# 2018 New Radiation Coding Rules

## Radiation Coding Scenarios

Please use the codes in the slides to complete the radiation coding scenarios below. The Phase I codes may be used to assign the Phase II and Phase 3 data items. Coding scenarios should be completed prior to the webinar. The radiation summaries in cases 1-6 are directly from radiation charts. We will review the cases during the webinar.

## Case 1-Oropharynx

Treatment Dates: 1/22/18-2/10/18

Site: Head & Neck

Dose: 70 Gy in 35 fractions over 50 elapsed days.

Techniques: IMRT in the 6 MV linear accelerator with Aquaplast immobilization and custom blocking with daily KV image guidance.

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| **Fields** | **Code** | **Rationale** |
| Reason no Radiation | 0 | Radiation Given |
| Radiation Start Date | 20180122 |  |
| Radiation End Date | 20180210 |  |
| Phase I Radiation Primary Treatment Volume | 22 | Oropharynx |
| Phase I Radiation to Draining Lymph Nodes | 03 | Cervical lns |
| Phase I Treatment Modality | 02 | EBRT, 6 mv photons |
| Phase I EBRT Planning Technique | 05 | IMRT |
| Phase I Dose per Fraction | 00200 | 200 cGy (70 Gy/35 x 100=200 cGy) |
| Phase I Number of Fractions | 035 | 35 fractions |
| Phase I Total Dose | 007000 | 70 Gy=7000 cGy |
| Phase II Radiation Primary Treatment Volume |  |  |
| Phase II Radiation to Draining Lymph Nodes |  |  |
| Phase II Treatment Modality |  |  |
| Phase II EBRT Planning Technique |  |  |
| Phase II Dose per Fraction |  |  |
| Phase II Number of Fractions |  |  |
| Phase II Total Dose |  |  |
| Phase III Radiation Primary Treatment Volume |  |  |
| Phase III Radiation to Draining Lymph Nodes |  |  |
| Phase III Treatment Modality |  |  |
| Phase III EBRT Planning Technique |  |  |
| Phase III Dose per Fraction |  |  |
| Phase III Number of Fractions |  |  |
| Phase III Total Dose |  |  |
| Number of Phases of Radiation Treatment to this Volume | 01 | 1 phase |
| Radiation Discontinued Early | 01 | Treatment completed |
| Total Dose | 007000 | 70 Gy=7000 cGy |

## Case 2- Prostate

Summary of I-125 seed implant: On 1/21/18, 66 iodine-125 seeds were implanted into the prostate gland/seminal vesicles with an activity of 0.245 mci/seed. He then received daily external beam therapy using intensity modulation and daily image guiding as outlined below:

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Treatment Site | Energy | Dose/Fx (Gy) | # Fx | Dose Correction (Gy) | Total Dose (Gy) | Start Date | End Date | Elapsed Days |
| 1-PROSV IMRT | 6X | 1.5 | 30/30 | 0 | 45 | 2/11/18 | 3/23/18 | 41 |
| 2-SV BST | 6X | 1.5 | 5/5 | 0 | 7.5 | 3/24/18 | 3/31/18 | 7 |
| Total |  |  |  |  | 52.5 | 2/11/18 | 3/31/18 | 49 |

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| **Fields** | **Code** | **Rationale** |
| Reason no Radiation | 0 |  |
| Radiation Start Date | 20180121 |  |
| Radiation End Date | 20180331 |  |
| Phase I Radiation Primary Treatment Volume | 64 | Prostate &/or seminal vesicles |
| Phase I Radiation to Draining Lymph Nodes | 00 |  |
| Phase I Treatment Modality | 10 | I-125 brachytx, interstitial LDR |
| Phase I EBRT Planning Technique | 88 | NA-no phase 1 EBRT |
| Phase I Dose per Fraction | 99998 | Brachytherapy |
| Phase I Number of Fractions | 001 | 1 fraction |
| Phase I Total Dose | 999998 | Brachytherapy |
| Phase II Radiation Primary Treatment Volume | 64 | Prostate &/or seminal vesicles |
| Phase II Radiation to Draining Lymph Nodes | 00 |  |
| Phase II Treatment Modality | 02 | External beam, assuming 6X=photons |
| Phase II EBRT Planning Technique | 05 | IMRT |
| Phase II Dose per Fraction | 00150 | 1.5 Gy=150 cGy |
| Phase II Number of Fractions | 030 | 30 fractions |
| Phase II Total Dose | 004500 | 45 Gy=4500 cGy |
| Phase III Radiation Primary Treatment Volume | 64 | Prostate &/or seminal vesicles |
| Phase III Radiation to Draining Lymph Nodes | 00 |  |
| Phase III Treatment Modality | 02 | External beam, assuming 6X=photons |
| Phase III EBRT Planning Technique | 05 | IMRT |
| Phase III Dose per Fraction | 00150 | 1.5 Gy=150 cGy |
| Phase III Number of Fractions | 005 | 5 fractions |
| Phase III Total Dose | 000750 | 7.5 Gy=750 cGy |
| Number of Phases of Radiation Treatment to this Volume | 03 | 3 phases |
| Radiation Discontinued Early | 01 | Radiation completed |
| Total Dose | 999998 | Brachytx & EBRT, instructions for Total Dose state not to add these |

## Case 3- Lung, Palliative for Stage IIIA T2aN2M0

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| Treatment Site | Energy | Dose/Fx (Gy) | # Fx | Dose Correction (Gy) | Total Dose (Gy) | Start Date | End Date | Elapsed Days |
| 1-Mediastinum | 6X | 4 | 5/5 | 0 | 20 | 2/11/18 | 2/17/18 | 6 |
| Total |  |  |  |  | 20 | 2/11/18 | 2/17/18 | 6 |

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| **Fields** | **Code** | **Rationale** |
| Reason no Radiation | 0 |  |
| Radiation Start Date | 20180211 |  |
| Radiation End Date | 20180217 |  |
| Phase I Radiation Primary Treatment Volume | 02 | Mediastinum-Thoracic LN regs |
| Phase I Radiation to Draining Lymph Nodes | 88 | NA-LN primary tx volume |
| Phase I Treatment Modality | 02 | EBRT, assuming 6X=6 mv photons |
| Phase I EBRT Planning Technique | 01 | EBRT, NOS |
| Phase I Dose per Fraction | 00400 | 4 Gy=400 cGy |
| Phase I Number of Fractions | 005 | 5 fractions |
| Phase I Total Dose | 002000 | 20 Gy=2000 cGy |
| Phase II Radiation Primary Treatment Volume |  |  |
| Phase II Radiation to Draining Lymph Nodes |  |  |
| Phase II Treatment Modality |  |  |
| Phase II EBRT Planning Technique |  |  |
| Phase II Dose per Fraction |  |  |
| Phase II Number of Fractions |  |  |
| Phase II Total Dose |  |  |
| Phase III Radiation Primary Treatment Volume |  |  |
| Phase III Radiation to Draining Lymph Nodes |  |  |
| Phase III Treatment Modality |  |  |
| Phase III EBRT Planning Technique |  |  |
| Phase III Dose per Fraction |  |  |
| Phase III Number of Fractions |  |  |
| Phase III Total Dose |  |  |
| Number of Phases of Radiation Treatment to this Volume | 01 | 1 phase |
| Radiation Discontinued Early | 01 | Radiation completed |
| Total Dose | 002000 | 20 Gy=2000 cGy |

## Case 4- Lung Stage IV T3N2M1b

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Treatment Site | Energy | Dose/Fx (Gy) | # Fx | Total Dose (Gy) | Start Date | End Date | Elapsed Days |
| 2 L4-SI | 10X/6X | 3 | 10/10 | 30 | 1/7/18 | 1/20/18 | 13 |
| 1 Lt Hip | 15X/6X | 3 | 10/10 | 30 | 1/7/18 | 1/20/18 | 13 |
| 3 Rt Lung | 6X | 1.8 | 35/35 | 63 | 1/25/18 | 4/1/18 | 67 |
| Total |  |  |  |  | 1/7/18 | 4/1/18 | 85 |

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| **Fields** | **Code** | **Rationale** |
| Reason no Radiation | 0 |  |
| Radiation Start Date | 20180107 |  |
| Radiation End Date | 20180401 |  |
| Phase I Radiation Primary Treatment Volume | 30 | Right Lung, instructions state if multiple discreet volumes consider XRT to primary site as Phase 1 |
| Phase I Radiation to Draining Lymph Nodes | 00 |  |
| Phase I Treatment Modality | 02 | EBRT photons, assuming 6X=photons |
| Phase I EBRT Planning Technique | 01 | EBRT, nos |
| Phase I Dose per Fraction | 00180 | 1.8 Gy=180 cGy |
| Phase I Number of Fractions | 035 | 35 fractions |
| Phase I Total Dose | 006300 | 63 Gy=6300 |
| Phase II Radiation Primary Treatment Volume | 81 | Spine/Sacroiliac |
| Phase II Radiation to Draining Lymph Nodes | 00 |  |
| Phase II Treatment Modality | 02 | EBRT photons, assuming 10X/6X=photons |
| Phase II EBRT Planning Technique | 01 | EBRT, nos |
| Phase II Dose per Fraction | 00300 | 3 Gy=300 cGy |
| Phase II Number of Fractions | 010 | 10 fractions |
| Phase II Total Dose | 003000 | 30 Gy=3000 cGy |
| Phase III Radiation Primary Treatment Volume | 84 | Left hip |
| Phase III Radiation to Draining Lymph Nodes | 00 |  |
| Phase III Treatment Modality | 02 | EBRT photons, assuming 15X/6X=photons |
| Phase III EBRT Planning Technique | 01 | EBRT, nos |
| Phase III Dose per Fraction | 00300 | 3 Gy=300 cGy |
| Phase III Number of Fractions | 010 | 10 fractions |
| Phase III Total Dose | 003000 | 30 Gy=3000 cGy |
| Number of Phases of Radiation Treatment to this Volume | 03 | 3 phases |
| Radiation Discontinued Early | 01 | Radiation treatment completed |
| Total Dose | 999998 | Multiple volumes (metastatic sites) treated simultaneously |

## Case 5- Cervix

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Treatment Site | Energy | Dose/Fx (Gy) | # Fx | Total Dose (Gy) | Start Date | End Date | Elapsed Days |
| 1-Pelvis | 10X/6X | 1.8 | 28/28 | 50.4 | 2/1/18 | 3/9/18 | 37 |
| Vag HDR | I-192 | 6.0 | 3/3 | 18.0 | 3/15/18 | 3/22/18 | 8 |

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| --- | --- | --- |
| **Fields** | **Code** | **Rationale** |
| Reason no Radiation | 0 |  |
| Radiation Start Date | 20180201 |  |
| Radiation End Date | 20180322 |  |
| Phase I Radiation Primary Treatment Volume | 71 | Uterus or cervix, instructions state not to use pelvis, nos code unless primary subsite is not a pelvic organ |
| Phase I Radiation to Draining Lymph Nodes | 06 | Assuming pelvic field includes pelvic nodes |
| Phase I Treatment Modality | 02 | EBRT photons, assuming 10X/6X=photons |
| Phase I EBRT Planning Technique | 01 | EBRT, NOS |
| Phase I Dose per Fraction | 00180 | 1.8 Gy=180 cGy |
| Phase I Number of Fractions | 028 | 28 fractions |
| Phase I Total Dose | 005040 | 50.4 Gy=5040 cGy |
| Phase II Radiation Primary Treatment Volume | 71 | Uterus or cervix |
| Phase II Radiation to Draining Lymph Nodes | 00 |  |
| Phase II Treatment Modality | 09 | Intracavitary HDR |
| Phase II EBRT Planning Technique | 88 | Tx not EBRT |
| Phase II Dose per Fraction | 99998 | Brachytherapy |
| Phase II Number of Fractions | 003 | 3 fractions |
| Phase II Total Dose | 999998 | Brachytherapy |
| Phase III Radiation Primary Treatment Volume |  |  |
| Phase III Radiation to Draining Lymph Nodes |  |  |
| Phase III Treatment Modality |  |  |
| Phase III EBRT Planning Technique |  |  |
| Phase III Dose per Fraction |  |  |
| Phase III Number of Fractions |  |  |
| Phase III Total Dose |  |  |
| Number of Phases of Radiation Treatment to this Volume | 02 | 2 phases |
| Radiation Discontinued Early | 01 | Radiation treatment completed |
| Total Dose | 999998 | Brachytx & EBRT, instructions for Total Dose state not to add these |

## Case 6-Breast

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Treatment Site | Energy | Dose/Fx (Gy) | #Fx | Total Dose (Gy) | Start Date | End Date | Elapsed Days |
| 2R SCF | 6X/10X | 1.8 | 28/28 | 50.4 | 6/22/18 | 8/3/18 | 42 |
| 1 R WB | 6X | 1.8 | 28/28 | 50.4 | 6/22/18 | 8/3/18 | 42 |
| 3 R B Scar Bst | 6E | 2 | 5/5 | 10 | 8/4/18 | 8/10/18 | 6 |
| 4 R Axilla Bst | 12E | 2 | 5/5 | 10 | 8/4/18 | 8/10/18 | 6 |
| Total |  |  |  |  | 6/22/18 | 8/10/18 | 49 |

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| **Fields** | **Code** | **Rationale** |
| Reason no Radiation | 0 |  |
| Radiation Start Date | 20180622 |  |
| Radiation End Date | 20180810 |  |
| Phase I Radiation Primary Treatment Volume | 40 | Whole Breast |
| Phase I Radiation to Draining Lymph Nodes | 04 | Supraclavicular (SCF) |
| Phase I Treatment Modality | 02 | EBRT photons assuming 6X/10X=photons |
| Phase I EBRT Planning Technique | 01 | EBRT, NOS |
| Phase I Dose per Fraction | 00180 | 1.8 Gy=180cGy |
| Phase I Number of Fractions | 028 | 28 fractions |
| Phase I Total Dose | 005040 | 50.4 Gy=5040 cGy |
| Phase II Radiation Primary Treatment Volume | 41 | Breast partial (scar) |
| Phase II Radiation to Draining Lymph Nodes | 04 | R Axilla Boost (Bst) |
| Phase II Treatment Modality | 04 | EBRT, electrons |
| Phase II EBRT Planning Technique | 01 | EBRT, NOS |
| Phase II Dose per Fraction | 00200 | 2 Gy=200 cGy |
| Phase II Number of Fractions | 005 | 5 fractions |
| Phase II Total Dose | 001000 | 10 Gy=1000 cGy |
| Phase III Radiation Primary Treatment Volume |  |  |
| Phase III Radiation to Draining Lymph Nodes |  |  |
| Phase III Treatment Modality |  |  |
| Phase III EBRT Planning Technique |  |  |
| Phase III Dose per Fraction |  |  |
| Phase III Number of Fractions |  |  |
| Phase III Total Dose |  |  |
| Number of Phases of Radiation Treatment to this Volume | 02 | 2 phases |
| Radiation Discontinued Early | 01 | Tx completed |
| Total Dose | 006040 | 5040 cGy + 1000 cGy=6040 cGy |