

Table S1: Multivariate Logistic Model for Patients Undergoing Endocrine Treatment Without Ovarian Ablation (Group 1 and Group 2: $n=2224$) versus With Ovarian Ablation (Group 3 and Group 4: $n=516$).

Variables	Levels	OR	95% CI Lower Bounds	95% CI Upper Bounds	<i>p</i>-value
Age at Diagnosis	as 1 yr increase	0.988	0.971	1.006	0.181
Year of Diagnosis	2011 vs 2010	0.979	0.677	1.416	0.037
	2012 vs 2010	1.128	0.780	1.631	
	2013 vs 2010	1.081	0.761	1.538	
	2014 vs 2010	1.577	1.109	2.242	
Histology	Lobular no ductal vs Ductal no lobular	1.409	0.902	2.201	0.085
	Lobular and ductal vs Ductal no lobular	0.955	0.625	1.46	
	Inflammatory vs Ductal no lobular	0.646	0.162	2.571	
	Other vs Ductal no lobular	0.253	0.078	0.823	
	Grade (219 unk.)	G2 vs G1	1.917	1.053	
	G3 vs G1	2.037	1.136	3.652	
LN Pos Exact (3 unk.)	Yes vs. No	1.178	0.799	1.739	0.408
Stage (210 unk.)	II vs. I	1.226	0.846	1.778	<0.001
	III vs. I	2.259	1.372	3.72	
Chemotherapy	Yes vs. No	0.969	0.726	1.292	0.829
HER-2 Targeted	Trastuzumab vs. None	0.797	0.551	1.152	0.004
	Trastuzumab+Other vs. None	2.382	1.342	4.231	

All the variables which had univariate p -value significant ($p < 0.05$) were entered into this multivariate model. The Odds Ratio (OR) is modeled for ovarian suppression (OS) = yes. $OR > 1$ means more likely to get OS; $OR < 1$ less likely to get OS; unk., unknown: number of patients in analysis who did not have documentation for this variable. All the unk. were excluded from this model building. The actual number in each group was $N=426$ vs. $N=1893$. LN, lymph node

Table S2: Timing of Endocrine Therapy: Medical Ovarian Suppression and Bilateral Salpingo-oophorectomy Among the Three Endocrine Treatment Groups

	Group 2 Endocrine Treatment without OS (n=2018)	Group 3 Endocrine Treatment with medical OS (n=282)	Group 4 Endocrine Treatment with BSO (n=234)
Months from Diagnosis to Start Endocrine treatment (without OS or BSO)			
Median (Mean)		6.7(6.7)	
Range		0.2-42.3	
IQR		4.3-8.6	
Median (Mean)	6.8(6.8)	6.3(6.5)	6.6(6.4)
Range	0.2-42.3	0.5-33.6	0.6-18.3
IQR	4.4-8.7	3.7-8.3	3.8-8.4
Missing start date	107	26	19
Patients treated with <u>both</u> , endocrine treatment* and OS or BSO	0 (0%)	256	208
Months from Diagnosis to any type of OS			
Median (Mean)	-	12.4(19.7)	
Range	-	0.76 - 94.0	
IQR	-	6.4-28.4	
Months from Diagnosis to BSO			
Median (Mean)	-		22.9(27.2)
Range	-		0.9-90.3
IQR	-		13.5-37.7
Endocrine treatment* before medical (group 3) or BSO (group 4)	-	135(88.8%)	193(92.8%)
Endocrine treatment* started with medical OS or BSO	-	119(80.4%)	4(1.9%)
Medical OS or BSO started before endocrine treatment*	-	2(66.7%)	11(5.3%)
Months from Start of Endocrine treatment* to start of medical OS or BSO			
N	-	135	193
Median (Mean)	-	13.6(19.8)	18.3(23.4)
Range	-	0-89.8	0.9-88.2
IQR	-	4-34	9.4-34.7

* in this context “endocrine treatment” refers to treatment with either tamoxifen or aromatase inhibitor. OS, ovarian suppression; BSO, bilateral salpingo-oophorectomy; IQR, interquartile range