**Additional file 2.** Utilities and utility decrements used in the model

| Parameter                                      | Utility | Distribution | Reference |
|------------------------------------------------|---------|--------------|-----------|
| Baseline utility                               | 0.800   | Beta         | [34]      |
| **Micro- and macrovascular complications**     |         |              |           |
| Unstable angina                                | -0.042  | Beta         | [35]      |
| Myocardial infarction                          | -0.055  | Beta         | [37]      |
| Heart failure                                  | -0.108  | Beta         | [37]      |
| Stroke                                         | -0.164  | Beta         | [37]      |
| End-stage kidney disease                       | -0.263  | Beta         | [41]      |
| Blindness                                      | -0.074  | Beta         | [41]      |
| Ulcers                                         | -0.170  | Beta         | [42]      |
| **Adverse events**                             |         |              |           |
| Urinary tract infection                        | -0.003  | Beta         | [38]      |
| Genital tract infection                        | -0.003  | Beta         | Assumption\(^a\) |
| Diabetic ketoacidosis                          | -0.047  | Beta         | Assumption\(^b\) |
| Acute kidney failure                           | -0.110  | Beta         | [35]      |
| Fractures                                      | -0.068  | Beta         | [35]      |
| **Hypoglycemic events**                        |         |              |           |
| Severe hypoglycemia                            | -0.047  | Beta         | [36]      |
| **Treatment discontinuation**                  |         |              | Assumption |
| **CKD**                                        |         |              |           |
| Stage 2                                        | 0       | Beta         | [39]      |
| Stage 3                                        | -0.030  | Beta         | [39]      |
| Stage 4                                        | -0.050  | Beta         | [39]      |
| Stage 5 (pre-dialysis)                         | -0.050  | Beta         | [39]      |
| **BMI**                                        |         |              |           |
| Increase of one unit                           | -0.047  | Beta         | [40]      |
| Reduction of one unit                          | +0.017  | Beta         | [40]      |

BMI: body mass index; CKD: chronic kidney disease.

\(^{a}\) Utility decrement was considered to be equivalent to urinary tract infection.

\(^{b}\) Utility decrement was considered to be equivalent to a severe hypoglycemic event.