## **ALZBIOMARKER**

## Alzheimer's Disease vs Control: hFABP (CSF)

Meta-analysis Results: Levels of heart fatty acid binding protein in cerebrospinal fluid are significantly higher in people with Alzheimer's disease compared with controls (effect size = 1.394, p <0.0001). This effect was consistent across the handful of available studies and highly significant. hFABP is expressed in the brain.

**Biochip Immunoassay** 

ELISA

xMAP

| Study         | Effect Size (95 % CI) |     |     |   |          |   | AD  | CTRL | Effect Size | Lower CI | Upper CI | % Weight |
|---------------|-----------------------|-----|-----|---|----------|---|-----|------|-------------|----------|----------|----------|
|               | 0.2                   | 0.4 | 0.6 | 1 | 2        | 5 | 5   |      |             |          |          |          |
| Bjerke, 2011  | ****                  |     |     | - | _        |   | 30  | 30   | 1.375       | 1.073    | 1.762    | 12.10    |
| Rosén, 2011   |                       |     |     | - | <u> </u> |   | 24  | 20   | 1.371       | 1.150    | 1.635    | 16.71    |
| Desikan, 2013 |                       |     |     |   | •        |   | 66  | 90   | 1.526       | 1.495    | 1.558    | 26.99    |
| Guo, 2013     |                       |     |     | • |          |   | 69  | 92   | 1.222       | 1.123    | 1.329    | 23.80    |
| Olsson, 2013  |                       |     |     | - | <b>-</b> |   | 96  | 65   | 1.475       | 1.297    | 1.677    | 20.40    |
| All Studies   |                       |     |     | < | >        |   | 285 | 297  | 1.394       | 1.242    | 1.565    | 100      |
| p<0.0001      |                       |     |     |   |          |   |     |      |             |          |          |          |
|               | 0.2                   | 0.4 | 0.6 | 1 | 2        | 5 |     |      |             |          |          |          |

How to interpret a forest plot: Each individual effect size (ES) is a ratio of the mean biomarker level in one condition over the mean level in another condition. An ES equal to 1 means that the two conditions had identical mean values. An ES > 1 indicates higher levels in the first condition, whereas an ES < 1 indicates lower levels in the first condition. The overall ES, indicated by a black diamond, is a weighted average of the individual effect sizes. The weight of each data point was determined by the inverse of the variance and is reflected in the size of each square. The width of the overall ES diamond is determined by the 95 percent confidence interval. Data out of range of the scale, including ES and confidence intervals, are indicated by an arrowhead at the edge of the plot, when applicable.

