

## G.6 Modifying risk factors for dementia progression

### G.6.1 Risk factors for dementia progression

- What effect does modifying risk factors have on slowing the progression of dementia?

#### G.6.1.1 Antidiabetic drugs versus placebo

| Quality assessment   |        |                      |              |               |                             | No of patients |         | Effect estimate                   | Quality  |
|--|--------|----------------------|--------------|---------------|-----------------------------|----------------|---------|-----------------------------------|----------|
| No of studies  | Design | Risk of bias         | Indirectness | Inconsistency | Imprecision                 | Intervention   | Control | Summary of results                |          |
| <b>Cognition – ADAS-cog (6 months) - lower numbers favour antidiabetic drugs</b>   |        |                      |              |               |                             |                |         |                                   |          |
| 2 (Gold 2010, Risner 2006)   | RCT    | Serious <sup>1</sup> | Not serious  | Not serious   | Serious <sup>2</sup>        | 512            | 252     | MD -0.42 (-1.35, 0.51)            | Low      |
| <b>Cognition – MMSE (6 months) - higher numbers favour antidiabetic drugs</b>  |        |                      |              |               |                             |                |         |                                   |          |
| 1 (Gold 2010)  | RCT    | Serious <sup>1</sup> | Not serious  | N/A           | Very serious <sup>2,3</sup> | 260            | 131     | Non-significant (MD not reported) | Very low |
| <b>Clinical Global Assessment – CIBIC+ (6 months) - lower numbers favour antidiabetic drugs</b>  |        |                      |              |               |                             |                |         |                                   |          |
| 1 (Gold 2010)  | RCT    | Serious <sup>1</sup> | Not serious  | N/A           | Serious <sup>2</sup>        | 260            | 131     | MD -0.05 (-0.27, 0.17)            | Low      |
| <b>Behavioural symptoms – NPI (6 months) - lower numbers favour antidiabetic drugs</b>   |        |                      |              |               |                             |                |         |                                   |          |
| 1 (Gold 2010)  | RCT    | Serious <sup>1</sup> | Not serious  | N/A           | Very serious <sup>2,3</sup> | 260            | 131     | Non-significant (MD not reported) | Very low |
| <b>Any adverse event (6 months)</b>  |        |                      |              |               |                             |                |         |                                   |          |
| 2 (Gold 2010, Risner 2006)   | RCT    | Serious <sup>1</sup> | Not serious  | Not serious   | Serious <sup>4</sup>        | 594            | 288     | RR 0.97 (0.80, 1.16)              | Low      |
| <b>Serious adverse events (6 months)</b>   |        |                      |              |               |                             |                |         |                                   |          |
| 2 (Gold 2010, Risner 2006)   | RCT    | Serious <sup>1</sup> | Not serious  | Not serious   | Very serious <sup>5</sup>   | 594            | 288     | RR 0.91 (0.50, 1.64)              | Very low |
| <b>Adverse events leading to discontinuation (6 months)</b>  |        |                      |              |               |                             |                |         |                                   |          |
| 1 (Gold 2010)  | RCT    | Serious <sup>1</sup> | Not serious  | Not serious   | Very serious <sup>5</sup>   | 331            | 164     | RR 0.99 (0.43, 2.27)              | Very low |
| <ol style="list-style-type: none"> <li>1. Participants were allowed to take other medications (such as antipsychotics, antidepressants and vitamin E supplements) which may have had an impact the outcome measure of interest; however, it was not reported what proportions of participants in each group took these medications.</li> <li>2. Non-significant result.</li> </ol> |        |                      |              |               |                             |                |         |                                   |          |

| Quality assessment   |        |              |              |               |             | No of patients |         | Effect estimate    | Quality |
|--|--------|--------------|--------------|---------------|-------------|----------------|---------|--------------------|---------|
| No of studies  | Design | Risk of bias | Indirectness | Inconsistency | Imprecision | Intervention   | Control | Summary of results |         |
| 3. Mean difference and measures of dispersion not reported.<br>4. 95% CI crosses two lines of a defined MID interval.<br>5. 95% CI crosses one line of a defined MID interval. |        |              |              |               |             |                |         |                    |         |