |  |

**A-wave amplitude: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Dimopoulos et al. 2013 | -7,21 | -14,91 | 0,49 | 15,70 | 87,26 |
| Forshaw et al. 2020 | -4,64 | -14,50 | 5,21 | 23,54 | 91,50 |
| Ronan et al. 2006 | -5,20 | -15,86 | 5,45 | 19,61 | 89,80 |
| Walter et al. 1999 | -1,63 | -5,82 | 2,55 | 3,32 | 39,74 |

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





**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 (%) |
| Dimopoulos et al. 2013 | -16,00 | -25,09 | -6,91 | 44,67 |
| Forshaw et al. 2020 | -9,35 | -29,04 | 10,34 | 9,51 |
| Ronan et al. 2006 | -19,53 | -31,03 | -8,03 | 27,90 |
| Walter et al. 1999 | -22,00 | -36,35 | -7,65 | 17,92 |
|  |  |  |  |  |
| Pooled | -17,43 | -23,50 | -11,35 | 100,00 |
| Statistics |  |  |  |  |
| I-squared | 0,00 | 0,00 | 63,53 |  |
| Cochran's Q | 1,26 |  |  |  |
| Chi2, p | 0,74 |  |  |  |
| tau2 | 0,00 |  |  |  |

**B-wave amplitude: sensitivity analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Excluded study | Pooled WMD | LCI 95% | HCI 95% | Cochran Q | I 2 |
| Dimopoulos et al. 2013 | -18,58 | -26,75 | -10,41 | 1,09 | 0,00 |
| Forshaw et al. 2020 | -18,28 | -24,66 | -11,89 | 0,55 | 0,00 |
| Ronan et al. 2006 | -16,61 | -23,77 | -9,46 | 1,08 | 0,00 |
| Walter et al. 1999 | -16,43 | -23,13 | -9,73 | 0,78 | 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 (%) |
| 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**

