

**Table 4:** The specific absorbed fraction (SAF) values with corresponding RE for photons in organ source: Heart

| Targets         | Energy<br>(keV) | SAF (kg <sup>-1</sup> ) and RE (%) |          |          |          |          |          |
|-----------------|-----------------|------------------------------------|----------|----------|----------|----------|----------|
|                 |                 | 15                                 | 50       | 100      | 500      | 1000     | 4000     |
| <b>Lung</b>     | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | 2.84E+02 | 4.43E+02 | 1.50E+02 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | 0.08     | 0.07     | 0.05     |
| <b>Skeleton</b> | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | 4.61E+00 | 2.38E+01 | 1.78E+01 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | 0.18     | 0.03     | 0.03     |
| <b>Heart</b>    | SAF             | 4.27E+03                           | 4.27E+03 | 4.27E+03 | 3.47E+03 | 2.47E+03 | 5.52E+02 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | 0.04     | 0.02     | 0.01     |
| <b>Bladder</b>  | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | 5.34E-04 | -        | 3.47E-03 |
|                 | RE              | 0.00                               | 0.00E    | 0.00     | 6.19     | -        | 6.31     |
| <b>Testes</b>   | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | -        | -        | -        |
|                 | RE              | 0.00                               | 0.00     | 0.00     | -        | -        | -        |
| <b>Stomach</b>  | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | 4.05E-03 | 6.30E-03 | 1.80E+01 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | 4.94     | 2.98     | 0.24     |
| <b>Spleen</b>   | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | 1.79E-03 | 4.31E-03 | 5.58E+00 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | 6.42     | 7.50     | 0.28     |
| <b>Pancreas</b> | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | -        | -        | 4.56E+00 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | -        | -        | 0.19     |
| <b>Liver</b>    | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | 1.06E+01 | 2.70E+01 | 3.62E+01 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | 0.07     | 0.08     | 0.06     |
| <b>Kidney</b>   | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | 1.58E-03 | 2.82E-03 | 2.09E+00 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | 7.43     | 3.38     | 0.56     |
| <b>Adrenal</b>  | SAF             | 0.00E+00                           | 0.00E+00 | 0.00E+00 | -        | -        | 1.24E+01 |
|                 | RE              | 0.00                               | 0.00     | 0.00     | -        | -        | 0.54     |