

Supplementary Table 2. Tracking of mammographic density measures over time among controls, by density assessment method

Mammographic density measure	Age at each screening round (time interval)	Cumulus (left MLO values)		ImageJ-based method			
		Left-right MLO mean values ^a		Left MLO values			
		N ^b	r ^c (p value)	N ^b	r ^c (p value)	N ^b	r ^c (p value)
Percent density ^c	41-42 (~1 yr)	314	0.77 (<0.0001)	330	0.83 (<0.0001)	309	0.78 (<0.0001)
	42 ^d -43 (~1 yr)	366	0.73 (<0.0001)	372	0.84 (<0.0001)	356	0.77 (<0.0001)
	42-44 (~2 yrs)	347	0.74 (<0.0001)	354	0.84 (<0.0001)	339	0.80 (<0.0001)
	42-45 (~3 yrs)	311	0.65 (<0.0001)	317	0.79 (<0.0001)	306	0.77 (<0.0001)
	42-46 (~4 yrs)	263	0.70 (<0.0001)	266	0.81 (<0.0001)	258	0.72 (<0.0001)
	42-47 (~5 yrs)	217	0.69 (<0.0001)	219	0.76 (<0.0001)	212	0.71 (<0.0001)
	42-48 (~6 yrs)	149	0.66 (<0.0001)	150	0.77 (<0.0001)	147	0.66 (<0.0001)
Dense Area	41-42 (~1 yr)	314	0.76 (<0.0001)	330	0.80 (<0.0001)	309	0.77 (<0.0001)
	42 ^d -43 (~1 yr)	366	0.70 (<0.0001)	372	0.79 (<0.0001)	356	0.72 (<0.0001)
	42-44 (~2 yrs)	347	0.72 (<0.0001)	354	0.80 (<0.0001)	339	0.71 (<0.0001)
	42-45 (~3 yrs)	311	0.63 (<0.0001)	317	0.75 (<0.0001)	306	0.67 (<0.0001)
	42-46 (~4 yrs)	263	0.64 (<0.0001)	266	0.75 (<0.0001)	258	0.66 (<0.0001)
	42-47 (~5 yrs)	217	0.66 (<0.0001)	219	0.70 (<0.0001)	212	0.63 (<0.0001)
	42-48 (~6 yrs)	149	0.64 (<0.0001)	150	0.68 (<0.0001)	147	0.63 (<0.0001)
Non- dense area	41-42 (~1 yr)	314	0.89 (<0.0001)	330	0.89 (<0.0001)	309	0.89 (<0.0001)
	42 ^d -43 (~1 yr)	366	0.88 (<0.0001)	372	0.91 (<0.0001)	356	0.87 (<0.0001)
	42-44 (~2 yrs)	347	0.86 (<0.0001)	354	0.91 (<0.0001)	339	0.89 (<0.0001)
	42-45 (~3 yrs)	311	0.81 (<0.0001)	317	0.89 (<0.0001)	306	0.86 (<0.0001)
	42-46 (~4 yrs)	263	0.83 (<0.0001)	266	0.90 (<0.0001)	258	0.86 (<0.0001)
	42-47 (~5 yrs)	217	0.84 (<0.0001)	219	0.86 (<0.0001)	212	0.82 (<0.0001)
	42-48 (~6 yrs)	149	0.82 (<0.0001)	150	0.86 (<0.0001)	147	0.84 (<0.0001)
Breast Area	41-42 (~1 yr)	314	0.94 (<0.0001)	330	0.92 (<0.0001)	309	0.92 (<0.0001)
	42 ^d -43 (~1 yr)	366	0.92 (<0.0001)	372	0.93 (<0.0001)	356	0.91 (<0.0001)
	42-44 (~2 yrs)	347	0.93 (<0.0001)	354	0.94 (<0.0001)	339	0.92 (<0.0001)
	42-45 (~3 yrs)	311	0.90 (<0.0001)	317	0.92 (<0.0001)	306	0.90 (<0.0001)
	42-46 (~4 yrs)	263	0.90 (<0.0001)	266	0.93 (<0.0001)	258	0.91 (<0.0001)
	42-47 (~5 yrs)	217	0.90 (<0.0001)	219	0.91 (<0.0001)	212	0.90 (<0.0001)
	42-48 (~6 yrs)	149	0.89 (<0.0001)	150	0.90 (<0.0001)	147	0.91 (<0.0001)

CI: confidence interval; MLO: medio-lateral oblique view; yr: year

^a For 14.4% cases and 14.1% controls only one MLO image (left or right) was available and its density values were used instead.

^b Number of women vary across ages because not all attended every screening round. The numbers of women for whom ImageJ-based left-right mean values were available at each screening round were greater than the corresponding numbers for Cumulus because only those with a left MLO view could be included in the latter. The numbers of women with ImageJ-based left MLO values were smaller than the corresponding numbers with Cumulus left MLO values because the ImageJ-based approach failed to produce valid readings for some images (see Material and Methods section).

^c Spearman correlation coefficient.

^d For Cumulus, tracking of percent density by reader is shown in Supplementary Table 3.

^e Tracking was calculated from age 42 years because the majority of participants joined the study at that age.