

### Supplement S1: Nomogram Equation and Survival of Baseline Population

Equation:  $S = S_0 \wedge \exp(-3.2868467 + 0.039854143 * \text{AGE} + 0.092083744 * \log(\text{PSA}) - 0.20891173 * \log(\text{PSADT}) + 0.21978332 * (\text{bone\_mets} == "3-9") + 0.32207461 * (\text{bone\_mets} == ">=10") + 1.0446017 * (\text{bone\_mets} == \text{"Visceral/Lymph node"})$ )

Survival of baseline population ( $S_0$ ) for years 1, 2, 3, 4 and 5 are, respectively, 0.5631, 0.2580, 0.1725, 0.1168, and 0.0739.

**Supplemental Table 1: Variation Inflation Factors for the Final Model**

<b>Variables</b>	<b>VIF</b>
<b>Age at Metastases (years)</b>	1.07
<b>Number of Bone Metastases</b>	
1-2	<i>ref.</i>
3-9	1.29
≥10	1.51
Visceral/Lymph Node Only	1.66
<b>PSA at Metastases<sup>a</sup> (ng/mL)</b>	1.38
<b>PSADT at Metastases<sup>a</sup> (ng/mL/year)</b>	1.23

Abbreviation: VIF = variation inflation factor.

<sup>a</sup>Log transformed.

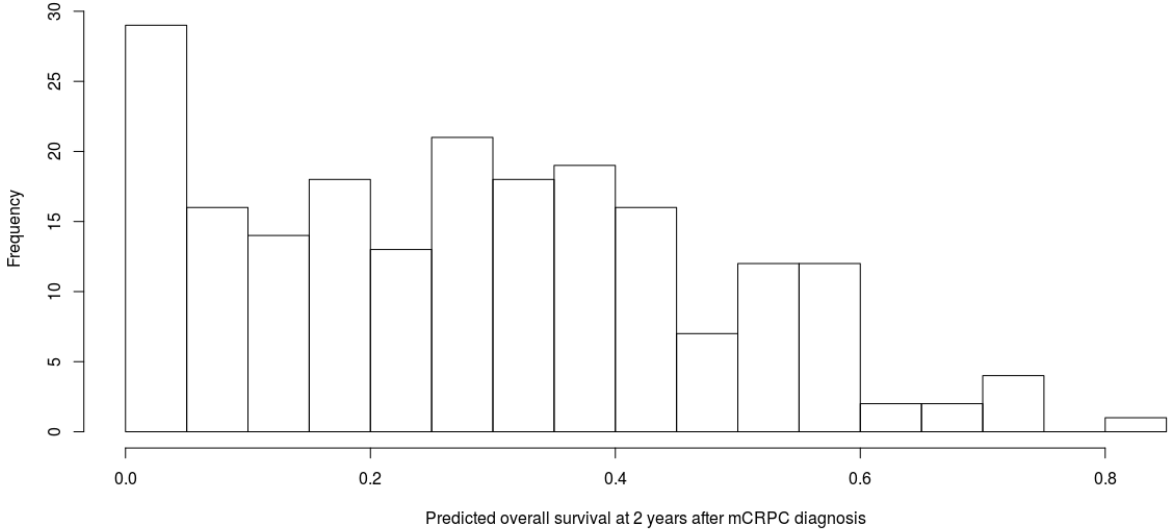
**Supplemental Table 2: Multivariable Analysis for the Final Model**

<b>Variables</b>	<b>HR</b>	<b>95% CI</b>	<b>P*</b>
<b>Age at Metastases (years)</b>	1.04	1.02-1.06	<0.001
<b>Number of Bone Metastases</b>			
1-2	<i>ref.</i>		
3-9	1.25	0.71-2.17	0.439
≥10	1.38	0.93-2.05	0.111
Visceral/Lymph Node Only	2.84	1.82-4.45	<0.001
<b>PSA at Metastases<sup>a</sup> (ng/mL)</b>	1.10	0.98-1.23	0.117
<b>PSADT at Metastases<sup>a</sup> (ng/mL/year)</b>	0.87	0.68-0.96	0.016

Abbreviation: CI = confidence interval; HR = hazard ratio.

<sup>a</sup>Log transformed.

**Supplemental Figure 1: Distribution of Predicted Overall Survival at 2 Years After mCRPC Diagnosis**



Abbreviation: mCRPC = metastatic castration-resistant prostate cancer.