|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Model 1 | Model 2 | Model 3 | Model 4 |
| Cognitive Test | Effect size and 95% interval | Effect size and 95% interval | Effect size and 95% interval | Effect size and 95% interval |
| Point estimate | Lower limit | Upper limit | P-value | Point estimate | Lower limit | Upper limit | P-value | Point estimate | Lower limit | Upper limit | P-value | Point estimate | Lower limit | Upper limit | P-value |
| RBANS Index I combined | 0.163 | -0.025 | 0.351 | 0.089 | 0.168 | -0.027 | 0.363 | 0.091 | 0.165 | -0.020 | 0.350 | 0.080 | 0.140 | -0.073 | 0.353 | 0.198 |
| RBANS Index II combined | 0.094 | -0.068 | 0.255 | 0.255 | 0.095 | -0.063 | 0.252 | 0.240 | 0.092 | -0.065 | 0.249 | 0.252 | 0.075 | -0.095 | 0.244 | 0.388 |
| RBANS Index III combined | 0.179 | -0.065 | 0.423 | 0.151 | 0.204 | -0.032 | 0.441 | 0.091 | 0.179 | -0.062 | 0.420 | 0.146 | 0.184 | -0.053 | 0.421 | 0.128 |
| RBANS Index IV combined | 0.052 | -0.042 | 0.145 | 0.276 | 0.073 | -0.023 | 0.169 | 0.138 | 0.051 | -0.043 | 0.144 | 0.287 | 0.053 | -0.042 | 0.148 | 0.277 |
| RBANS Index V combined | 0.196 | -0.042 | 0.435 | 0.107 | 0.187 | -0.053 | 0.427 | 0.127 | 0.196 | -0.041 | 0.433 | 0.105 | 0.186 | -0.077 | 0.447 | 0.165 |
| RBANS Index Total Scale combined | 0.162 | -0.068 | 0.393 | 0.167 | 0.170 | -0.048 | 0.389 | 0.126 | 0.163 | -0.063 | 0.388 | 0.158 | 0.150 | -0.089 | 0.390 | 0.218 |
| MMSE combined | 0.004 | -0.013 | 0.020 | 0.658 | 0.003 | -0.014 | 0.020 | 0.722 | 0.004 | -0.013 | 0.020 | 0.658 | 0.002 | -0.016 | 0.021 | 0.798 |
| FAB(log) combined | -0.002 | -0.006 | 0.002 | 0.384 | -0.002 | -0.006 | 0.002 | 0.384 | -0.002 | -0.006 | 0.002 | 0.384 | -0.002 | -0.006 | 0.002 | 0.384 |

 Table 1S: Body Mass Index versus Cognitive Function on the Combined three TUDA groups using Comprehensive Meta- Analysis

Model 1: Age, Education (Duration schooling), Sex (male), BMI, WHR, Current smoker, Past smoker, TUG, Total IADL

Model 2: Model 1 + Haemoglobin A1C (HbA1C)

Model 3: Model 1 + cerebrovascular diseases(transient ischaemic attack and/or stroke)

Model 4: Model 1 + c-reactive protein (CRP)

Combined: cognitive, bone and hypertensive cohorts combined using comprehensive meta analysis (CMA)

Abbreviations: BMI-Body Mass Index, WHR- Waist-Hip Ratio, TUG- Timed-Up-and-Go, IADL- Instrumental Activities of Daily Living, MMSE-Mini-Mental State Examination, FAB-Frontal Assessment Battery, RBANS-Repeatable Battery for the Assessment of Neuropsychological Status