

[Table 7.4g.2](#) lists dose constraint limits to a volume within critical organs. All dose limits indicated as variation unacceptable must be met, and treatment delivery that exceeds these limits will constitute a major protocol violation. Other volumetric dose constraints are suggested guidelines, and while every effort should be made to achieve the recommended constraints, exceeding the suggested dose volume metrics will not constitute a protocol deviation.

Table 7.4g.2 Normal Tissue Dose Constraints

			3 Fractions	4 Fractions	5 Fractions	8 Fractions
Serial Tissue	Volume	Priority	Limit	Limit	Limit	Limit
Spinal Cord	D0.03cc [Gy]	Variation Unacceptable	18.0	24	28	32
	D0.35cc [Gy]	Variation Unacceptable	15.9	19	22	26.4
	D1.2cc [Gy]	Variation Unacceptable	13	13.6	15.6	16.8
Esophagus	D0.03cc (Gy)	Variation Unacceptable	27	30	105%	105%
	D0.03cc (Gy)	Variation acceptable	25.2	30	35	40
	D5cc [Gy]	Variation Acceptable	17.7	18.8	19.5	21.6
Brachial Plexus	D0.03cc [Gy]	Variation Unacceptable	24	27.2	32.0	38
	D3cc [Gy]	Variation Unacceptable	22	24.7	27	32.8
Heart	D0.03cc [Gy]	Variation Unacceptable	30 Gy	34 Gy	105%	105%
	D0.03cc [Gy]	Variation acceptable	NA	NA	38	40
	D15cc [Gy]	Variation acceptable	24	28	32	34
Great vessels	D0.03cc [Gy]	Variation Unacceptable	45	49	105%	105%
	D10cc [Gy]	Variation acceptable	39	43	47	55
Trachea	D0.03cc [Gy]	Variation Unacceptable	30	34.8	105%	105%
	D0.03cc [Gy]	Variation acceptable	NA	NA	40	44
	D5cc [Gy]	Variation acceptable	25.8	29.2	32	35
Proximal bronchial tree	D0.03cc [Gy]	Variation Unacceptable	30	34.8	105%	105%
	D0.03cc [Gy]	Variation acceptable	23.1	28	33	38
	D0.5cc [Gy]	Variation acceptable	18.9	20	21	23
Chest Wall	D0.03cc [Gy]	Variation acceptable	50	54	57	63



			3 Fractions	4 Fractions	5 Fractions	8 Fractions
	V30Gy [cc]	Variation acceptable	30 cc	30 cc	30 cc	30 cc
Skin	D0.03cc [Gy]	Variation acceptable	33	36	38.5	43
	D10cc [Gy]	Variation acceptable	31	33.2	36.5	38
Stomach	D0.03cc (Gy)	Variation Unacceptable	30	32.9	35	42
	D5cc[Gy]	Variation Unacceptable	22.5	24.8	26.5	31
Bile duct	D0.03cc [Gy]	Variation acceptable	36	39	41	48
Renal hilum	D15cc [Gy]	Variation Unacceptable	19.5	21.5	23	28

		Priority	3 Fractions	4 Fractions	5 Fractions	8 Fractions
Parallel Tissue	Constraint		Limit (cc or %)	Limit (cc or %)	Limit (cc or %)	
Lungs-GTV	CV10.5Gy [cc]	Variation acceptable	>1500			
	CV11.6Gy [cc]	Variation acceptable		>1500		
	CV12.5Gy [cc]	Variation acceptable			>1500	
	CV13.6Gy [cc]	Variation acceptable				>1500
	V11Gy[%]	Variation acceptable	<37			
	V13Gy[%]	Variation acceptable		<37		
	V13.5Gy[%]	Variation acceptable			<37	
	V20 Gy	Variation acceptable	<10%	<10%	<10%	<10%
	V20 Gy	Variation Unacceptable	<15%	<15%	<15%	<15%
Liver	CV17.1Gy [cc]	Variation acceptable	>700			
	CV19.2Gy [cc]	Variation acceptable		>700		
	CV21Gy[cc]	Variation acceptable			>700	
	CV24.8Gy [cc]	Variation acceptable				>700
Renal Cortex (Right + Left)	CV15Gy[cc]	Variation acceptable	>200			
	CV17[cc]	Variation acceptable		>200		
	CV18Gy[cc]	Variation acceptable			>200	
	CV20Gy [cc]	Variation acceptable				>200

Table 7.4g.3 Delivery Compliance Criteria

Delivery Metric		Per Protocol	Variation Acceptable	Notes
Overall Treatment time	3,4,5 Fraction (every other day)	≤14 days	≤16 days	Reason(s) for interruptions should be documented
	8 fraction (daily or	≤18 days	≤20 days	

