Online Supplementary File 1. Cancer site, ICD10 code, and applied tumour grouping for analysis.

Subsite malignant cancer	ICD10 code	Tumor type	Pelvis/nonpelvis	Region
Lip, oral cavity and pharynx	C0-C14		Nonpelvis	
Nasal cavity, middle ear, sinuses	C30,C31		nonpelvis	
Larynx	C32		nonpelvis	
Eye and adnexa	C69		nonpelvis	
Meninges	C70	Central Nervous System	nonpelvis	
Brain	C71	Central Nervous System	nonpelvis	
Pineal Gland	C75	Central Nervous System	nonpelvis	
Spinal cord/other parts CNS	C72	Central Nervous System	nonpelvis	
Thyroid gland	C73		nonpelvis	
Esophagus	C15	gastrointestinal	nonpelvis	chest
Stomach	C16	gastrointestinal	nonpelvis	abdomen
Small Intestine	C17	gastrointestinal	nonpelvis	abdomen
Colon	C18	gastrointestinal	nonpelvis	abdomen
Appendix	C18.1	gastrointestinal	nonpelvis	abdomen
Rectum + rectosigmoid	C19,C20	gastrointestinal	pelvis	pelvis
Anus, anal canal	C21	gastrointestinal	pelvis	pelvis
Liver, gallbladder & billiary tract	C22-C24	gastrointestinal	nonpelvis	abdomen
Pancreas	C25	gastrointestinal	nonpelvis	abdomen
Penis	C60	genitourinary tract	pelvis	pelvis
Testis & other male genitalia	C62,C63	genitourinary tract	pelvis	pelvis
Kidney	C64	genitourinary tract	nonpelvis	abdomen
Renal pelvis	C65	genitourinary tract	nonpelvis	abdomen
Bladder	C67	genitourinary tract	pelvis	pelvis
Ureter	C66	genitourinary tract	nonpelvis	abdomen
Urethra	C68	genitourinary tract	pelvis	pelvis

Trachea	C33		nonpelvis	chest
Lung & bronchus	C34		nonpelvis	chest
Heart, mediastinum, pleura	C38		nonpelvis	chest
Pleuramesothelioma	C38.4		nonpelvis	chest
Thymus	C37		nonpelvis	chest
Breast	C50		nonpelvis	chest
Bone limbs	C40		nonpelvis	
Pelvic bones	C41.4		pelvis	pelvis
Other bones	C41.0/1/2/3/8/9		nonpelvis	
Kaposi sarcoma	C46	soft tissue	nonpelvis	
Peripheral nervous system	C47	soft tissue	nonpelvis	
(Retro)peritoneum	C48	soft tissue	nonpelvis	abdomen
Oher soft tissue - headneck	C49.0	soft tissue	nonpelvis	
Oher soft tissue - limbs	C49.1, C49.2	soft tissue	nonpelvis	
Oher soft tissue - thorax	C49.3	soft tissue	nonpelvis	chest
Oher soft tissue - abdomen	C49.4	soft tissue	nonpelvis	abdomen
Oher soft tissue - pelvis	C49.5	soft tissue	pelvis	pelvis
Other soft tissue - unspecified/overlap	C49.6-C49.9	soft tissue	nonpelvis	
Unknown primary -description pelvis	C80		pelvis	pelvis
Unknown primary - unclear/outside pelvis	C80		nonpelvis	

Online Supplementary File 2. Estimated sHRs (sensitivity analysis) when other treatment-related factors are added to the baseline model (age, calendar period, technique) for the primary endpoint of non-pelvic second primary cancer. Abbreviations: sHR = subhazard ratio, CI=confidence interval.

Treatment characteristic	Fine & Gray Model		
	sHR additional factor (95% CI)	p-value	Estimated sHR for IMRT vs 3DCRT
Baseline model	-		1.56
+Seminal vesicle dose ≥50 Gy vs 0 Gy	0.97 (0.66-1.42)	0.9	1.56
+Prostate dose 78 Gy vs 72 Gy	0.94 (0.58-1.54)	0.8	1.57
+Hormonal therapy yes vs no	0.90 (0.66-1.22)	0.5	1.57
+Setup verification online vs offline	1.04 (0.59-1.86)	0.9	1.52
Baseline model for 78 Gy subgroup only			1.53