

**Supplementary Table S6.** Multivariable-adjusted<sup>a</sup> association between body mass index (BMI) and mammographic density (MD)<sup>b</sup> by race and ethnicity and hormone therapy (HT) use, among women ages 45 and older

BMI	All			AIAN			Asian			Black			Hispanic			NHPI			White			
	Low MD (n)	High MD (n)	RR (95% CI)	Low MD (n)	High MD (n)	RR (95% CI)	Low MD (n)	High MD (n)	RR (95% CI)	Low MD (n)	High MD (n)	RR (95% CI)	Low MD (n)	High MD (n)	RR (95% CI)	Low MD (n)	High MD (n)	RR (95% CI)	Low MD (n)	High MD (n)	RR (95% CI)	
All women ages ≥45																						
<25	21,936	29,601	(ref)	62	106	(ref)	208	687	(ref)	75	121	(ref)	800	1,388	(ref)	12	31	(ref)	20,779	27,268	(ref)	
≥25-≤30	25,252	15,294	0.68 (0.67, 0.69)	88	62	0.65 (0.52, 0.82)	109	105	0.65 (0.56, 0.74)	124	59	0.52 (0.41, 0.66)	1,075	818	0.69 (0.65, 0.73)	31	24	0.62 (0.44, 0.87)	23,825	14,226	0.68 (0.67, 0.69)	
≥30	20,486	6,666	0.43 (0.42, 0.44)	<0.001	101	22	0.28 (0.19, 0.41)	41	25	0.50 (0.36, 0.68)	141	41	0.36 (0.27, 0.48)	<0.001	368	0.46 (0.42, 0.50)	56	20	0.36 (0.23, 0.55)	19,240	6,190	0.43 (0.42, 0.44)
p-trend			<0.001			<0.001												0.002			<0.001	
Never HT																						
<25	18,496	25,611	(ref)	*	*	(ref)	192	637	(ref)	*	110	(ref)	700	1,271	(ref)	*	*	(ref)	17,471	23,470	(ref)	
≥25-≤30	21,159	12,816	0.67 (0.66, 0.69)	72	* 0.70	0.55, 0.88	100	96	0.65 (0.56, 0.75)	111	* 0.50	0.39, 0.64	951	734	0.68 (0.64, 0.73)	*	*	0.57 (0.39, 0.84)	19,896	11,861	0.68 (0.66, 0.69)	
≥30	17,148	5,549	0.43 (0.42, 0.44)	<0.001	*	* 0.26 (0.17, 0.40)		*	* 0.52 (0.38, 0.72)	126	*	0.33 (0.24, 0.46)	<0.001	324	0.45 (0.41, 0.50)	*	*	0.33 (0.21, 0.53)	16,043	5,132	0.43 (0.42, 0.44)	
p-trend			<0.001			<0.001												0.002			<0.001	
Past HT																						
<25	1,335	1,378	(ref)	*	*	(ref)	*	24	(ref)	*	*	(ref)	41	37	(ref)	*	*	(ref)	1,284	1,306	(ref)	
≥25-≤30	1,790	904	0.67 (0.63, 0.72)	*	*	**	*	* 0.52	0.27, 0.99	*	*	0.53 (0.17, 1.66)	59	29	0.68 (0.47, 0.99)	*	*	**	1,713	862	0.67 (0.63, 0.72)	
≥30	1,627	445	0.42 (0.38, 0.46)	<0.001	*	*	**	*	* 0.42 (0.08, 2.22)	*	*	* 0.77 (0.23, 2.53)	52	21	0.57 (0.37, 0.88)	*	*	**	1,562	415	0.41 (0.37, 0.45)	
p-trend			<0.001			**		0.17			0.60		0.020					**			<0.001	
Current HT																						
<25	2,105	2,612	(ref)	*	*	(ref)	*	25	(ref)	*	*	(ref)	59	80	(ref)	*	*	(ref)	2,024	2,492	(ref)	
≥25-≤30	2,303	1,574	0.74 (0.70, 0.77)	*	* 0.35	0.14, 0.87	*	* 0.71	0.45, 1.11	*	*	**	65	55	0.80 (0.63, 1.02)	*	*	**	2,216	1,503	0.73 (0.70, 0.77)	
≥30	1,711	672	0.50 (0.47, 0.54)	<0.001	*	* 0.23	0.04, 1.19	0.038		*	*	**	57	23	0.50 (0.35, 0.74)	<0.001	*	**	1,635	643	0.51 (0.47, 0.54)	
p-heterogeneity			<0.001			0.45		0.75			0.33		**		0.56		**			<0.001		

Abbreviations: AIAN=non-Hispanic American Indian or Alaska Native; Asian=non-Hispanic Asian; Black=non-Hispanic Black; NHPI=non-Hispanic Native Hawaiian or Pacific Islander; White=non-Hispanic White

\*Consistent with Utah Population Database confidentiality policies, we have masked low counts (n<11) and any counts that could be used to re-create the low counts.

\*\*Model does not converge or all counts are 0.

<sup>a</sup>Multivariable models are adjusted for age (continuous), education (less than high school or high school diploma, more than high school, missing), and parity (0 births in Utah, 1 birth in Utah, 2+births in Utah, parous with number of births not known). The model for the full population, "All," is additionally adjusted for the combined race and ethnicity variable.

<sup>b</sup>Low MD is defined as BI-RADS A or B, and high MD is defined as BI-RADS C or D.

<sup>c</sup>Test for heterogeneity is a likelihood ratio test comparing models with and without interaction terms between HT and BMI. For each race and ethnicity group, tests for interaction compare only those categories of HT use for which results are displayed.