**TG119**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Volume** | **Dose metric** | **Tolerance** | **Static, 4°**  **2.0 min** | **Dynamic** | **Dynamic (rescaled)** | **Dynamic optimized**  **2.4 min** |
| PTV | *D*95% | >50 Gy | 50 Gy | 47.9 Gy | 50 Gy | 50 Gy |
|  | *D*10% | <55 Gy | 51.7 Gy | 54.0 Gy | 56.4 Gy | 52.4 Gy |
|  |  |  |  |  |  |  |
| Core | *D*10% | <25 Gy | 20.6 Gy | 27.4 Gy | 28.6 Gy | 20.4 Gy |
|  |  |  |  |  |  |  |

**Prostate**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Volume** | **Dose metric** | **Tolerance** | **Static, 4°**  **2.1 min** | **Dynamic** | **Dynamic (rescaled)** | **Dynamic optimized**  **2.2 min** |
| PTV76Gy | *D*95% | >76 Gy | 76 Gy | 74.3 Gy | 76.3 Gy | 76 Gy |
|  | *D*2% | <83.6 Gy | 82.3 Gy | 83.9 Gy | 86.0 Gy | 82.9 Gy |
|  |  |  |  |  |  |  |
| PTV46Gy | *D*95% | >46 Gy | 46.8 Gy | 44.8 Gy | 46 Gy | 47.0 Gy |
|  |  |  |  |  |  |  |
| Bladder | *V*65 Gy | <50% | 19.6% | 19.5% | 20.1% | 20.4% |
| *V*70 Gy | <35% | 17.8% | 17.4% | 18.2% | 18.4% |
| *V*75 Gy | <25% | 15.6% | 15.0% | 16.1% | 16.2% |
| *V*80 Gy | <15% | 7.3% | 9.5% | 12.6% | 11.2% |
|  |  |  |  |  |  |  |
| Rectum | *V*60 Gy | <50% | 14.6% | 15.9% | 17.8% | 16.6% |
| *V*65 Gy | <35% | 10.2% | 11.4% | 12.5% | 12.4% |
| *V*70 Gy | <25% | 7.2% | 8.0% | 8.8% | 8.4% |
| *V*75 Gy | <15% | 5.5% | 5.3% | 6.3% | 5.3% |
|  |  |  |  |  |  |  |
| Penile bulb | *D*mean | <5.25 Gy | 3.4 Gy | 3.5 Gy | 3.6 Gy | 3.7 Gy |
|  |  |  |  |  |  |  |
| Left femur | *V*50 Gy | <5% | 0.3% | 0.1% | 0.2% | 2.2% |
|  |  |  |  |  |  |  |
| Right femur | *V*50 Gy | <5% | 0.5% | 0.5% | 0.9% | 1.0% |
|  |  |  |  |  |  |  |

**Head and neck**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **OAR** | **Dose metric** | **Tolerance** | **Static, 4°**  **2.7 min** | **Dynamic** | **Dynamic (rescaled)** | **Dynamic optimized**  **2.2 min** |
| PTV70Gy | *D*99% | >66.5 Gy | 68.4 Gy | 64.3 Gy | 69.7 Gy | 68.5 Gy |
|  | *D*95% | >70 Gy | 70.2 Gy | 66.5 Gy | 72.1 Gy | 70.6 Gy |
|  | *D*20% | <77 Gy | 74.7 Gy | 73.7 Gy | 79.9 Gy | 75.1 Gy |
|  | *D*max | <80.5 Gy | 78.9 Gy | 80.9 Gy | 87.7 Gy | 78.9 Gy |
|  | *D*mean | <73.5 Gy | 73.2 Gy | 71.2 Gy | 77.1 Gy | 73.6 Gy |
|  |  |  |  |  |  |  |
| PTV63Gy | *D*99% | >59.8 Gy | 56.1 Gy | 51.7 Gy | 56.0 Gy | 54.2 Gy |
|  | *D*95% | >63 Gy | 63 Gy | 58.1 Gy | 63.0 Gy | 63.0 Gy |
|  |  |  |  |  |  |  |
| PTV56Gy | *D*99% | >53.2 G | 55.5 Gy | 50.7 Gy | 54.9 Gy | 56.5 Gy |
|  | *D*95% | >56 Gy | 56.9 Gy | 53.6 Gy | 58.1 Gy | 57.4 Gy |
|  |  |  |  |  |  |  |
| Spinal cord | *D*0.1 cm3 (0.58%) | <45 Gy | 37.3 Gy | 46.3 Gy | 50.1 Gy | 46.7 Gy |
| *D*max | <48 Gy | 40.7 Gy | 47.0 Gy | 50.9 Gy | 48.0 Gy |
|  |  |  |  |  |  |  |
| Brainstem | *D*0.1 cm3 (0.53%) | <50 Gy | 42.5 Gy | 44.0 Gy | 47.6 Gy | 45.0 Gy |
| *D*max | <54 Gy | 43.3 Gy | 44.3 Gy | 48.1 Gy | 46.7 Gy |
|  |  |  |  |  |  |  |
| Optic chiasm | *D*max | <50 Gy | 2.8 Gy | 3.1 Gy | 3.4 Gy | 3.8 Gy |
|  |  |  |  |  |  |  |
| Parotid | *D*50% | <30 Gy | 17.6 Gy | 23.7 Gy | 25.7 Gy | 18.1 Gy |
| *D*mean | <26 Gy | 23.0 Gy | 28.4 Gy | 30.8 Gy | 23.2 Gy |
|  |  |  |  |  |  |  |
| Temporomandibular joint | *D*0.1 cm3 (27.8%) | <70 Gy | 45.0 Gy | 46.2 Gy | 50.1 Gy | 51.5 Gy |
|  |  |  |  |  |  |  |
| Larynx | *D*67% | <50 Gy | 41.1 Gy | 45.1 Gy | 48.8 Gy | 44.0 Gy |
| *D*mean | <45 Gy | 42.5 Gy | 46.9 Gy | 50.8 Gy | 44.9 Gy |
|  |  |  |  |  |  |  |
| Lips | *D*mean | <20 Gy | 19.3 Gy | 21.2 Gy | 23.0 Gy | 20.6 Gy |
| *D*max | <30 Gy | 23.8 Gy | 28.8 Gy | 21.2 Gy | 26.1 Gy |
|  |  |  |  |  |  |  |
| Optic nerve | *D*max | <50 Gy | 3.3 Gy | 3.3 Gy | 3.5 Gy | 3.9 Gy |
|  |  |  |  |  |  |  |