**Table 1***.* Comparison of [68Ga]Gallium chloride starting activities (low and high) and related RCY and RCP.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **[68Ga] Low Activity (X)** | | | | | | **[68Ga] High Activity (Y)** | | | | | | |
| **68Ga Starting Activities**  **(MBq)** | **RCY**  **(%)** | | **RCP**  **(%)** | | **68Ga Starting Activities**  **(MBq)** | | | **RCY (%)** | | **RCP (%)** | |
| 640.84 | 77.70 | 100 | | 1323.12 | | | 67 | | 100 | |
| 637.88 | 80.70 | 100 | | 1536.61 | | | 71.40 | | 99.99 | |
| 572.39 | 83.10 | 100 | | 1519.96 | | | 74.50 | | 99.95 | |
| 648.61 | 79.40 | 100 | | 1499.98 | | | 76.10 | | 99.91 | |
| 572.39 | 79.20 | 100 | | 1434.49 | | | 67.20 | | 99.95 | |
| 598.29 | 78.60 | 100 | | 1448.18 | | | 72.10 | | 99.98 | |
| 582.38 | 78.50 | 100 | | 1387.13 | | | 64.80 | | 99.99 | |
| 526.51 | 94.60 | 99.75 | | 1365.67 | | | 74 | | 100 | |
| 580.90 | 77.60 | 100 | | 1441.89 | | | 72.90 | | 99.81 | |
| 605.32 | 80.40 | 99 | | 1405.63 | | | 74.80 | | 100 | |
| **596.55\*** | **80.98\*** | **99.91\*** | | **1436.27\*** | | | **71.48\*** | | **99.96\*** | |
| **37.97\*\*** | **0.051\*\*** | **0.002\*\*** | | **68.68\*\*** | | | **0.038\*\*** | | **0.001\*\*** | |

1RCY (%) not corrected for decay and RCP (%) reported for every batch production of [68Ga]PSMA-11; for low starting activities (range X) RCY score is 80.98%, for high starting activities (range Y) RCY decreased to 71.48%. \*Average \*\*Standard deviation.

**Table 2***.* Costs of production and PET/CT exams for [18F]PSMA-1007 and [68Ga]PSMA-11.

|  |  |  |  |
| --- | --- | --- | --- |
| **Radioligand** | **Costs of production** | **N° PET/CT performed** | **Costs for single PET/CT exam** |
| [18F]PSMA-1007 |  |  |  |
| 5454€ | 25 | **30€** |
|  |  |  |
| [18Ga]PSMA-11 | Low act. High act. | Low act. High act. | Low act. High act. |
| 1831€ 1831€ | 2 5 | **583€** **275€** |
| 583€ 275€ |  |  |

2In comparison, economical aspects due to a single production of [18F]PSMA-1007 and [68Ga]PSMA-11 related to the number of PET/CT performed and the cost of a single exam considering a standard dose of 259MBq for [18F]PSMA-1007 and of 154MBq for [68Ga]PSMA-11. For [18F]PSMA-1007 the optimal range of starting activity (medium B) and for [68Ga]PSMA-11 both ranges low (X) and high (Y) were considered.