

Table S2

	Clinical-based cohort	Clinicogenetic-based cohort
	N=10,200	N=4,555
Breast cancer within 5 years	131 (1.28%)	58 (1.27%)
BCRAT absolute risk (%)	1.30 (0.74)	1.33 (0.73)
IBIS absolute risk (%)	1.31 (0.59)	1.33 (0.60)
Age at baseline (years)	54.1 (7.7)	54.1 (7.6)
Age categories:		
<=49	3,556 (34.9%)	1,557 (34.2%)
50-59	3,980 (39.0%)	1,839 (40.4%)
>=60	2,664 (26.1%)	1,159 (25.4%)
Birth province:		
In Canada outside Quebec	333 (3.3%)	74 (1.6%)
Outside Canada	1,490 (14.6%)	189 (4.1%)
Quebec	8,373 (82.1%)	4,292 (94.2%)
Missing	4	0
Ethnicity:		
Asian	188 (1.8%)	5 (0.1%)
Black African	182 (1.8%)	0 (0.0%)
Hispanic non-american	234 (2.3%)	1 (<0.1%)
Other	542 (5.3%)	86 (1.9%)
White/European	9,054 (88.8%)	4,463 (98.0%)
Age at menarche (years):		
<=11	2,305 (22.9%)	1,027 (22.7%)
12-13	4,754 (47.2%)	2,166 (47.9%)
>=14	3,021 (30.0%)	1,331 (29.4%)
Missing	120	31
Age at first live birth (years):		
<=19	1,124 (13.1%)	422 (11.1%)
20-24	2,955 (34.5%)	1,324 (34.8%)
25-29	2,814 (32.9%)	1,312 (34.5%)
>=30	1,621 (19.0%)	734 (19.3%)
Nulliparous	40 (0.5%)	14 (0.4%)
Missing	1,646	749
First-degree relatives with breast cancer:		
0	8,945 (87.7%)	3,949 (86.7%)
1	1,130 (11.1%)	556 (12.2%)
>=2	125 (1.23%)	50 (1.10%)
Previous breast biopsy:		
0	10,023 (98.3%)	4,463 (98.0%)

	1	134 (1.31%)	71 (1.56%)
	>=2	43 (0.42%)	21 (0.46%)
History of hyperplasia		6 (0.06%)	1 (0.02%)
History of atypical hyperplasia		1 (0.56%)	0 (0.00%)
Lobular Carcinoma In Situ		0	0
Weight (Kg)		67.4 [59.4;78.0]	66.8 [59.6;76.8]
Height (m)		1.61 [1.57;1.65]	1.61 [1.57;1.65]
History of ovary cancer		94 (0.92%)	46 (1.01%)
Menopause occurrence			
	Pre-menopausal	4176 (40.9%)	1891 (41.5%)
	Post-menopausal	5885 (57.7%)	2617 (57.5%)
	Unknown	139 (1.36%)	47 (1.03%)
Use of HRT			
	Never	7477 (73.3%)	3249 (71.3%)
	Previous user (more than 5 years ago)	1126 (11.0%)	506 (11.1%)
	Previous user (less than 5 years ago)	1285 (12.6%)	646 (14.2%)
	Current user	312 (3.06%)	154 (3.38%)
HRT length of use (years)		0.00 [0.00;1.00]	0.00 [0.00;1.00]
Last HRT use (years)		0.00 [0.00;0.00]	0.00 [0.00;0.00]
Mother history of breast cancer		832 (8.16%)	412 (9.05%)
Mother history of ovary cancer		114 (1.12%)	60 (1.32%)
Father history of breast cancer		8 (0.08%)	2 (0.04%)

HRT: hormonal replacement therapy; PRS: polygenic risk score; clinical-based cohort: validation of the BCRAT and IBIS models, included women with a BCRAT and an IBIS score; clinico-genetic-based cohort: validation of the PRS models and comparison with the BCRAT and IBIS models, genotyped women with all SNPs available.

* Not available for the phase 2