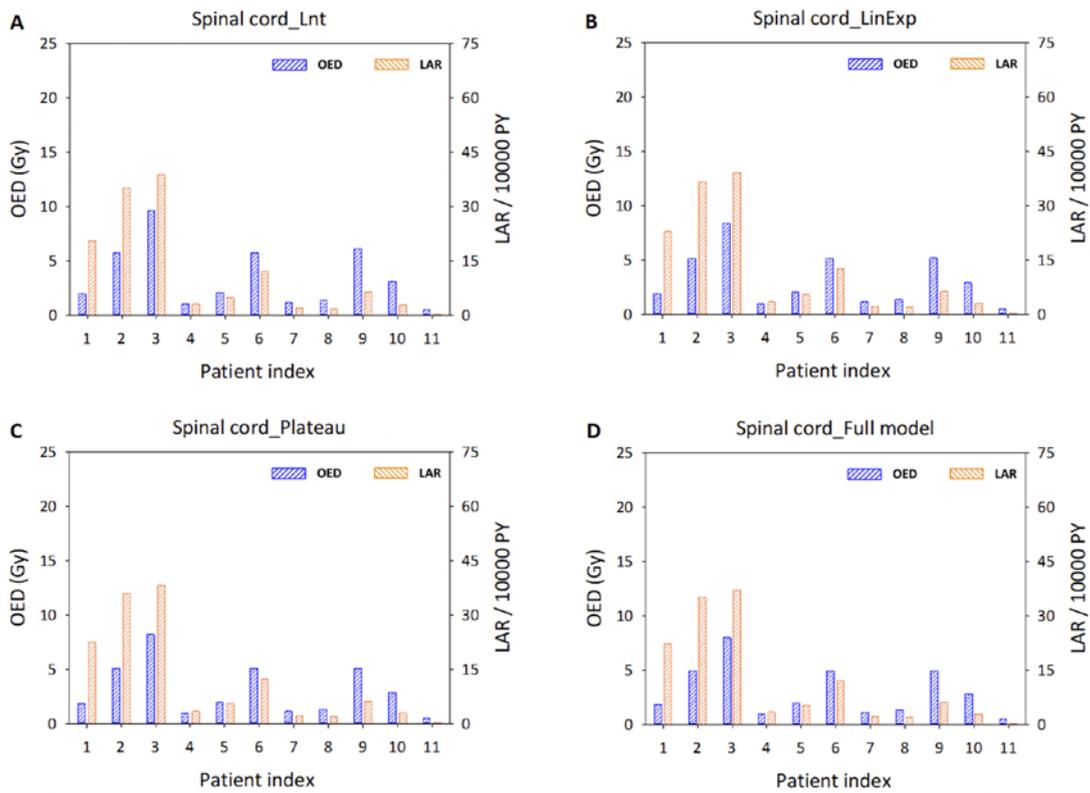


Radiation-induced Secondary Cancer Risk Assessment in Patients with Lung Cancer after Stereotactic Body Radiotherapy using the CyberKnife M6 System with Lung-optimized Treatment

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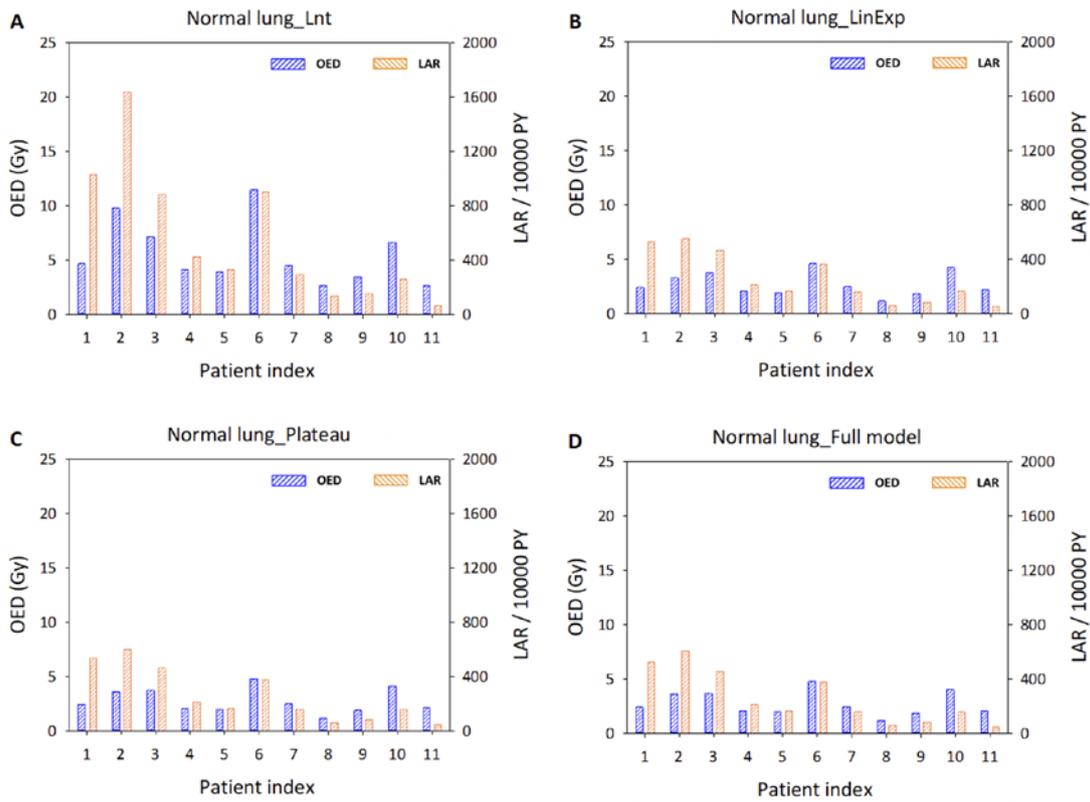
Supplementary Figures



Supplementary Figure S1. OED/LAR of spinal cord for 11 patients using corresponding dose-response models (A) Lnt, (B) LinExp, (C) Plateau, (D) Full;

Notes: Patients were ordered by age from young to old; X axis: patient index; Y axis: OED (Left), LAR (Right); Unit is Gy (Left) and per 10,000 person-years (PY) (Right).

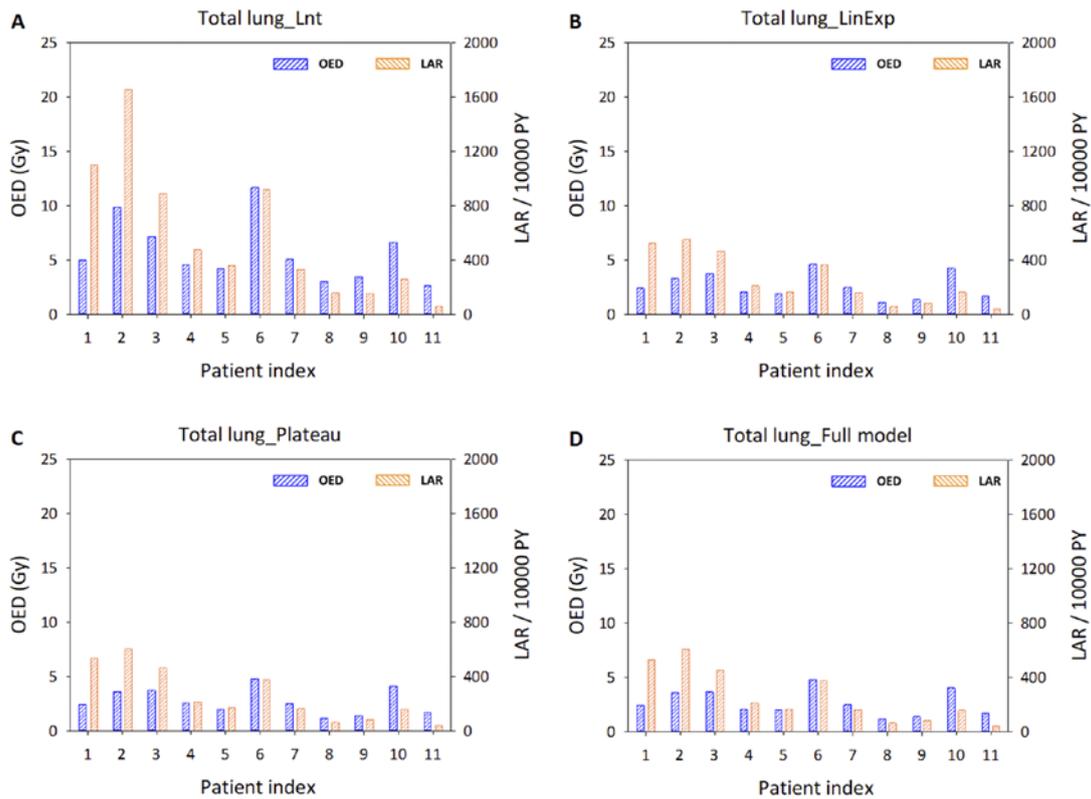
Abbreviations: Lnt, Linear-no-threshold dose response model; LinExp, Linear-exponential dose response model; Plateau, Plateau dose response model; Full, Schneider parameterization dose-response model; OED, Organ equivalent dose; LAR, Lifetime attributable risk; PTV, Planning target volume.



Supplementary Figure S2. OED/LAR of normal lung for 11 patients using corresponding dose-response models **(A)** Lnt, **(B)** LinExp, **(C)** Plateau, **(D)** Full;

Notes: Patients were ordered by age from young to old; X axis: patient index; Y axis: OED (Left), LAR (Right); Unit is Gy (Left) and per 10,000 person-years (PY) (Right).

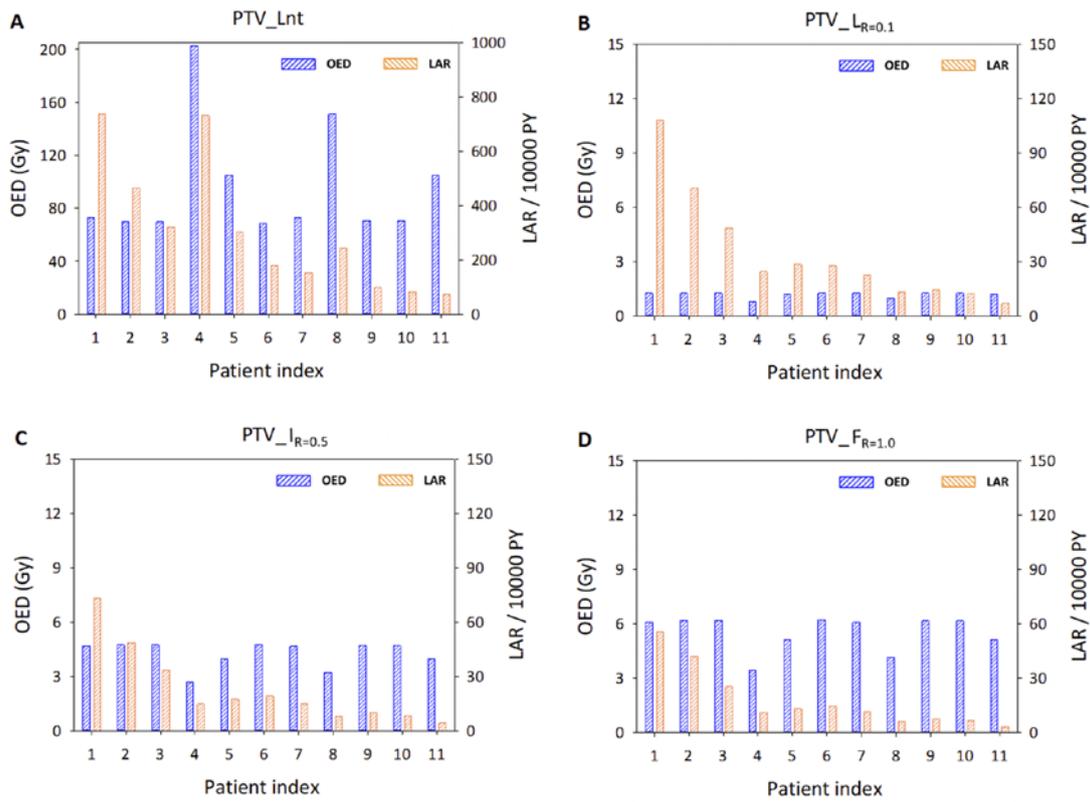
Abbreviations: Lnt, Linear-no-threshold dose response model; LinExp, Linear-exponential dose response model; Plateau, Plateau dose response model; Full, Schneider parameterization dose-response model; OED, Organ equivalent dose; LAR, Lifetime attributable risk; PTV, Planning target volume.



Supplementary Figure S3. OED/LAR of total lung for 11 patients using corresponding dose-response models **(A)** Lnt, **(B)** LinExp, **(C)** Plateau, **(D)** Full;

Notes: Patients were ordered by age from young to old; X axis: patient index; Y axis: OED (Left), LAR (Right); Unit is Gy (Left) and per 10,000 person-years (PY) (Right).

Abbreviations: Lnt, Linear-no-threshold dose response model; LinExp, Linear-exponential dose response model; Plateau, Plateau dose response model; Full, Schneider parameterization dose-response model; OED, Organ equivalent dose; LAR, Lifetime attributable risk; PTV, Planning target volume.



Supplementary Figure S4. OED/LAR of PTV for 11 patients using corresponding dose-response models **(A)** Lnt, **(B)** Low repopulation ($L_{R=0.1}$) $R = 0.1$, **(C)** Intermediate repopulation ($I_{R=0.5}$) $R = 0.5$, **(D)** Full tissue recovery models ($F_{R=1.0}$) $R = 1.0$;

Notes: Patients were ordered by age from young to old; X axis: patient index; Y axis: OED (Left), LAR (Right); Unit is Gy (Left) and per 10,000 person-years (PY) (Right).

Abbreviations: Lnt, Linear-no-threshold dose response model; Full, Schneider parameterization dose-response model; Low repopulation ($L_{R=0.1}$) $R = 0.1$, Intermediate repopulation ($I_{R=0.5}$) $R = 0.5$, Full tissue recovery models ($F_{R=1.0}$) $R = 1.0$; OED, Organ equivalent dose; LAR, Lifetime attributable risk; PTV, Planning target volume.