<table>
<thead>
<tr>
<th>Possible deviation of intended and applied dose in:</th>
<th>Source of dose deviation</th>
<th>Uncertainty in calibration</th>
<th>Reproducibility</th>
<th>Target coverage (dose inhomogeneity)</th>
<th>Deviating set-up</th>
<th>Combined range of probable total dose deviation (Dev_{total}) min max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IORT with electrons</strong></td>
<td>dosimetry</td>
<td>2.1%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>recombination losses</td>
<td>0.5-3%</td>
<td></td>
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<tr>
<td></td>
<td>output instability</td>
<td></td>
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<tr>
<td></td>
<td>stable linacs</td>
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<tr>
<td></td>
<td>unstable linacs</td>
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<tr>
<td></td>
<td>(included in SDs from in-vivo dosimetry)</td>
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</tr>
<tr>
<td></td>
<td>beveled applicators</td>
<td>2-5%</td>
<td></td>
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<tr>
<td></td>
<td>SDs from in-vivo dosimetry:</td>
<td></td>
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<tr>
<td></td>
<td>angle of beam incidence &amp; appl. position</td>
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<tr>
<td></td>
<td>(includes output instability)</td>
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<tr>
<td></td>
<td>outliers</td>
<td></td>
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<tr>
<td></td>
<td>dose gradient</td>
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<tr>
<td></td>
<td>90%-111%</td>
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<tr>
<td></td>
<td>incorrect applicator size</td>
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<tr>
<td></td>
<td>total</td>
<td>2.2-3.7%</td>
<td>2-10%</td>
<td></td>
<td></td>
<td>4.1% 11.7%</td>
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<tr>
<td></td>
<td>beveled: 2.9-6.2%</td>
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<tr>
<td>IORT with kV X-rays</td>
<td>dosimetry rel. dose distributions</td>
<td>5.35-10.8%</td>
<td>4.8-8%</td>
<td>5.4%</td>
<td>4.8%</td>
<td>10.8%</td>
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</tr>
<tr>
<td>output instability</td>
<td></td>
<td>0.23-0.49%</td>
<td></td>
<td>0,2%</td>
<td>0,5%</td>
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<tr>
<td>dose gradient in</td>
<td>per cent depth dose at 10/20mm</td>
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<tr>
<td>10mm target shell (5cm / 3.5cm applicator)</td>
<td>34% (5cm) / 25% (3.5cm)</td>
<td>-66,0%</td>
<td>-75,0%</td>
<td>-66,0%</td>
<td>-75,0%</td>
<td>-66,0%</td>
</tr>
<tr>
<td>20mm target shell (5cm / 3.5cm applicator)</td>
<td>15% (5cm) / 10% (3.5cm)</td>
<td>-85,0%</td>
<td>-90,0%</td>
<td>-85,0%</td>
<td>-90,0%</td>
<td>-85,0%</td>
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<tr>
<td>incomplete adherence of tissue to applicator (4cm applicator)</td>
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<tr>
<td>1mm air gap</td>
<td>-9%</td>
<td>-9,0%</td>
<td>-9,0%</td>
<td>-9,0%</td>
<td>-9,0%</td>
<td>-9,0%</td>
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<tr>
<td>1mm gap filled with liquid</td>
<td>-14%</td>
<td>-14,0%</td>
<td>-14,0%</td>
<td>-14,0%</td>
<td>-14,0%</td>
<td>-14,0%</td>
</tr>
<tr>
<td>2mm air gap</td>
<td>-17%</td>
<td>-17,0%</td>
<td>-17,0%</td>
<td>-17,0%</td>
<td>-17,0%</td>
<td>-17,0%</td>
</tr>
<tr>
<td>2 mm gap filled with liquid</td>
<td>-26%</td>
<td>-26,0%</td>
<td>-26,0%</td>
<td>-26,0%</td>
<td>-26,0%</td>
<td>-26,0%</td>
</tr>
<tr>
<td>total with no gap</td>
<td>7.2% - 13.4%</td>
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<td></td>
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<td>7.2%</td>
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<tr>
<td>total with 1mm gap</td>
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<td>10.5%-15%</td>
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<tr>
<td>total with 2mm gap</td>
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<td>20.1%-28.2%</td>
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</tbody>
</table>