## SUPPLEMENTARY FILE B

Additional variables used for multiple imputation via chained equations:

- Primary treatment
  - EBRT, LDR brachytherapy, or HDR brachytherapy
- Pelvic lymph node dissection at primary treatment (yes/no)
- Initial NCCN risk group
  - Low risk (T1-T2a AND Gleason ≤ 6 AND PSA < 10 ng/mL), Intermediate risk (T2b-T2c OR Gleason 7 OR PSA 10-20 ng/mL), or High risk (≥ T3a OR Gleason ≥ 8 OR PSA > 20 ng/mL)
- ADT use
  - $\circ$  No,  $\leq$  36 months, or > 36 months
- PSA nadir post-primary treatment (ng/mL)
- Prostate size on pre-salvage MRI (cm<sup>3</sup>)
- Maximum tumour diameter on pre-salvage MRI (mm)
- V200% CTV (%)
- PSA velocity (ng/mL/years)
- Interval between primary and salvage treatment (months)
- Previous salvage treatment (yes/no)
- Time to nadir post-primary treatment (months)
- Deceased (yes/no)