Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.

List of abbreviations

AI, aromatase inhibitors

BC, breast cancer

CI, confidence intervals

ER, estrogen receptor

DFS, disease-free survival

G, tumor grade

HR, hazard ratio

ICSI, intracytoplasmic sperm injection.

IQR, interquartile range

IVF, *in vitro* fertilization

LHRHa, luteinizing hormone-releasing hormone agonists

PR, progesterone receptor

N, nodal status

NE, not evaluable

T, tumor size

eAppendix. Supplementary methods and results – secondary matched analysis

In the secondary matched analysis, each patient with a pregnancy after breast cancer (patient with a pregnancy) was matched with 3 patients without subsequent pregnancy (patient with no pregnancy). Each matched patient with no pregnancy had to have a disease-free interval ≥ than the time occurring between breast cancer diagnosis and conception of the matched patient with a pregnancy. Patients with a pregnancy following a disease-free survival event were dropped from this analysis. Other matching factors included specific *BRCA* gene (*BRCA1* vs. *BRCA2*), hormone receptor status (positive vs. negative), nodal status (negative vs. positive), and year at diagnosis (± 2.5 years within the same category of the year). Because all included patients were diagnosed at age 40 years or younger, matching according to age was not performed. The matching was performed centrally with an automated system blinded to patients' outcomes. To avoid the potential exclusion of patients with missing value of one of the matching factors, single imputation assuming monotone missing pattern and using the logistic regression method was performed before matching only on matching factors: *BRCA* status (for patients with unknown data on the specific *BRCA* gene carrying a pathogenic variant), hormone receptor status and nodal status. *BRCA* status was missing in 10 (0.2%) patients, nodal status in 186 (3.9%) and hormone receptor status in 77 (1.6%).

In the secondary matched analysis, after excluding 43 patients with a pregnancy due to the development of a disease-free survival event before conceiving and 3 patients with a pregnancy that could not be matched, 2,452 were included of whom 613 had a pregnancy and 1,839 did not. As per matching criteria, no difference in year at breast cancer diagnosis, nodal status, hormone receptor status, and specific *BRCA* gene was observed between patients with a pregnancy and matched patients with no pregnancy (eTable 2). As compared to matched patients with no pregnancy, patients with a pregnancy were significantly younger at diagnosis, more likely to receive ovarian suppression as part of adjuvant endocrine therapy with its total duration being shorter (eTable 2).

As compared to matched patients with no pregnancy, patients with a pregnancy had significantly improved disease-free survival (HR 0.63; 95% CI 0.53-0.74; *P*<.001; eFigure 1 in the Supplement). In subgroup analyses, a significant interaction was observed between occurrence of pregnancy and both specific *BRCA* gene (*BRCA1*: adjusted HR 0.51; 95% CI 0.41-0.62; *BRCA2*: adjusted HR 1.07; 95% CI 0.79-1.45; *P*<.001 for interaction) and hormone receptor status (hormone receptor-positive: adjusted HR 0.81; 95% CI 0.60-1.09; hormone receptor-negative: adjusted HR 0.55; 95% CI 0.45-0.68; *P*=.04 for interaction, eTable 4 in the Supplement). Patients with a pregnancy had significantly improved breast cancer-specific survival (HR 0.43; 95% CI 0.30-0.63; *P*<.001; eFigure 2 in the Supplement) and overall survival (HR 0.43; 95% CI 0.30-0.61; *P*<.001; eFigure 3 in the Supplement). Subgroup analyses showed a significant interaction between occurrence of pregnancy and specific *BRCA* gene for both breast cancer-specific survival (*BRCA1*: adjusted HR 0.30; 95% CI 0.18-0.50; *BRCA2*: adjusted HR 0.83; 95% CI 0.47-1.46; *P*=.04 for interaction, eTable 5 in the Supplement) and overall survival (*BRCA1*: adjusted HR 0.29; 95% CI 0.18-0.48; *BRCA2*: adjusted HR 0.81; 95% CI 0.48-1.39; *P*=.02 for interaction, eTable 6 in the Supplement). No interaction between occurrence of pregnancy and interval since diagnosis, pregnancy outcome, or breastfeeding status on disease-free survival (eTable 7 in the Supplement), breast cancer-specific survival (eTable 8 in the Supplement) or overall survival (eTable 9 in the Supplement) was observed.

eTable 1. Pattern of invasive disease-free survival events.

	Patients with a pregnancy n=659	**Patients with no pregnancy n=4073**
Follow-up, median (IQR) years	9.6 (6.5-13.8)	7.4 (4.2-12.3)
DFS events/100*person-year	5.44	5.45
Type of DFS events		
Loco-regional recurrence events/100*person-year	1.22	1.20
Distant (±loco-regional) recurrence events/100*person-year	1.29	1.82
Second primary malignancy, except breast cancer events/100*person-year	0.37	0.63
Second primary breast cancer events/100*person-year	2.57	1.64
Death without any prior DFS event/100*person-year	0	0.15

One patient in the non-pregnant cohort had loco-regional recurrence and 2nd primary breast cancer at the same date.

Abbreviations: IQR, interquartile range; DFS, disease-free survival.

eTable 2. Patient characteristics at diagnosis of breast cancer among patients included in the secondary matched analysis.

	No. (%)		
	Overall cohort (n = 2452)	**Patients with a pregnancy (n = 613)[a]**	**Matched patients with no pregnancy (n=1839)**
Region			
Southern Europe	1117 (45.6)	281 (45.8)	836 (45.5)
Asia	412 (16.8)	122 (19.9)	290 (15.8)
Northern Europe	364 (14.9)	98 (16.0)	266 (14.5)
North America	266 (10.9)	59 (9.6)	207 (11.3)
Eastern Europe	127 (5.2)	20 (3.3)	107 (5.8)
Australia/Oceania	97 (4.0)	24 (3.9)	73 (4.0)
Latin/South America	69 (2.8)	9 (1.5)	60 (3.3)
Year at diagnosis of breast cancer			
2000-2004	368 (15.0)	92 (15.0)	276 (15.0)
2005-2008	512 (20.9)	128 (20.9)	384 (20.9)
2009-2012	640 (26.1)	160 (26.1)	480 (26.1)
2013-2016	608 (24.8)	152 (24.8)	456 (24.8)
2017-2020	324 (13.2)	81 (13.2)	243 (13.2)
Age at diagnosis of breast cancer, y			
≤ 30 years	591 (24.1)	308 (50.2)	283 (15.4)
31-35 years	922 (37.6)	242 (39.5)	680 (37.0)
36-40 years	939 (38.3)	63 (10.3)	876 (47.6)
Median (IQR)	34 (31-37)	30 (28-33)	35 (32-38)
Specific *BRCA* gene			
BRCA1	1804 (73.6)	451 (73.6)	1353 (73.6)
BRCA2	644 (26.3)	161 (26.3)	483 (26.3)
BRCA1 and *BRCA2*	4 (0.2)	1 (0.2)	3 (0.2)
Tumor characteristics			
Histology	n = 2352	n = 588	n = 1764
Ductal carcinoma	2045 (87.0)	523 (89.0)	1524 (86.4)
Lobular carcinoma	52 (2.2)	8 (1.4)	44 (2.5)
Mixed ductal/lobular	30 (1.3)	6 (1.0)	24 (1.4)
Invasive, not specified	80 (3.4)	23 (3.9)	57 (3.2)
Other[b]	143 (6.1)	28 (4.8)	115 (6.5)
Grade[c]	n = 2235	n = 564	n = 1671
G1	27 (1.2)	8 (1.4)	19 (1.1)
G2	421 (18.8)	114 (20.2)	307 (18.4)
G3	1787 (80.0)	442 (78.4)	1345 (80.5)
Size[d]	n = 2334	n = 586	n = 1748
T1 (≤ 2 cm)	971 (41.6)	258 (44.0)	713 (40.8)
T2 (>2 to ≤ 5 cm)	1079 (46.2)	256 (43.7)	823 (47.1)
T3 (> 5 cm) to T4	284 (12.2)	72 (12.3)	212 (12.1)
Nodal status[d]	n = 2356	n = 593	n = 1763
N0	1455 (61.8)	370 (62.4)	1085 (61.5)
N1	679 (28.8)	171 (28.8)	508 (28.8)
N2-N3	222 (9.4)	52 (8.8)	170 (9.6)
Hormone receptor status			
ER and/or PR positive	816 (33.3)	204 (33.3)	612 (33.3)
ER and PR negative	1636 (66.7)	409 (66.7)	1227 (66.7)
ERBB2 status	n = 2308	n = 581	n = 1727
Negative	2157 (93.5)	552 (95.0)	1605 (92.9)
Positive	151 (6.5)	29 (5.0)	122 (7.1)
Treatment			
Breast surgery	n = 2410	n = 602	n = 1808

None	5 (0.2)	1 (0.2)	4 (0.2)
Breast-conserving surgery	1110 (46.1)	291 (48.3)	819 (45.3)
Mastectomy	1295 (53.7)	310 (51.5)	985 (54.5)
Received chemotherapy	2259/2439 (92.6)	568/612 (92.8)	1691/1827 (92.6)
Type of chemotherapy[e]	n = 2181	n = 557	n = 1624
Anthracycline and taxane based	1512 (69.3)	394 (70.7)	1118 (68.8)
Anthracycline based	490 (22.5)	126 (22.6)	364 (22.4)
Taxane based	90 (4.1)	17 (3.1)	73 (4.5)
Others	89 (4.1)	20 (3.6)	69 (4.3)
Received endocrine therapy[f]	759/810 (93.7)	186/203 (91.6)	573/607 (94.4)
Type of endocrine therapy[g]	n = 753	n = 185	n = 568
Tamoxifen alone	289 (38.4)	61 (33.0)	228 (40.1)
Tamoxifen plus LHRH agonist	232 (30.8)	77 (41.6)	155 (27.3)
LHRH agonist alone	14 (1.9)	5 (2.7)	9 (1.6)
Aromatase inhibitor with or without LHRH agonist	88 (11.7)	21 (11.4)	67 (11.8)
Tamoxifen and aromatase inhibitor (with or without LHRH agonist)	121 (16.1)	17 (9.2)	104 (18.3)
Other	9 (1.2)	4 (2.2)	5 (0.9)
Duration of endocrine therapy, median (IQR) mo	60 (36-60)	48 (24-60)	60 (43-60)
Unknown, No.	174	38	136

Abbreviations: IQR, interquartile range; ER, estrogen receptor; PR, progesterone receptor; LHRH, luteinizing hormone-releasing hormone.

[a] Patients with a pregnancy included women with ≥1 pregnancy (irrespective of their outcome) any time following breast cancer diagnosis. Information on pregnancy after breast cancer was collected from the medical records based on patient self-report during follow-up clinic visits and/or by serial patient survey depending on the center.
[b] Other histology findings included medullary (n = 49), metaplastic (n = 17), mucinous (n = 8), papillary (n = 4), micropapillary (n = 4), pleomorphic variant (n = 3), squamous cell (n = 3), tubular carcinoma (n = 2), apocrine (n = 1), comedocarcinoma (n = 1), cribriform (n = 1), and unknown (n = 50).
[c] Histologic grade was based on the degree of tumor histologic differentiation.
[d] Tumor size and nodal status were assessed clinically for patients who received neoadjuvant systemic therapy and pathologically for those who received breast surgery as first treatment.
[e] Calculated among patients who received chemotherapy.
[f] Calculated among patients with hormone receptor-positive breast cancer.
[g] Calculated among patients with hormone receptor-positive breast cancer who received endocrine therapy.

eTable 3. Pregnancy, fetal, and obstetric outcomes in patients with a pregnancy after breast cancer included in the secondary matched analysis.

Outcomes	No. (%) (n = 613)
Age at pregnancy, median (IQR), y	34.6 (31.7-37.2)
Time from diagnosis to conception, median (IQR), y	3.4 (2.2-5.1)
Pregnancy interval	
≤ 2 years after diagnosis	128 (20.9)
Between >2 and ≤5 years after diagnosis	330 (53.8)
> 5 years after diagnosis	155 (25.3)
Type of conception	
Spontaneous pregnancy	434/540 (80.4)
Use of assisted reproductive technology	106/540 (19.6)
Embryo transfer after oocyte/embryo cryopreservation at diagnosis of breast cancer	44
Embryo transfer following oocyte donation	21
Ovarian stimulation for IVF/ICSI/ovulation induction after cancer treatment	33
Unknown type of assisted reproductive technology	8
Pregnancy outcome	n = 604
Delivered	486 (80.5)
Ongoing pregnancy	21 (3.5)
Miscarriage	54 (8.9)
Induced abortion	43 (7.1)
Number of live births from first pregnancy after breast cancer [a]	n = 486
1	435 (89.5)
2	51 (10.5)
Timing of delivery [a]	n = 420
At term (≥37 wk)	382 (90.9)
Preterm (<37 wk)	38 (9.1)
Complications[a]	n = 399
None	345 (86.5)
Pregnancy complications	25 (6.3)
Delivery complications	21 (5.3)
Congenital abnormalities[b,c]	3 (0.7)
Fetal complications[b,c]	3 (0.7)
Other complications[c]	2 (0.5)
Breastfeeding[a]	126/382 (33.0)
Duration, median (IQR), mo	4.5 (2-6)
Unknown, No.	47

Abbreviation: IQR, interquartile range, IVF, *in vitro* fertilization ICSI, intracytoplasmic sperm injection.

[a] Calculated from the total number of delivered pregnancies.
[b] Calculated from the total number of infants born to patients with known information on pregnancy complications (n = 445).
[c] Congenital abnormalities included: cardiac malformations (n = 2) and chromosome abnormality with karyotype 47,XXY (n = 1).
Fetal complications included: respiratory distress (n = 2), neonatal icterus treated with phototherapy (n = 1).
Other complications included maternal internal carotid artery aneurysm (n = 1) and kidney failure in the child due to hypoxia (n = 1).

eTable 4. Subgroup analyses of disease-free survival (patients with a pregnancy vs. patients with no pregnancy).

Extended Cox model analysis					
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value**	**Multivariate HR (95% CI)**	***P* value**
Study group	4732/1683	0.97 (0.82-1.15)	.74	0.99 (0.81-1.20)	.90
Specific *BRCA* gene			<.001[a]		.007[a]
BRCA1	3033/1101	0.79 (0.64-0.97)		0.80 (0.63-1.01)	
BRCA2	1663/569	1.61 (1.22-2.12)		1.55 (1.12-2.16)	
BRCA1 and *BRCA2*	26/11	1.82 (0.33-10.1)		4.49 (0.28-72.17)	
BRCA, unknown if 1 or 2 types	10/2	1.11 (0.05-23.2)		NE	
Hormone receptor status			.04[a]		.009[a]
Positive	2126/715	1.29 (0.98-1.70)		1.30 (0.95-1.76)	
Negative	2529/951	0.82 (0.67-1.01)		0.76 (0.60-0.95)	
Unknown	77/17	1.08 (0.25-4.74)		0.28 (0.04-2.21)	
ERBB2 status			.30[a]		.08[a]
Positive	339/111	0.66 (0.24-1.80)		0.61 (0.22-1.71)	
Negative	4151/1471	1.01 (0.85-1.21)		1.07 (0.87-1.31)	
Unknown	242/101	0.61 (0.30-1.26)		0.42 (0.17-1.02)	
Chemotherapy			.31[a]		.47[a]
No chemotherapy	381/138	1.06 (0.61-1.87)		0.77 (0.39-1.52)	
(Neo)adjuvant chemotherapy	4319/1534	0.97 (0.82-1.16)		1.00 (0.82-1.23)	
Unknown	32/11	NE		0.77 (0.39-1.52)	
Endocrine therapy			.02[a]		.01[a]
No endocrine therapy	2640/998	0.82 (0.67-1.01)		0.85 (0.67-1.08)	
Endocrine therapy	1987/659	1.35 (1.01-1.81)		1.55 (1.08-2.21)	
Unknown	105/26	0.77 (0.18-3.23)		0.13 (0.01-2.95)	
Secondary matched analysis					
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value**		
Study group	2452/838	0.63 (0.53-0.74)	<.001		
Specific *BRCA* gene			<.001[a]		
BRCA1	1804/623	0.51 (0.41-0.62)			
BRCA2	644/211	1.07 (0.79-1.45)			
BRCA1 and *BRCA2*	4/4	3.49 (0.36-33.67)			
Hormone receptor status			.04[a]		
Positive	816/254	0.81 (0.60-1.09)			
Negative	1636/584	0.55 (0.45-0.68)			
ERBB2 status			.41[a]		
Positive	151/44	0.47 (0.17-1.31)			
Negative	2157/736	0.65 (0.54-0.78)			
Unknown	144/58	0.40 (0.19-0.85)			
Chemotherapy			.59[a]		

No chemotherapy	180/59	0.82 (0.45-1.51)			
(Neo)adjuvant chemotherapy	2259/772	0.62 (0.52-0.74)			
Unknown	13/7	1.36 (0.08-23.68)			
Endocrine therapy			.15[a]		
No endocrine therapy	1687/598	0.56 (0.46-0.69)			
Endocrine therapy	759/239	0.81 (0.60-1.11)			
Unknown	6/1	NE			

[a] P value for interaction

Abbreviations: HR, hazard ratio; CI, confidence intervals; NE, not evaluable.

eTable 5. Subgroup analyses of breast cancer-specific survival (patients with a pregnancy vs. patients with no pregnancy).

Extended Cox model analysis					
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value**	**Multivariate HR (95% CI)**	***P* value**
Study group	4732/558	0.53 (0.37-0.74)	<.001	0.60 (0.40-0.88)	.009
Specific *BRCA* gene			.007[a]		.19[a]
BRCA1	3033/357	0.35 (0.21-0.56)		0.44 (0.26-0.73)	
BRCA2	1663/195	1.17 (0.71-1.93)		1.02 (0.57-1.81)	
BRCA1 and *BRCA2*	26/5	NE		NE	
BRCA, unknown if 1 or 2 types	10/1	NE		NE	
Hormone receptor status			.24[a]		.30[a]
Positive	2126/247	0.78 (0.46-1.35)		0.80 (0.44-1.45)	
Negative	2529/307	0.43 (0.27-0.67)		0.44 (0.28-0.71)	
Unknown	77/4	NE		NE	
ERBB2 status			.89[a]		.98[a]
Positive	339/40	0.74 (0.18-3.08)		0.52 (0.11-2.36)	
Negative	4151/487	0.52 (0.36-0.74)		0.60 (0.40-0.91)	
Unknown	242/31	0.51 (0.12-2.13)		0.59 (0.12-2.97)	
Chemotherapy			.89[a]		.36[a]
No chemotherapy	381/37	0.69 (0.21-2.26)		1.08 (0.30-3.91)	
(Neo)adjuvant chemotherapy	4319/518	0.51 (0.36-0.74)		0.57 (0.38-0.86)	
Unknown	32/3	NE		NE	
Endocrine therapy			.22[a]		.99[a]
No endocrine therapy	2640/320	0.43 (0.28-0.67)		0.59 (0.36-0.95)	
Endocrine therapy	1987/231	0.81 (0.46-1.43)		0.63 (0.33-1.20)	
Unknown	105/7	NE		NE	
Secondary matched analysis					
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value**		
Study group	2452/233	0.43 (0.30-0.63)	<.001		
Specific *BRCA* gene			.04[a]		
BRCA1	1804/165	0.30 (0.18-0.50)			
BRCA2	644/68	0.83 (0.47-1.46)			
BRCA1 and *BRCA2*	4/0	NE			
Hormone receptor status			.31[a]		
Positive	816/75	0.57 (0.31-1.05)			
Negative	1636/158	0.38 (0.23-0.61)			
ERBB2 status			.57[a]		
Positive	151/13	0.39 (0.05-3.03)			
Negative	2157/200	0.46 (0.31-0.69)			
Unknown	144/20	0.15 (0.02-1.14)			
Chemotherapy			.30[a]		

No chemotherapy	180/21	0.53 (0.17-1.66)			
(Neo)adjuvant chemotherapy	2259/210	0.44 (0.29-0.65)			
Unknown	13/2	NE			
Endocrine therapy			.34[a]		
No endocrine	1687/161	0.37 (0.23-0.60)			
Endocrine therapy	759/71	0.65 (0.35-1.20)			
Unknown	6/1	NE			

[a] P value for interaction

Abbreviations: HR, hazard ratio; CI, confidence intervals; NE, not evaluable.

eTable 6. Subgroup analyses of overall survival (patients with a pregnancy vs. patients with no pregnancy).

Extended Cox model analysis					
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value**	**Multivariate HR (95% CI)**	***P* value**
Study group	4732/609	0.52 (0.38-0.72)	<.001	0.58 (0.40-0.85)	.005
Specific *BRCA* gene			.004[a]		.13[a]
BRCA1	3033/386	0.35 (0.23-0.56)		0.42 (0.26-0.68)	
BRCA2	1663/217	1.16 (0.73-1.86)		1.00 (0.58-1.72)	
BRCA1 and *BRCA2*	26/5	0.66 (0.04-11.99)		NE	
BRCA, unknown if 1 or 2 types	10/1	1.45 (0.06-35.87)		NE	
Hormone receptor status			.16[a]		.24[a]
Positive	2126/270	0.81 (0.49-1.35)		0.78 (0.44-1.38)	
Negative	2529/334	0.43 (0.28-0.66)		0.43 (0.27-0.66)	
Unknown	77/5	0.53 (0.03-9.63)		NE	
ERBB2 status			.47[a]		.92[a]
Positive	339/43	1.04 (0.32-3.35)		0.73 (0.21-2.60)	
Negative	4151/527	0.51 (0.36-0.72)		0.56 (0.38-0.83)	
Unknown	242/39	0.39 (0.09-1.60)		0.62 (0.13-3.02)	
Chemotherapy			.97[a]		.49[a]
No chemotherapy	381/41	0.60 (0.19-1.95)		0.90 (0.25-3.24)	
(Neo)adjuvant chemotherapy	4319/563	0.52 (0.37-0.73)		0.56 (0.38-0.82)	
Unknown	32/5	NE		NE	
Endocrine therapy			.23[a]		.99[a]
No endocrine therapy	2640/350	0.45 (0.30-0.68)		0.57 (0.36-0.90)	
Endocrine therapy	1987/251	0.80 (0.47-1.37)		0.59 (0.31-1.13)	
Unknown	105/8	0.39 (0.02-6.86)		NE	
Secondary matched analysis					
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value**		
Study group	2452/258	0.43 (0.30-0.61)	<.001		
Specific *BRCA* gene			.02[a]		
BRCA1	1804/180	0.29 (0.18-0.48)			
BRCA2	644/78	0.81 (0.48-1.39)			
BRCA1 and *BRCA2*	4/0	NE			
Hormone receptor status			.29[a]		
Positive	816/82	0.56 (0.31-1.01)			
Negative	1636/176	0.37 (0.24-0.59)			
ERBB2 status			.51[a]		
Positive	151/13	0.40 (0.05-3.07)			
Negative	2157/223	0.46 (0.31-0.66)			
Unknown	144/22	0.14 (0.02-1.02)			
Chemotherapy			.47[a]		

No chemotherapy	180/23	0.47 (0.15-1.47)			
(Neo)adjuvant chemotherapy	2259/231	0.44 (0.30-0.64)			
Unknown	13/4	2.83 (0.15-54.14)			
Endocrine therapy			.49[a]		
No endocrine therapy	1687/180	0.38 (0.25-0.60)			
Endocrine therapy	759/77	0.59 (0.32-1.08)			
Unknown	6/1	NE			

[a] P value for interaction

Abbreviations: HR, hazard ratio; CI, confidence intervals; NE, not evaluable.

eTable 7. Impact of the interval between diagnosis and pregnancy, outcome of pregnancy, and breastfeeding status on disease-free survival (patients with a pregnancy vs. patients with no pregnancy).

Secondary matched analysis			
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value[a]**
Pregnancy interval			.24
≤ 2 years	512/216	0.52 (0.37-0.73)	
> 2 years	1940/622	0.66 (0.54-0.80)	
Pregnancy outcome			.25
Abortion/miscarriage	388/145	0.49 (0.32-0.76)	
Completed pregnancy	1944/667	0.65 (0.54-0.79)	
Breastfeeding			.15
Not applicable (pregnancy not completed/ongoing)/unknown	804/289	0.68 (0.51-0.91)	
Breastfed	504/209	0.76 (0.55-1.05)	
No breastfeeding	1024/314	0.50 (0.37-0.67)	

Abbreviations: HR, hazard ratio; CI, confidence intervals.

[a] P value for interaction

eTable 8. Impact of the interval between diagnosis and pregnancy, outcome of pregnancy, and breastfeeding status on breast cancer-specific survival (patients with a pregnancy vs. patients with no pregnancy).

Secondary matched analysis			
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value[a]**
Pregnancy interval			.32
≤ 2 years	512/95	0.34 (0.18-0.63)	
> 2 years	1940/138	0.50 (0.31-0.80)	
Pregnancy outcome			.95
Abortion/miscarriage	388/61	0.45 (0.22-0.93)	
Completed pregnancy	1944/165	0.44 (0.28-0.68)	
Breastfeeding			.63
Not applicable (pregnancy not completed/ongoing)/unknown	804/91	0.54 (0.30-0.94)	
Breastfed	504/58	0.45 (0.22-0.93)	
No breastfeeding	1024/77	0.34 (0.17-0.70)	

Abbreviations: HR, hazard ratio; CI, confidence intervals.

[a] P value for interaction

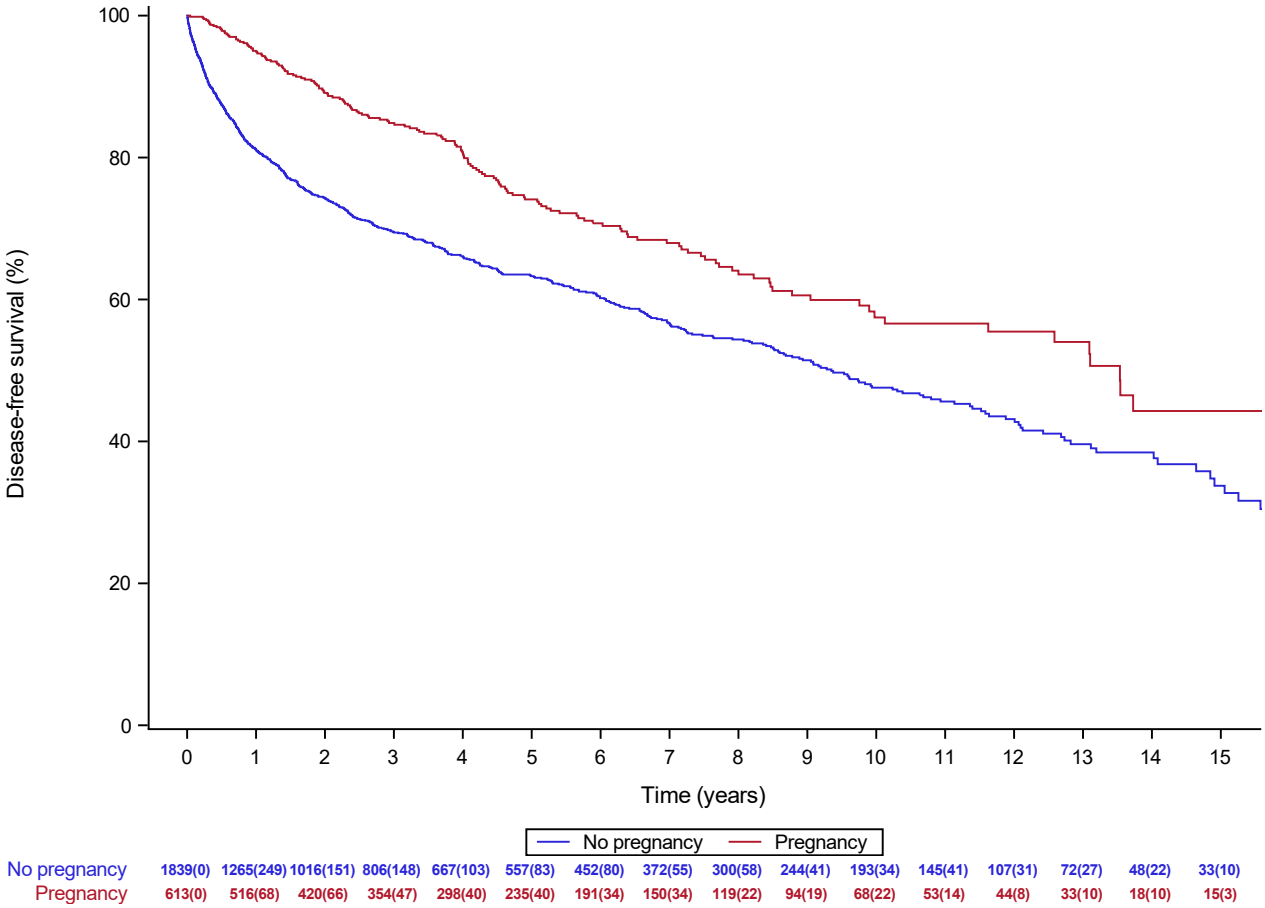
eTable 9. Impact of the interval between diagnosis and pregnancy, outcome of pregnancy, and breastfeeding status on overall survival (patients with a pregnancy vs. patients with no pregnancy).

Secondary matched analysis			
Variables	**No. of patients/No. of events**	**Univariate HR (95% CI)**	***P* value[a]**
Pregnancy interval			.43
≤ 2 years	512/99	0.35 (0.19-0.64)	
> 2 years	1940/159	0.47 (0.30-0.74)	
Pregnancy outcome			.91
Abortion/miscarriage	388/65	0.42 (0.20-0.86)	
Completed pregnancy	1944/186	0.44 (0.29-0.67)	
Breastfeeding			.63
Not applicable (pregnancy not completed/ongoing)/unknown	804/98	0.49 (0.28-0.86)	
Breastfed	504/65	0.50 (0.26-0.98)	
No breastfeeding	1024/88	0.33 (0.17-0.66)	

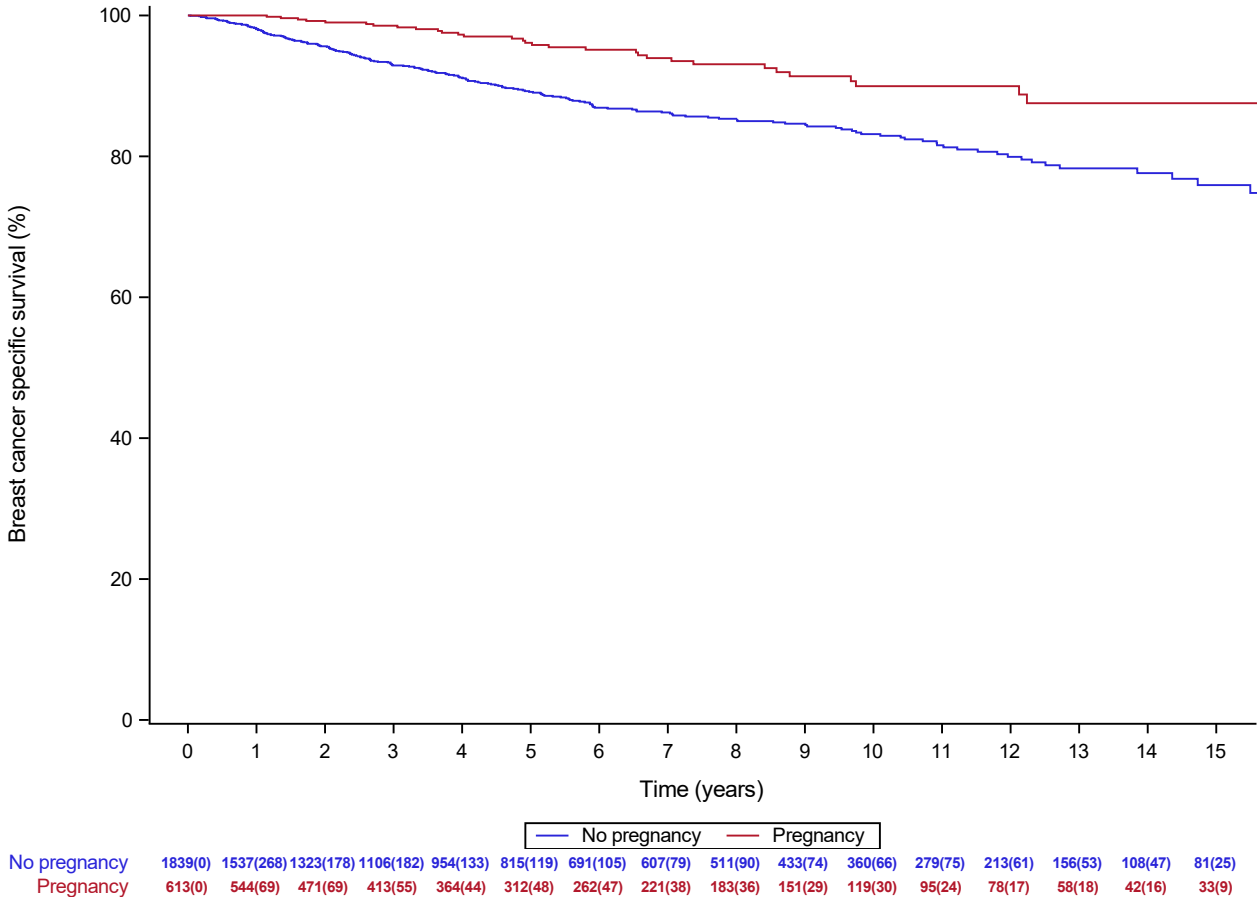
Abbreviations: HR, hazard ratio; CI, confidence intervals.

[a] P value for interaction

eFigure1. Prognostic impact of pregnancy after breast cancer in young *BRCA* carriers in the secondary matched analysis: disease-free survival.



eFigure2. Prognostic impact of pregnancy after breast cancer in young *BRCA* carriers in the secondary matched analysis: breast cancer-specific survival.



eFigure3. Prognostic impact of pregnancy after breast cancer in young *BRCA* carriers in the secondary matched analysis: overall survival.