

**Table S6.** Risk estimates of overall breast cancer and estrogen-receptor subtypes for truncating variants using ExAC controls.

		ExAC European		ExAC All	
		OR (95% CI)	P-Value	OR (95% CI)	P-Value
<i>ATM</i>	Overall	<b>2.18 (1.63-2.91)</b>	<b>1.1E-07</b>	<b>2.62 (2.01-3.42)</b>	<b>3.8E-13</b>
	ER Positive	<b>2.13 (1.52-3.00)</b>	<b>1.3E-05</b>	<b>2.57 (1.86-3.54)</b>	<b>4.4E-09</b>
	ER Negative	0.86 (0.32-2.34)	1.0	1.03 (0.38-2.79)	0.80
<i>CHEK2</i>	Overall	<b>2.73 (2.25-3.31)</b>	<b>2.2E-16</b>	<b>3.34 (2.80-3.99)</b>	<b>2.2E-16</b>
	ER Positive	<b>2.99 (2.41-3.73)</b>	<b>2.2E-16</b>	<b>3.67 (3.00-4.49)</b>	<b>2.2E-16</b>
	ER Negative	1.39 (0.19-2.45)	0.32	1.70 (0.98-2.97)	0.087
<i>PALB2</i>	Overall	<b>5.30 (3.69-7.64)</b>	<b>2.2E-16</b>	<b>4.11 (3.09-5.48)</b>	<b>2.2E-16</b>
	ER Positive	<b>4.27 (2.80-6.52)</b>	<b>6.7E-13</b>	<b>3.32 (2.32-4.74)</b>	<b>8.9E-12</b>
	ER Negative	<b>5.56 (2.86-10.8)</b>	<b>7.7E-08</b>	<b>4.32 (2.31-8.06)</b>	<b>2.6E-06</b>
<i>XRCC2</i>	Overall	1.04 (0.48-2.27)	1.0	1.26 (0.60-2.62)	0.69
	ER Positive	1.01 (0.38-2.66)	1.0	1.16 (0.45-2.98)	0.95
	ER Negative	0.98 (0.13-7.25)	1.0	1.17 (0.16-8.60)	0.58