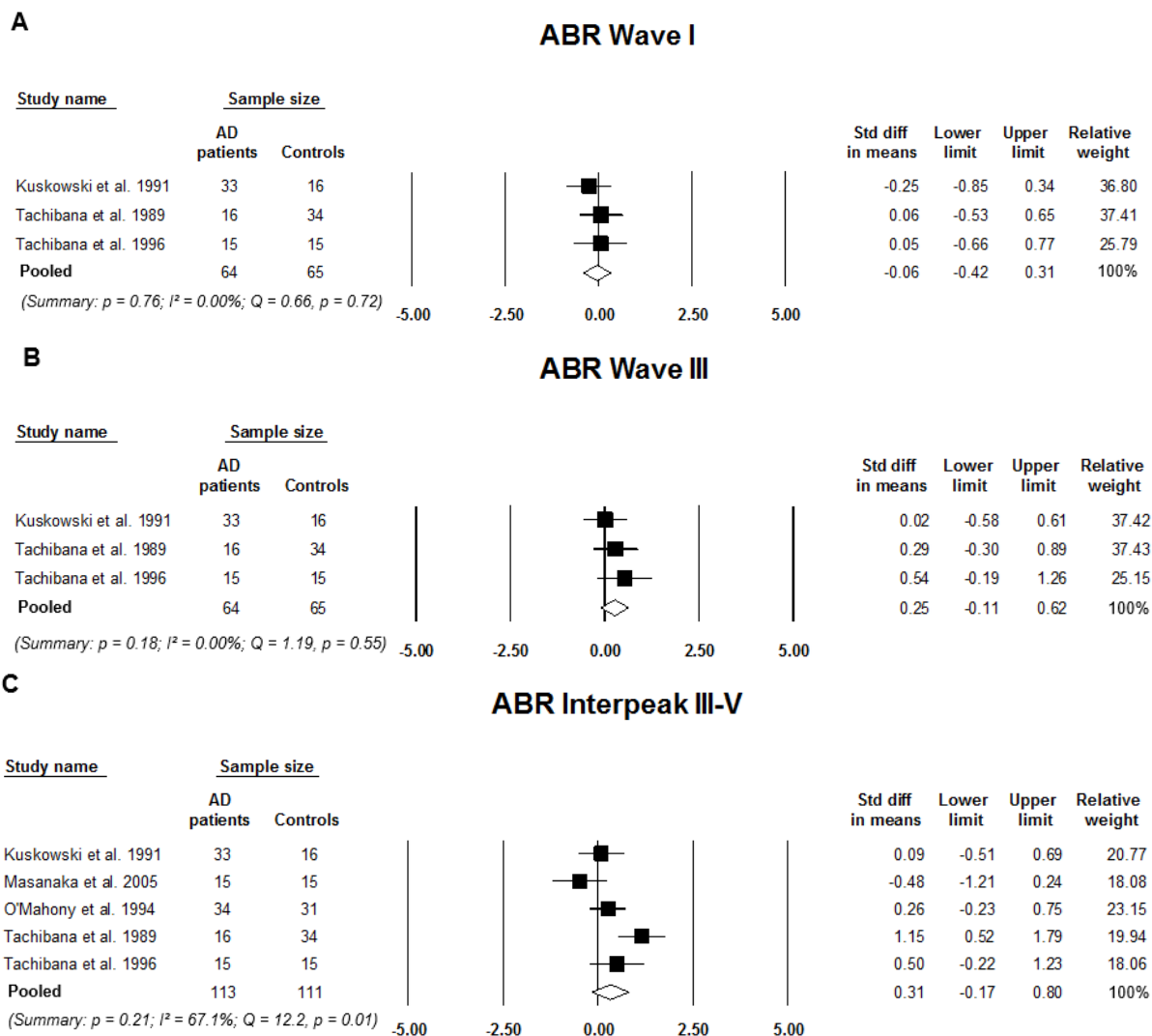


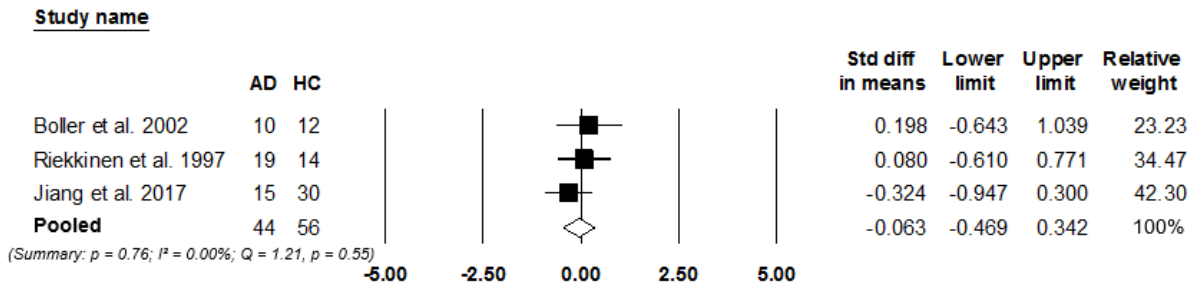
Supplementary Material

Investigating Auditory Electrophysiological Measures of Participants with Mild Cognitive Impairment and Alzheimer's disease: A Systematic Review and Meta-analysis of Event-Related Potential Studies

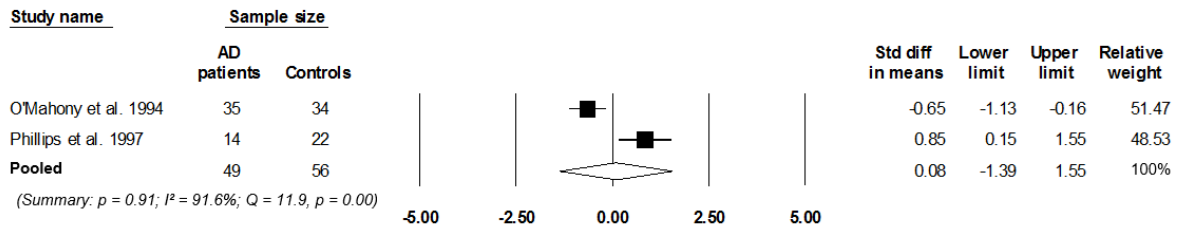
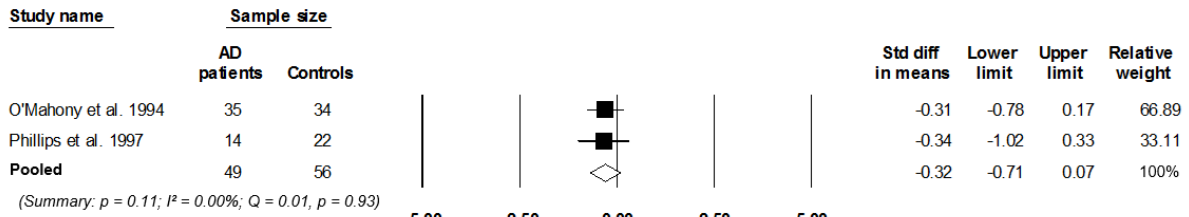


Supplementary Figure 1. Standard mean difference and pooled estimated of each study included in the meta-analyses of auditory brainstem responses (ABR) elicited using the passive rarefaction click paradigm. All the analyses compare participants with Alzheimer's disease (AD) to controls A) analysis of ABR wave I latency, B) analysis of ABR wave III, and C) analysis of ABR interpeak wave III-V. Summary includes: p = significance level; I^2 = percentage of heterogeneity; Q = Cochran's Q . The horizontal lines represent the 95% confidence interval for each computed standard mean difference. Note: weights are from random effects analysis.

MMN Amplitude



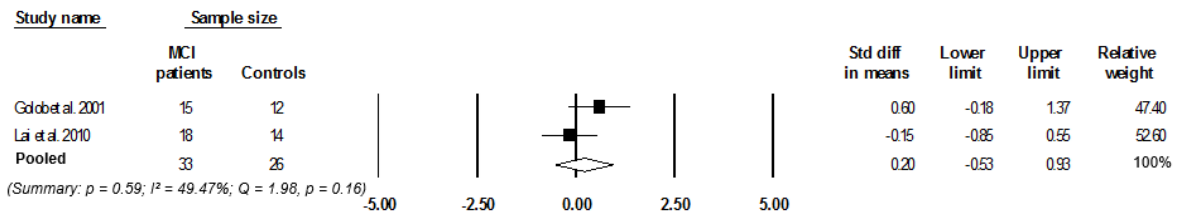
Supplementary Figure 2. Standard mean difference and pooled estimated of each study included in the meta-analyses of mismatch negativity (MMN) elicited using the passive two-tone oddball paradigm. Comparing participants with Alzheimer’s disease (AD) to controls. Summary includes: p = significance level; I^2 = percentage of heterogeneity; Q = Cochran’s Q . The horizontal lines represent the 95% confidence interval for each computed standard mean difference. Note: weights are from random effects analysis.

A**P50 Amplitude****B****P50 Latency**

Supplementary Figure 3. Standard mean difference and pooled estimated of each study included in the meta-analyses of P50 elicited using the passive rarefaction click paradigm. A) comparing P50 amplitude between participants with Alzheimer's disease (AD) to controls, B) comparing P50 latency between participants with AD and controls, Summary includes: p = significance level; I^2 = percentage of heterogeneity; Q = Cochran's Q . The horizontal lines represent the 95% confidence interval for each computed standard mean difference. Note: weights are from random effects analysis.

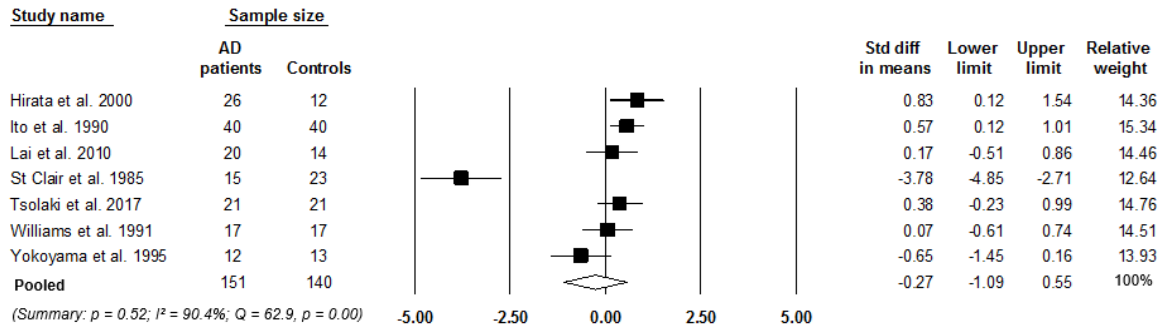
A

N100 Latency



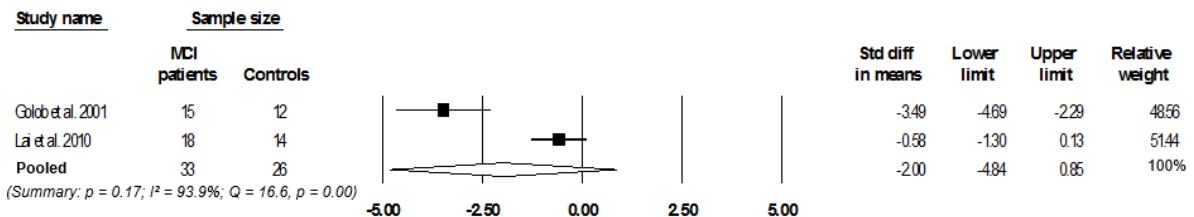
B

N100 Amplitude

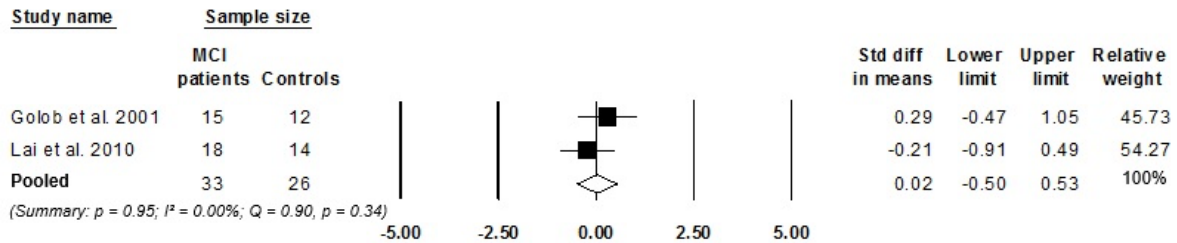
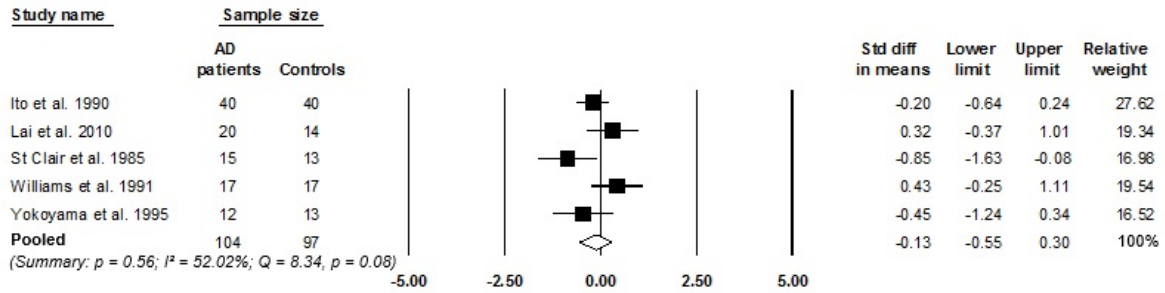
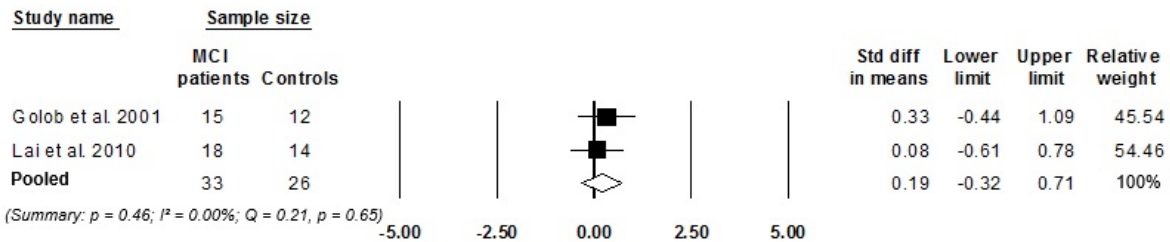


C

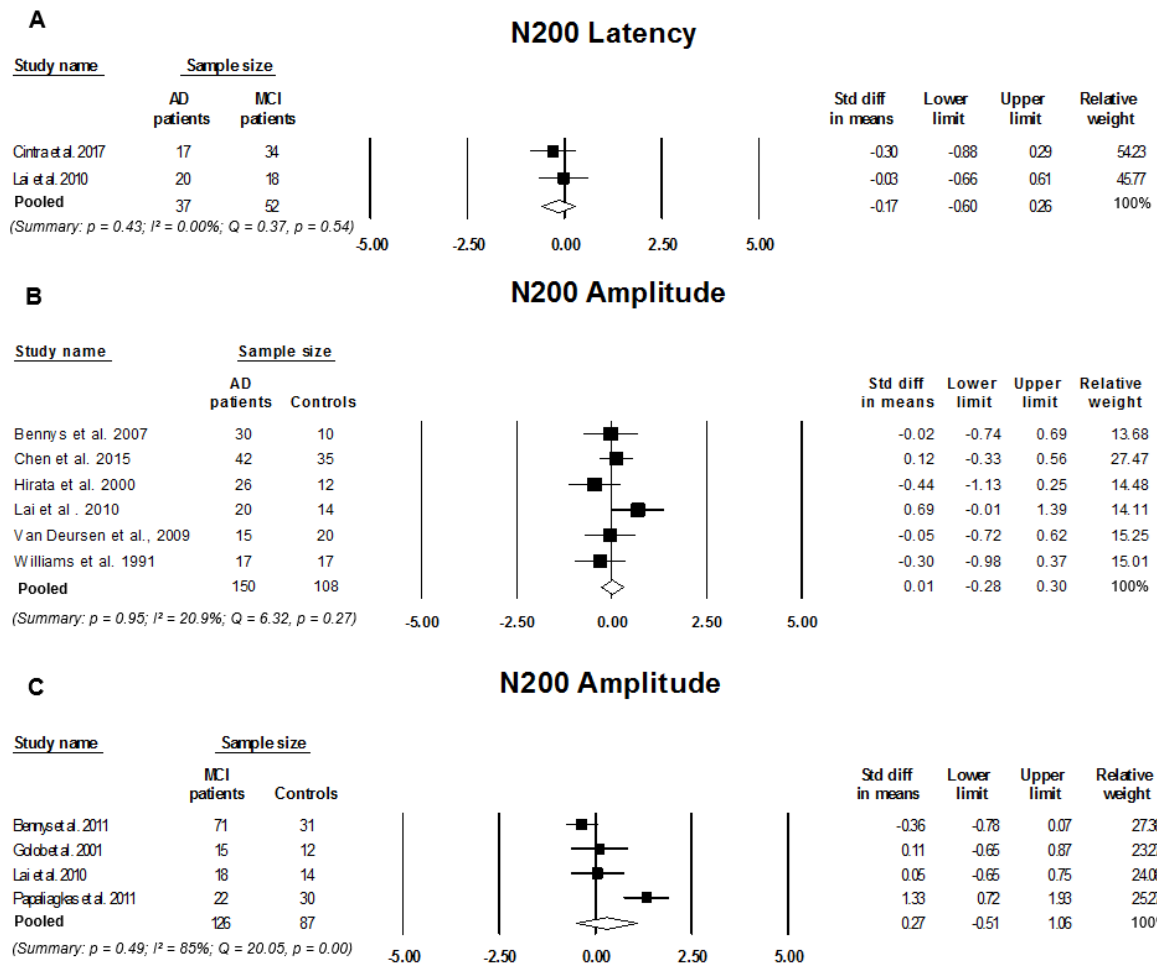
N100 Amplitude



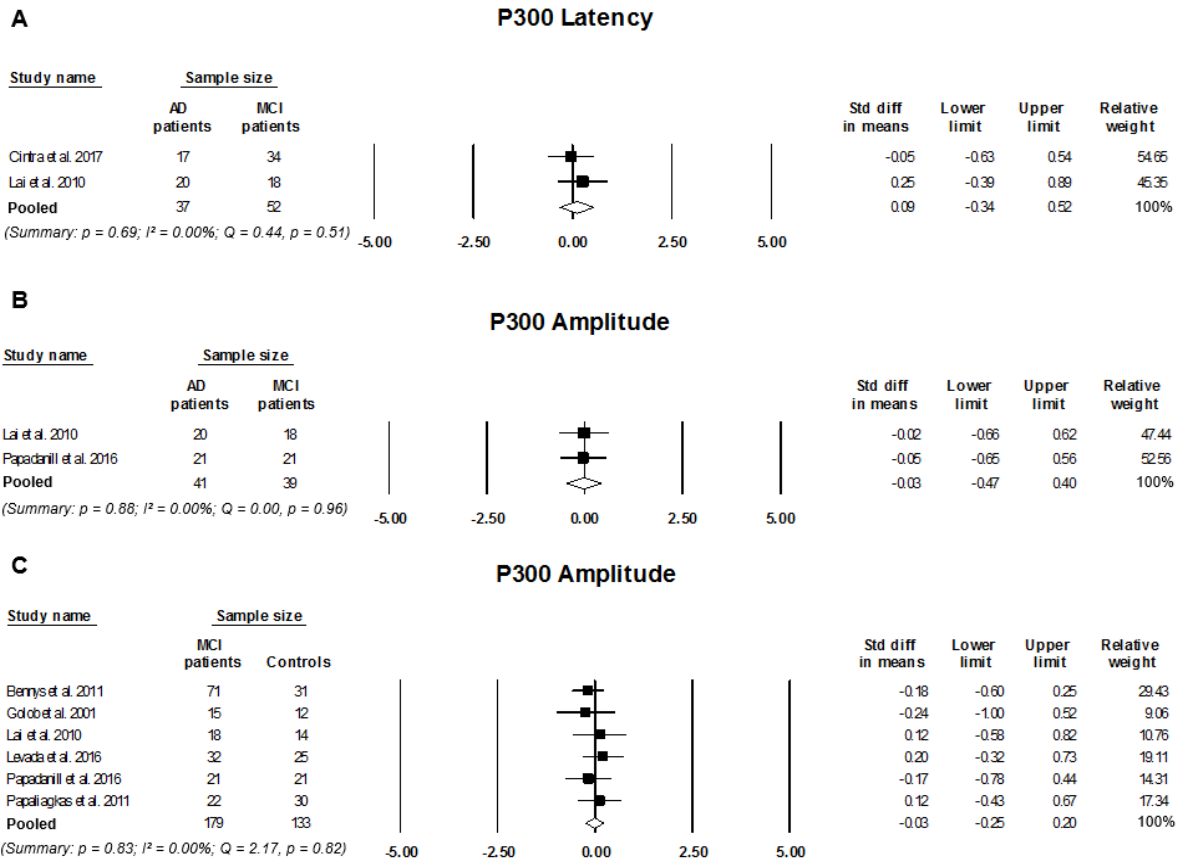
Supplementary Figure 4. Standard mean difference and pooled estimated of each study included in the meta-analyses of N100 elicited using an active two-tone oddball paradigm. A) comparing N100 latency between participants with MCI to controls, B) comparing N100 amplitude between AD participants to controls, and C) comparing N100 amplitude between participants with MCI to controls. Summary includes: p = significance level; I^2 = percentage of heterogeneity; Q = Cochran's Q . The horizontal lines represent the 95% confidence interval for each computed standard mean difference. Note: weights are from random effects analysis.

A**P200 Latency****B****P200 Amplitude****C****P200 Amplitude**

Supplementary Figure 5. Standard mean difference and pooled estimated of each study included in the meta-analyses of P200 elicited using an active two-tone oddball paradigm. A) Comparing P200 latency between participants with mild cognitive impairment (MCI) to controls, B) comparing P200 amplitude between participants with Alzheimer's disease (AD) to controls, and C) comparing P200 amplitude between participants with MCI to controls. Summary includes: p = significance level; I^2 = percentage of heterogeneity; Q = Cochran's Q . The horizontal lines represent the 95% confidence interval for each computed standard mean difference. Note: weights are from random effects analysis.



Supplementary Figure 6. Standard mean difference and pooled estimated of each study included in the meta-analyses of N200 elicited using an active two-tone oddball paradigm. A) comparing N200 latency between participants with Alzheimer’s disease (AD) to participants with mild cognitive impairment (MCI), B) comparing N200 amplitude between participants AD to controls, and C) comparing N200 amplitude between MCI participants and controls. Summary includes: p = significance level; I^2 = percentage of heterogeneity; Q = Cochran’s Q . The horizontal lines represent the 95% confidence interval for each computed standard mean difference. Note: weights are from random effects analysis.



Supplementary Figure 7. Standard mean difference and pooled estimated of each study included in the meta-analyses of P300 elicited using an active two-tone oddball paradigm. A) Comparing P300 latency between participants with Alzheimer’s disease (AD) to participants with mild cognitive impairment (MCI), B) comparing P300 amplitude between participants with AD and participants with MCI, and C) comparing P300 amplitude between participants with MCI to controls. Summary includes: p = significance level; I^2 = percentage of heterogeneity; Q = Cochran’s Q . The horizontal lines represent the 95% confidence interval for each computed standard mean difference. Note: weights are from random effects analysis.