

#	OAR	Fractionation	Metric	Green	Yellow	Red	Metric Type	Expected Performance Rate	Source	Notes
D-1a	Rectum	Standard	V75 Gy	<=10%	>10%<=15%	>15%	Constraint	90%	Michalski et al	
D-1b	Rectum	Standard	V70 Gy	<=15%	>15%<=25%	>25%	Constraint	90%	Michalski et al	
D-1c	Rectum	Standard	V40 Gy	<=40%	>40%<=65%	>65%	Constraint	90%	PACE-B	
D-2a	Rectum	ModHypo (70Gy/28Fx)	V70 Gy	<=10cc		>10cc	Constraint	90%	Bekelman & Lee	
D-2b	Rectum	ModHypo (70Gy/28Fx)	V65 Gy	<=10%		>10%	Constraint	90%	Bekelman & Lee	
D-2c	Rectum	ModHypo (70Gy/28Fx)	V40 Gy	<=35%		>35%	Constraint	90%	Bekelman & Lee	
D-3a	Rectum	ModHypo (60Gy/20Fx)	V60 Gy	<=0.01%		>0.01%	Constraint	90%	CHHiP (updated)	
D-3b	Rectum	ModHypo (60Gy/20Fx)	V50 Gy	<=22%		>22%	Constraint	90%	CHHiP (updated)	
D-3c	Rectum	ModHypo (60Gy/20Fx)	V30 Gy	<=57%		>57%	Constraint	90%	CHHiP (updated)	
D-4a	Rectum	Ultrahypo (5Fx)	V36 Gy	<=1cc	>1cc<=2cc	>2cc	Constraint	90%	PACE-B	
D-4b	Rectum	Ultrahypo (5Fx)	V29 Gy	<=20%		>20%	Constraint	90%	PACE-B	
D-4c	Rectum	Ultrahypo (5Fx)	V 18.1 Gy	<=50%		>50%	Constraint	90%	PACE-B	
D-5a	Rectum (postop)	Standard	V65 Gy	<=35%	>35%<=45%	>45%	Constraint	90%	RTOG 0534	
D-5b	Rectum (postop)	Standard	V40 Gy	<=55%	>55%<=65%	>65%	Constraint	90%	RTOG 0534	
D-6a	Bladder	Standard	V75 Gy	<=25%		>25%	Constraint	90%	RTOG 0415	
D-6b	Bladder	Standard	V70 Gy	<=35%		>35%	Constraint	90%	QUANTEC, RTOG 0126, 0415, 0815	
D-6c	Bladder	Standard	V50 Gy	<=50%		>50%	Constraint	90%	PACE-B	
D-7a	Bladder	ModHypo (70Gy/28Fx)	V70 Gy	<=10cc		>10cc	Constraint	90%	Bekelman & Lee	
D-7b	Bladder	ModHypo (70Gy/28Fx)	V65 Gy	<=15%		>15%	Constraint	90%	Bekelman & Lee	
D-7c	Bladder	ModHypo (70Gy/28Fx)	V40 Gy	<=35%		>35%	Constraint	90%	Bekelman & Lee	
D-8a	Bladder	ModHypo (60Gy/20Fx)	V60 Gy	<=5%	>5%<=15%	>15%	Constraint	90%	CHHiP, PACE-B	
D-8b	Bladder	ModHypo (60Gy/20Fx)	V48 Gy	<=25%		>25%	Constraint	90%	CHHiP, PACE-B	
D-8c	Bladder	ModHypo (60Gy/20Fx)	V40 Gy	<=50%		>50%	Constraint	90%	CHHiP, PACE-B	
D-9a	Bladder	Ultrahypo (5Fx)	V37 Gy	<=5cc	>5cc<=20cc	>20cc	Constraint	90%	HYTEC, PACE-B	
D-9b	Bladder	Ultrahypo (5Fx)	V18.1 Gy	<=40%		>40%	Constraint	90%	PACE-B	
D-10a	Bladder (postop)	Standard	V65 Gy	<=50%	>50%<=57.5%	>57.5%	Constraint	90%	RTOG 0534 (Bladder-CTVp)	
D-10b	Bladder (postop)	Standard	V40 Gy	<=70%	>70%<=77.5%	>77.5%	Constraint	90%	RTOG 0534 (Bladder-CTVp)	
D-11	Femurs	Standard	V50 Gy	<=10%		>10%	Informational		RTOG 0534	
D-12	Femurs	ModHypo (70Gy/28Fx)	V40 Gy	0%		>0%	Informational		Bekelman&Lee	
D-13	Femurs	ModHypo (60Gy/20Fx)	V40 Gy	<=5%	>5%<=50%	>50%	Informational		PACE-B	
D-14	Femurs	Ultrahypo (5Fx)	V14.5 Gy	<=5%		>5%	Informational		PACE-B	
D-15	Femurs (postop)	Standard	V50 Gy	<=10%	>10%<=15%	>15%	Informational		RTOG 0534	

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D-16a	Small Bowel	Standard	V45 Gy	<=200 cc		>200 cc	Informational		RTOG 0534, Peritoneal Cavity	
D-16b	Small Bowel	Standard	Dmax	<=50 Gy		>50 Gy	Informational			
D-17	Small Bowel	ModHypo (70Gy/28Fx)	V 40 Gy	<=1%		>1%	Informational		Bekelman&Lee	
D-18a	Small Bowel	ModHypo (60Gy/20Fx)	V52 Gy	0cc		>0cc	Informational		PACE (BOWEL BAG)	
D-18b	Small Bowel	ModHypo (60Gy/20Fx)	V40 Gy	<=17cc	>17cc<=70cc	>70cc	Informational		PACE-B (BOWEL BAG)	
D-19a	Small Bowel	Ultrahypo (5Fx)	V30 Gy	<=0.03cc	>0.03cc<=1cc	>1cc	Informational		PACE, NRG GU 005	
D-19b	Small Bowel	Ultrahypo (5Fx)	V18.1 Gy	<=5cc		>5 cc	Informational		PACE-B	
D-20	Small Bowel (postop)	Standard	V45 Gy	<=150cc	>150cc<=200cc	>200cc	Informational		RTOG 0534 (PLNT, bowelspace)	
D-21a	Large Bowel	Standard	V60 Gy	<=1%		>1%	Informational		Panel consensus	
D-21b	Large Bowel	Standard	Dmax	<=62.5Gy		>62.5Gy	Informational		Panel consensus	
D-22a	Large Bowel	ModHypo (70Gy/28Fx)	V50 Gy	<=1%		>1%	Informational		Panel consensus	
D-22b	Large Bowel	ModHypo (70Gy/28Fx)	Dmax	<=55Gy		>55Gy	Informational		Panel consensus	
D-23	Large Bowel	ModHypo (60Gy/20Fx)	Dmax	<=50Gy		>50Gy	Informational		Panel consensus	
D-24	Large Bowel	Ultrahypo (5Fx)	Dmax	<=30Gy		>30Gy	Informational		Panel consensus	
D-25a	Large Bowel (post-op)	Standard	V60 Gy	<=1%		>1%	Informational		Panel consensus	
D-25b	Large Bowel (post-op)	Standard	Dmax	<=62.5Gy		>62.5Gy	Informational		Panel consensus	
D-26	Penile Bulb	Standard	Mean Dose	<=52.5 Gy		>52.5 Gy	Informational		RTOG 0415	
D-27	Penile Bulb	ModHypo (70Gy/28Fx)	Mean Dose	<=50 Gy		>50 Gy	Informational		Bekelman&Lee	
D-28	Penile Bulb	ModHypo (60Gy/20Fx)	V48 Gy	<=10%		>10%	Informational		PACE-B	
D-29a	Penile Bulb	Ultrahypo (5Fx)	D0.03cc	<=36.25Gy		>36.25Gy	Informational		HyTEC (GU005, RTOG0938)	
D-29b	Penile Bulb	Ultrahypo (5Fx)	V29.5 Gy	<=50%		>50%	Informational		PACE-B	
D-30	Urethra	Ultrahypo (5Fx)	V42 Gy	<=50%		>50%	Informational		PACE-B	
#	Target	Fractionation	Metric	Green	Yellow	Red	Metric Type	Expected Performance Rate	Source	Notes
E-1a	PTV coverage	Standard/Hypo	V100	>=95% Rx	>= 90% <95%	<90% Rx	Constraint	90%	RTOG 0126, 0415, 0815 (relaxed)	
E-1b	PTV Heterogeneity	Standard/Hypo	D2%	<=110% Rx	>110% <=115% Rx	>115% Rx	Constraint	90%	RTOG 0126, 0415, 0815 (relaxed)	
E-2a	PTV coverage	Ultrahypo	V100	>=95% Rx		<95% Rx	Constraint	90%		
E-2b	PTV Heterogeneity	Ultrahypo	D0.03cc	<=120% Rx		>120% Rx	Constraint	90%		Robotic/ablative
E-2c	PTV Dmax	Ultrahypo	D0.03cc	<=107% Rx		>107% Rx	Constraint	90%	HyTEC (GU005, RTOG0938)	Linac based