Table S2: AEC risks for antidiabetic drugs in adults and elderly patients

| Age     | Gender | AEC Event       | metformin | pioglitazone | empagliflozin | canagliflozin | liraglutide | dapagliflozin | metformin and sitagliptin | sitagliptin | exenatide | rosiglitazone |
|---------|--------|-----------------|-----------|--------------|---------------|---------------|-------------|---------------|----------------------------|--------------|-----------|--------------|
| adult   | M      | occult blood    | 0         | -0.4         | -0.95         | -2.27         | -1.77       | -1.1          | -0.61                      | -1.16        | -1.81     | -2.76        |
| adult   | M      | GI hemorrhage   | 0.26      | 0.86         | -0.58         | -2.9          | -0.59       | -0.73         | -2.24                      | -1.21        | -1.44     | -2.22        |
| adult   | M      | anemia          | 1.11      | 1.71         | 1.38          | 0             | 0           | 0             | 0                          | -1.41        | 0         | -0.43        |
| elderly | M      | occult blood    | 0.79      | 0.46         | -1.45         | 0.04          | -2.27       | 0             | 0.7                        | 0.85         | -1.5      | -3.67        |
| elderly | M      | GI hemorrhage   | 0.24      | 0.52         | -0.46         | -0.61         | -4.28       | -1.61         | -0.8                       | 0.2          | 2.74      | 2.27         |
| elderly | M      | anemia          | 0.71      | 1.78         | 0             | 0.14          | 0           | 0             | -0.2                      | 0.25         | -2.4      | -0.77        |
| adult   | F      | occult blood    | -1.18     | -0.78        | -0.11         | -2.43         | 0.25        | -0.25         | -1.77                      | -1.09        | -1.97     | -2.92        |
| adult   | F      | GI hemorrhage   | -0.27     | -1.31        | -0.37         | -1.1          | -3.18       | -1.51         | -1.03                      | -0.16        | -1.06     | -2.37        |
| adult   | F      | anemia          | 0.62      | -1.09        | 0             | 0             | 0           | 0             | 0.51                      | 0.7          | 1.12      | -2.64        |
| elderly | F      | occult blood    | 0.06      | -0.23        | 0             | -1.29         | -3.37       | 0             | -2.22                      | 0.04         | -4.42     | -3.78        |
| elderly | F      | GI hemorrhage   | -0.14     | -0.43        | -2.49         | -2.81         | -2.3        | 0             | -0.56                      | 0.45         | -4.35     | -2.71        |
| elderly | F      | anemia          | -0.36     | -1           | 0             | 0             | 0           | 0             | -0.4                       | -0.21        | 0         | -0.97        |
| mean    |        |                 | 0.153     | 0.007        | -0.419        | -1.103        | -1.459      | -0.433        | -0.718                     | -0.229       | -1.714    | -2.293       |
| occult blood |      |                 | -0.083    | -0.238       | -0.628        | -1.488        | -1.79       | -0.338        | -0.975                     | -0.34        | -2.425    | -3.283       |
| GI hemorrhage |      |                 | 0.023     | -0.09        | -0.975        | -1.855        | -2.588      | -0.963        | -1.158                     | -0.18        | -2.398    | -2.393       |
| anemia  |        |                 | 0.52      | 0.35         | 0.345         | 0.035         | 0           | 0             | -0.023                     | -0.168       | -0.32     | -1.203       |
|          | rosiglitazone | exenatide         | liraglutide         |
|----------|---------------|-------------------|--------------------|
| Mean     | -2.3          | -1.714166667      | -1.459166667      |
| Variance | 1.1           | 2.756790152       | 2.565826515       |
| Observat | 12            | 12                | 12                 |
| Hypoth        | 0             |                   |                   |
| df    | 19            |                   |                   |
| t Stat | -1            |                   |                   |
| P(T<=t) one-tail | 0.2         |                   |                   |
| t Critical | 2.8         |                   |                   |
| P(T<=t) two-tail | 0.3        |                   |                   |
| t Critical | 3.1         |                   |                   |

|          | exenatide | liraglutide |
|----------|-----------|-------------|
| Mean     | -1.7      | -1.459166667|
| Variance | 2.8       | 2.565826515  |
| Observat | 12        | 12          |
| Hypoth        | 0         |             |
| df    | 22         |             |
| t Stat | -0.4       |             |
| P(T<=t) one-tail | 0.4     |             |
| t Critical | 2.8     |             |
| P(T<=t) two-tail | 0.7    |             |
| t Critical | 3.1     |             |

|          | rosiglitazone | liraglutide |
|----------|---------------|-------------|
| Mean     | -2.3          | -1.459166667|
| Variance | 1.1           | 2.565826515  |
| Observat | 12            | 12          |
| Hypoth        | 0             |             |
| df    | 19            |             |
| t Stat | -1.5         |             |
| P(T<=t) one-tail | 0.1      |             |
| t Critical | 2.8        |             |
| P(T<=t) two-tail | 0.2     |             |
| t Critical | 3.1        |             |