Anal/Rectal

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| **Pelvis** | **[Conventional]** |  |
| **Colon / Bowel bag** | 60 Gy  Anal:  30 Gy (200 cc) 05-29  35 Gy (150 cc) 05-29  45 Gy (20 cc) 05-29 | Max < 50  Rectal (RTOG 0822):  V35 < 180 cc (230)  V40 < 100 cc (130)  V45 < 65 cc (90) |
| **Rectum** | **75 Gy (15%)** QUANTEC  **70 Gy (20%)** QUANTEC  **65 Gy (25%)** QUANTEC  69.5 Gy EQD2 (2 cc)  **65 Gy** EQD2 **(2 cc)**  55 Gy EQD2 (11 cc)  60 Gy (50 - 55%) 04-15, 08-15  50 Gy (50%) PACE, QUANTEC  40 Gy (55 - 60%) 05-34 (SPPORT) |  |
| **Bladder wall** | **75 Gy (25%)** QUANTEC  **70 Gy (35%)** QUANTEC  **65 Gy (50%)** QUANTEC  50 Gy (50%) CHHiP, PACE  **40 Gy (70% -** 77.5%)05-34 (SPPORT) | V40 < 40 (55)  V45 < 15 (30) |
| **Ureter / Urethra** | 70 Gy |  |
| **Penile bulb** | Mean < 52.5 Gy 04-15, 08-15  70 Gy (60-70%)  50 Gy (90-95%)  Mean < 24 Gy CHHiP | 6.5.1.4 External Genitalia  - no more than 50% above 20 Gy  - no more than 35% above 30 Gy  - no more than 5% above 40 Gy |
| **Vagina** | Upper < 120-150 Gy  Mid < 80-90 Gy  Lower < 60-70 Gy |
| **Femoral heads** | Mean < 45 Gy  **30 Gy (50%)**05-29 | Max < 50  V40 < 40% (65)  V45 < 25 (40) |
| **Iliac crest** | **30 Gy (50%)**05-29 |  |
| **Bone marrow**  (Cervical cancer)  \* | **Median < 34.2 Gy** Klopp IJROBP ’16  **40 Gy (37%)**TIME-C / 04-18, Klopp IJROBP ’16  20 Gy (75%) Mell IJROBP ’06  **10 Gy (90%)**TIME-C / 04-18, Mell IJROBP ’06 | \* Dr. J does need this contoured |
| **Bone marrow**  (Anal cancer) | 30 Gy (750 cc) Lee IJROBP ’17  40 Gy (23%) Lee IJROBP ’17 | Anal cancer (MMC): It makes sense that V40 is a lower value than for cervical cancer, as MMC has significant heme toxicity.  Patients who had ≥ 750 cc spared from ≥ 30 Gy had 0% G3 heme at week 3.  G3+ neutropenia for BM V40 ± 23% of 8→ 33%. |