Supplementary Document III – Distribution for the generation of synthetic dataset

Parameter name	*Distribution type*			*Ref*
Age (years)	Normal	μ = 60	σ = 10	[1–5]
PSA (ng/mL)	Beta	α = 4.17	β = 51.5	[1–5]
BMI (kg/m^2)	Normal	μ = 28	σ = 3	[3–5]
T-stage	Step	T1 = 66%	T2 = 34%	[1, 3–5]
neg. biopsy cores (N)	Normal	μ = 4.5	σ = 1.9	[2]
pos. biopsy cores (N)	Half normal	Location = 1	Scale = 2.46	[2]
P. Gleason grade	Beta	4 = 14%	3 = 86%	[1, 3, 4]
S. Gleason grade	Step	4 = 19%	3 = 71%	[2]
ADT given	Step	no = 22%	yes = 78%	[6]
ADT length	Beta	α = 0.125	β = 1.25	[1]
ASA score	Step	I/II = 18%	III/IV = 82%	[1, 3]
Nerve sparing	Step	no = 81%	yes = 19%	[4]
Abdominal surgery	Step	no = 90.3%	yes = 9.7%	[6]
HRQOL (%)	Beta	α = 1.5	β = 6	[5]
Membranous urethra length (mm)	Normal	μ = 12	σ = 3	[4]
Mean Trigone dose (Gy)	Normal	μ = 68	σ = 6	[3]
V75 rectum (%)	Gamma	location = 1	scale = 4	[6]

Ref: reference; PSA: prostate specific antigen; BMI: body mass index; T-stage: Tumor stage; N neg.: number of negative; N pos.: number of positive; P.: Primary; S.: Secondary; ADT: androgen deprivation therapy; ASA: American Society of Anesthesiologists; PN: Pelvic nodes; HRQOL: sexual health-related quality of life; V75: percentage receiving at least 75 Gray; Gy = Gray

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3. Schaake W, van der Schaaf A, van Dijk LV, et al (2018) Development of a prediction model for late urinary incontinence, hematuria, pain and voiding frequency among irradiated prostate cancer patients. PLoS One 13:e0197757
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