**Appendix 2 – assumptions**

**Table A1.** Assumptions used in the model

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| **Assumptions** |
| The treatment regimens were based on the VISION, SPLASH and ALSYMPCA trials [13,15,17]. |
| Since no phase 3 clinical trial results were yet available from 177Lu-PSMA-I&T, it was assumed that the treatment procedures were similar to those of 177Lu-PSMA-617 in the VISION trial [17]. |
| Imaging and biomarker assessments of patients treated with 177Lu-PSMA-I&T were based on expert opinion. For radium-223, this was based on the ALSYMPCA trial, SmPC, and expert opinion [13]. There was ? |
| Patients spend on average 1 day in the hospital after hospital admission. This was based on expert opinion. |
| There was no value-added tax included in the drug costs. |
| Adverse events and other event costs associated with mCRPC (treatment) were not included since there was no phase 3 data available from 177Lu-PSMA-I&T and no head-to-head studies of 177Lu-PSMA-I&T and radium-223. |
| Costs for observation after radiopharmaceutical administration were only included for patients who were not hospitalized. |
| The percentage of patients with hospital admission during radiopharmaceutical treatment was based on OpenDIS data [23]. |
| The SmPC recommends consideration of treatment with bone health agents (i.e., bisphosphonates or denosumab) when treated with radium-223 [9]. Respectively 8.5% and 34.8% of patients treated with 177Lu-PSMA-617 in the VISION trial use bisphosphonate and denosumab [17]. Therefore, the use of bone health agents (bisphosphonates or denosumab) was assumed during radium-223 and 177Lu-PSMA-I&T treatment. |
| In the VISION trial, antiemetics were given during the 177Lu-PSMA-617 treatment [17]. Therefore, in the model, patients received ondansetron before every 177Lu-PSMA-I&T administration. |
| At the time of writing, there was no fitting DBC code for 177Lu-PSMA-I&T administration. Therefore, hospitals had to use DBC codes for supportive care for prostate cancer, and these DBC codes were used to calculate the effect difference between per-patient costs and coverage. The use of the supportive care DBC codes was based on expert opinion. |

**Abbreviations:** DBC: Diagnosis Related Group; mCRPC: Metastatic castration-resistant prostate cancer; 177Lu-PSMA-I&T: Lutetium-177-labelled- prostate-specific membrane antigen imaging and treatment; PSMA: Prostate-specific membrane antigen; SmPC: Summary of Product Characteristics