Supplementary File

Table S1. Treatment plans localisations

Region	Localization	Number of arcs
Abdomen and Pelvic	Bladder	12
	Gynaecology	59
	Prostate	228
	Rectum	64
	Stomach	2
	Adrenal	2
	Metastasis to bones	26
	Metastasis to soft tissues	26
	TOTAL	*419*
Thorax	Lung	136
	Oesophagus	29
	Metastasis to bones	26
	TOTAL	*191*
Head and Neck	Laryngopharynx	135
	Oropharynx	45
	Nasopharynx	2
	Metastasis to bones	4
	Brain	6
	TOTAL	*192*

Table S2. Spearman correlation coefficients between plan and complexity metrics. Results in bold are statistically significant at $\alpha = 0.05$

Variables	PTV (L)	D(fr,arc)	MU/Gy	BA	BI	BM	aMU/CP	sdMU/CP	aDR	sdDR	aGS	sdGS	ϑ
PTV (L)	**1**												
D(fr,arc)	**-0.226**	**1**											
MU/Gy	**-0.216**	**-0.195**	**1**										
BA	**0.897**	**-0.195**	**-0.438**	**1**									
BI	**0.628**	**-0.337**	**0.146**	**0.552**	**1**								
BM	**0.164**	**-0.258**	**0.441**	0.012	**0.714**	**1**							
aMU/CP	**-0.439**	**0.690**	**0.292**	**-0.533**	**-0.457**	**-0.184**	**1**						
sdMU/CP	**-0.375**	**0.410**	**0.231**	**-0.442**	**-0.259**	-0.010	**0.563**	**1**					
aDR	**-0.364**	**0.737**	**0.199**	**-0.472**	**-0.400**	**-0.144**	**0.890**	**0.416**	**1**				
sdDR	**0.135**	**-0.206**	-0.002	**0.098**	**0.227**	**0.325**	**-0.285**	**0.332**	**-0.273**	**1**			
aGS	**0.452**	**-0.496**	**-0.325**	**0.572**	**0.283**	-0.035	**-0.705**	**-0.692**	**-0.731**	0.049	**1**		
sdGS	**-0.426**	**0.452**	**0.355**	**-0.554**	**-0.242**	**0.092**	**0.678**	**0.694**	**0.698**	0.012	**-0.983**	**1**	
ϑ	**-0.370**	**0.737**	**0.208**	**-0.481**	**-0.398**	**-0.135**	**0.893**	**0.438**	**0.999**	**-0.263**	**-0.749**	**0.719**	**1**

Legend:	no correlation	small	fair	moderate	substantial	almost perfect

Table S3. Confusion matrices for the training sample for the DA model

from \ to	Green	Yellow	Red	Total	% correct
Green	160	273	1	434	36.87%
Yellow	7	175	5	187	93.58%
Red	0	0	21	21	100.00%
Total	167	448	27	642	55.45%

Table S4. Confusion matrices for the training sample for the RDF model

From\to	Green	Yellow	Red	Total	% correct
Green	412	21	1	434	94.9
Yellow	38	142	7	187	75.9
Red	4	8	9	21	42.9
Total	454	171	17	642	87.7

Table S5. Confusion matrices for the validation sample for the DA model

From\to	Green	Yellow	Red	Total	% correct
Green	38	70	0	108	35.19%
Yellow	1	45	1	47	95.74%
Red	0	0	5	5	100.00%
Total	39	115	6	160	55.00%

Table S6. Confusion matrices for the validation sample for the RDF model

from \ to	Green	Yellow	Red	Total	% correct
Green	102	6	0	108	94.4
Yellow	9	36	2	47	76.6
Red	1	2	2	5	40.0
Total	112	44	4	160	87.5

Table S7. Confusion matrices for the validation sample for the hybrid model.

From\to	Green	Yellow	Red	Total	% correct
Green	102	6	0	108	94.4
Yellow	10	36	1	47	76.6
Red	0	0	5	5	100.0
Total	112	42	6	160	89.4