Plan Report

Patient data

Patient ID	
Patient name	
Patient gender	
Case data	
Case name	CASE 1
Physician	
Body site	

Treatment plan data

Treatment plan name	lung_LLL
Planned by	
Number of beam sets	1
Patient treatment position	HFS : Head First Supine
Plan comment	
Planning CT data	
Name	CT 1
Imaging system	Toshiba_Oct2014N 10 Oct 2014, 16:18:01 (hr:min:sec)
Patient scanning position	HFS
Acquisition date and time	27 May 2021, 17:24:33 (hr:min:sec)

General data

Treatment planning system	RayStation 5 SP3 (5.0.3.17)
Report creation time	04 Jun 2021, 12:08:23 (hr:min:sec)
Template name	PLAN_REPORT_20190429
Patient coordinate system	IEC 61217

Beam Set overview

Beam Set name	lung_LLL
Treatment technique	VMAT
Treatment unit	ELT34V-FFF
Number of beams	2

Beam Set Report

Patient setup

Localization point	
POI	initial
Treatment position	HFS : Head First Supine
Position [cm]	X(Right-Left) = -0.18 , Y(Inf-Sup) = -125.15 , Z(Post-Ant) = -0.03
Patient setup	
Beams	1A1, 1A2
Isocenter [cm]	lung_LLL 1 - X(R-L) = 4.51 , Y(I-S) = -105.95 , Z(P-A) = -1.59
Localization point - Isocenter [cm]	X(R-L) = -4.69 , Y(I-S) = -19.2 , Z(P-A) = 1.56

Position patient such that lasers line up with patient marks.
Move the couch according to the PATIENT coordinate system:
RIGHT 4.69 cm (patient's right)
INFERIOR 19.2 cm
ANTERIOR 1.56 cm

Beam Set data

Treatment technique	VMAT
Beam Set name	lung_LLL
Number of beams	2
Energy [MV]	6.00
Number of segments	360
MU per fraction	3591.18
Number of fractions	4
Treatment unit	ELT34V-FFF
Modality	Photons
Planning image set	CT 1
DICOM Plan UID	1.2.826.0.1.3680043.8.176.20210601151705698.2700.22745
Structure set UID	1.2.826.0.1.3680043.8.176.20210531070220970.3780.48511
Dose calculation algorithm	Collapsed Cone, Version 3.2

Prescription

Prescription	5000 cGy to dose at 95.00% volume in PTV 1250x4 Dmax~
Prescribed dose per fraction [cGy]	1250

Beam Data Overview [lung_LLL 1 - Right-Left: 4.51 Inf-Sup: -105.95 Post-Ant: -1.59]

#	Beam name (Description)	Number of segments	Maximum jaw aperture [cm Non-IEC] Y1	Y2	Start gantry angle [deg]	Stop gantry angle [deg]	Coll. angle [deg]	Couch angle [deg]	MU per fraction	Bolus [Y/N]
1	1A1 (1A1)	180	1.50	2.00	181.0	179.0	0.0	0.0	1735.18	N
2	1A2 (1A2)	180	1.50	2.00	179.0	181.0	90.0	0.0	1856.00	N

Objectives

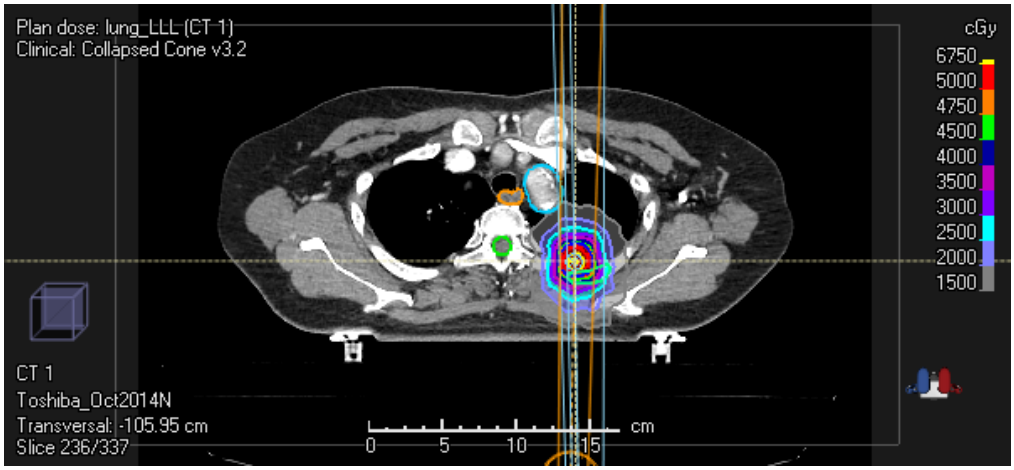
Dose	Function	ROI	Description	Robust	Weight	Value
	Physical Composite Objective			No		5.2133
Plan	Min Dose	PTV 1250x4 Dmax~	Min Dose 4950 cGy	No	30000	0.3193
Plan	Max Dose	PTV 1250x4 Dmax~	Max Dose 7000 cGy	No	30000	0.0000
Plan	Min DVH	PTV 1250x4 Dmax~	Min DVH 5000 cGy to 95% volume	No	30000	0.0000
Plan	Dose Fall-Off	external	Dose Fall-Off [H]5000 cGy [L]800 cGy, Low dose distance 1.00 cm	No	5000	1.3050
Plan	Dose Fall-Off	external	Dose Fall-Off [H]5000 cGy [L]500 cGy, Low dose distance 2.00 cm	No	4000	1.1062
Plan	Dose Fall-Off	external	Dose Fall-Off [H]5000 cGy [L]100 cGy, Low dose distance 3.00 cm	No	3000	2.1724
Plan	Max Dose	ring	Max Dose 5000 cGy	No	2000	0.0025
Plan	Max Dose	rib	Max Dose 5300 cGy	No	10000	0.2102
Plan	Max Dose	GTV	Max Dose 7000 cGy	No	30000	0.0000
Plan	Min DVH	GTV	Min DVH 6500 cGy to 50% volume	No	30000	0.0000
Plan	Min Dose	GTV	Min Dose 6000 cGy	No	30000	0.0860
Plan	Max Dose	esophagus	Max Dose 800 cGy	No	50	0.0088
Plan	Max Dose	spinal_cord	Max Dose 900 cGy	No	50	0.0028

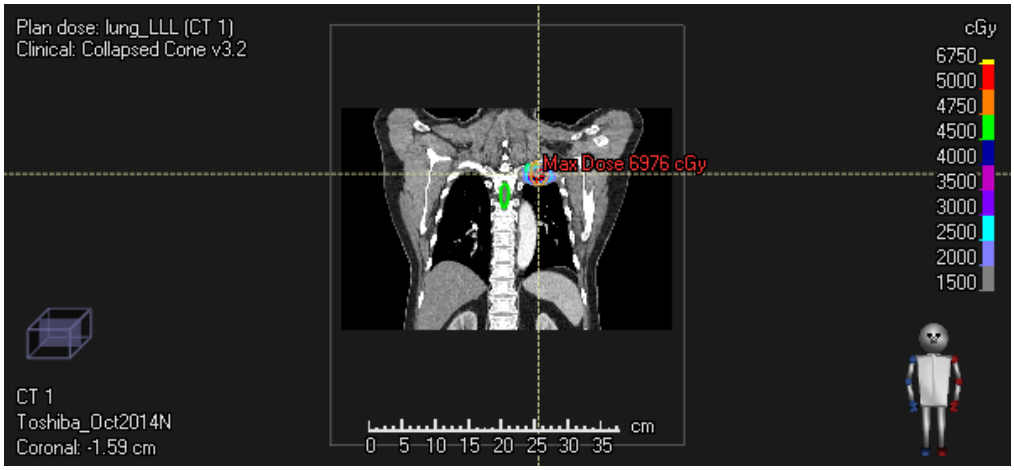
Constraints

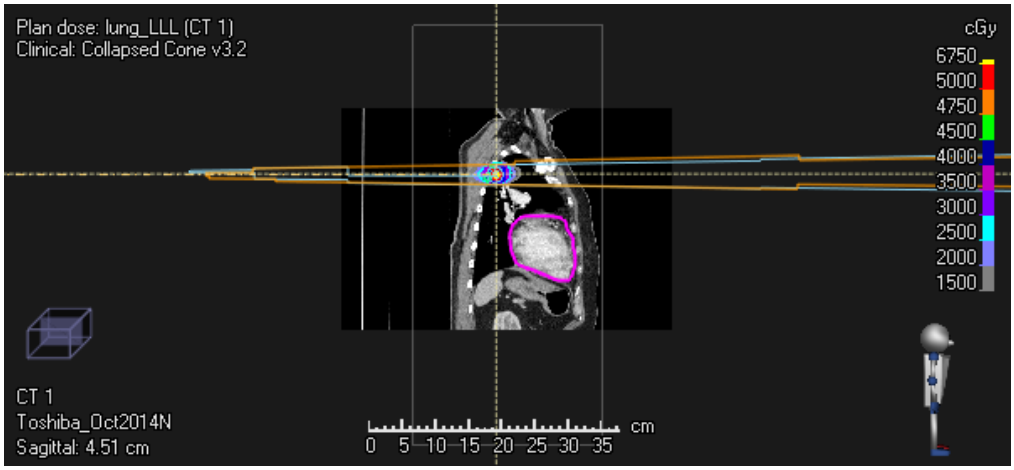
No constraints defined

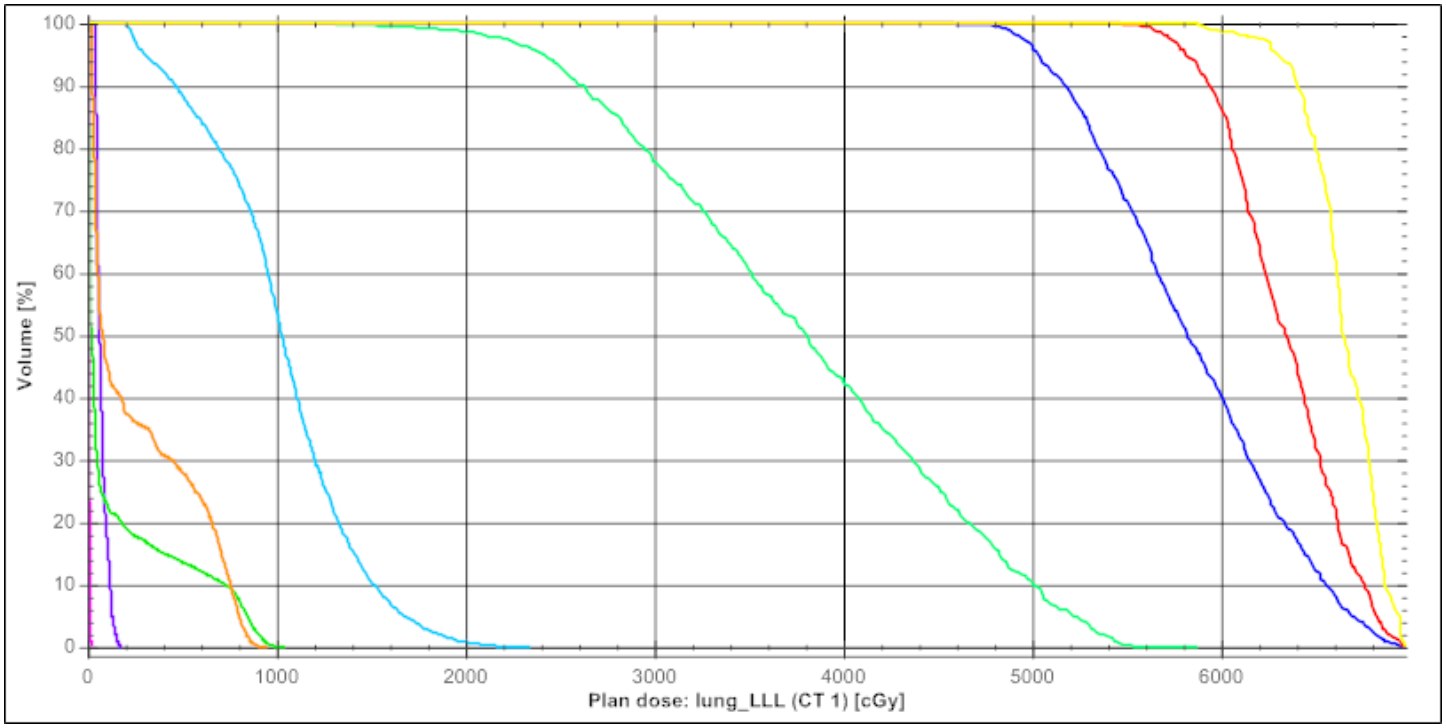
Beamset dose data

Isocenter name	lung_LLL 1
Isocenter [cm]	Right-Left: 4.51 Inf-Sup: -105.95 Post-Ant: -1.59
Dose grid resolution [cm]	Right-Left: 0.20 Inf-Sup: 0.20 Post-Ant: 0.20
Beams	1A1, 1A2









POI Dose statistics

Dose	POI	Dose [cGy]	Position		
			Right-Left: [cm]	Inf-Sup: [cm]	Post-Ant: [cm]
Plan dose: lung_LLL (CT 1)	initial	6	-0.18	-125.15	-0.03
Plan dose: lung_LLL (CT 1)	isocenter	6895	4.51	-105.95	-1.59

ROI Dose statistics [Beam Set dose]

Name	Volume [cm³]	D99 [cGy]	D98 [cGy]	D95 [cGy]	Average [cGy]	D50 [cGy]	D2 [cGy]	D1 [cGy]	% outside grid
esophagus	12.21	20	21	22	269	79	838	859	0
external	20031.10	0	0	0	70	8	775	1106	0
GTV	0.72	5955	6137	6297	6649	6643	6951	6966	0
heart	788.47	2	2	2	6	5	15	17	0
ITV	3.03	5639	5716	5813	6335	6341	6891	6945	0
L_lung	740.82	4	4	5	326	26	3247	4805	0
large vassel	16.90	224	241	301	1021	1027	1863	1965	0
lung	1998.85	1	1	1	151	14	1718	2683	0
PTV 1250x4 Dmax~	8.05	4871	4925	5031	5845	5816	6816	6863	0
R_lung	1258.11	1	1	2	49	7	430	495	0
rib	4.24	1901	2110	2418	3795	3804	5375	5436	0
ring	25.54	2106	2209	2353	3313	3202	4790	4883	0
spinal_cord	23.04	5	5	5	147	20	903	932	0
thyroid	4.53	38	39	41	71	63	148	156	0

external — This ROI is set as the external ROI that defines the outer border of the patient

Beam data

Beam name	1A1
Beam description	1A1
Isocenter [cm]	lung_LLL 1 - Right-Left: 4.51 Inf-Sup: -105.95 Post-Ant: -1.59
Start gantry angle [deg]	181.0
Stop gantry angle [deg]	179.0
Rotation direction	CW
Collimator angle [deg]	0.0
Couch angle [deg]	0.0
Beam MU/fraction	1735.18
Number of segments	180
Beam number	1
Number of fractions	4
Total beam MU	6940.70
Beam weight [%]	48.3
Treatment unit	ELT34V-FFF
Energy [MV]	6.00
Jaw max aperture width [cm]	-
X1 [cm Non-IEC]	-
X2 [cm Non-IEC]	-
Jaw max aperture height [cm]	3.50
Y1 [cm Non-IEC]	1.50
Y2 [cm Non-IEC]	2.00
Bolus data	
No bolus	

Beam dose specification point

Coordinates [cm]	Isocenter
Dose per fraction [cGy]	881.2

Beam data

Beam name	1A2
Beam description	1A2
Isocenter [cm]	lung_LLL 1 - Right-Left: 4.51 Inf-Sup: -105.95 Post-Ant: -1.59
Start gantry angle [deg]	179.0
Stop gantry angle [deg]	181.0
Rotation direction	CCW
Collimator angle [deg]	90.0
Couch angle [deg]	0.0
Beam MU/fraction	1856.00
Number of segments	180
Beam number	2
Number of fractions	4
Total beam MU	7424.01
Beam weight [%]	51.7
Treatment unit	ELT34V-FFF
Energy [MV]	6.00
Jaw max aperture width [cm]	-
X1 [cm Non-IEC]	-
X2 [cm Non-IEC]	-
Jaw max aperture height [cm]	3.50
Y1 [cm Non-IEC]	1.50
Y2 [cm Non-IEC]	2.00
Bolus data	
No bolus	

Beam dose specification point

Coordinates [cm]	Isocenter
Dose per fraction [cGy]	842.7