

Supplementary Table 1. Distribution of women according to primary therapy received

	Number of subjects (%)	
	Goserelin N=1354	No Goserelin N=1356
Surgery		
Local excision	675 (50)	696 (51)
Mastectomy	663 (49)	651 (48)
Unknown	16 (1)	9 (1)
Radiotherapy		
Yes	817 (60)	870 (64)
No	507 (38)	462 (34)
Unknown	30 (2)	24 (2)
Chemotherapy		
Yes	583 (43)	590 (44)
No	766 (56)	761 (56)
Unknown	5 (<1)	5 (<1)

Supplementary Table 2. Number of deaths and first events in women allocated to receive goserelin or not

	Number of subjects (%)	
	Goserelin N=1351	No Goserelin N=1355
All deaths (reported cause)	316 (23.4)	374 (27.6)
Due to breast cancer	239 (17.7)	281 (20.7)
Not due to breast cancer, but breast cancer was present	4 (0.3)	9 (0.7)
Not due to breast cancer, but breast cancer not present	25 (1.8)	22 (1.6)
Unknown*	48 (3.6)	62 (4.6)
All first events	536 (39.7)	612 (45.2)
Death†	23 (1.7)	32 (2.4)
Local recurrence	161 (11.9)	204 (15.0)
Distant recurrence	247 (18.3)	273 (20.1)
Recurrence (unknown site)	0	1 (<0.1)
New tumour#	105 (7.8)	102 (7.5)

* in the statistical analysis these deaths were assumed to be due to breast cancer † includes 5 women who died from breast cancer but with no previous recorded date of recurrence (in the statistical analysis they were assumed to have had a distant recurrence just before dying)

there were 50 women who had a new tumour before a recurrence

Supplementary Table 3. Hazard ratios (Goserelin vs ‘No Goserelin’) for event-free survival, overall survival, recurrence and breast cancer mortality according to trial group.

	Number randomised	Event-free survival		Overall survival		Breast cancer recurrence		Breast cancer mortality	
		No. events	Hazard ratio HR (95% confidence interval CI)	No. events	HR (95% CI)	No. events	HR (95% CI)	No. events	HR (95% CI)
CRUK	1191	497	0.78 (0.65-0.93)	282	0.79 (0.62-1.00)	413	0.79 (0.65-0.96)	261	0.78 (0.61-1.00)
GIVIO	382	133	1.01 (0.72-1.43)	94	1.10 (0.73-1.65)	103	1.18 (0.80-1.74)	81	1.09 (0.71-1.69)
SE Sweden	208	101	0.78 (0.52-1.15)	74	0.68 (0.43-1.09)	89	0.83 (0.54-1.26)	68	0.75 (0.46-1.21)
Stockholm	925	417	0.83 (0.68-1.00)	240	0.83 (0.64-1.06)	336	0.74 (0.60-0.92)	220	0.80 (0.61-1.04)
All	2706	1148	0.82 (0.73-0.92) P=0.001	690	0.83 (0.71-0.96) P=0.013	941	0.81 (0.71-0.92) P=0.001	630	0.82 (0.70-0.96) P=0.003

N: number of events

There was no evidence of heterogeneity between the trial group estimates of hazard ratio: event-free survival (p=0.77), overall survival (p=0.61), breast cancer recurrence (p=0.36), breast cancer mortality (p=0.73).

Supplementary Table 4. Hazard ratios for event free survival associated with Goserelin and four pre-specified factors, according to whether women took tamoxifen or not

Factor	Women who did not take tamoxifen N=945		Women who took tamoxifen N=1761	
	Hazard ratio (95% confidence interval) Goserelin vs No Goserelin	p-value for the interaction between the factor and Goserelin	Hazard ratio (95% confidence interval) Goserelin vs No Goserelin	p-value for the interaction between the factor and Goserelin
Age ²				
< 40 years	0.89 (0.58-1.35)	0.25	0.86 (0.66-1.13)	0.54
≥ 40	0.65 (0.52-0.80)		0.95 (0.80-1.14)	
Nodal status*				
Negative	0.58 (0.44-0.78)	0.08	0.82 (0.66-1.02)	0.17
Positive	0.84 (0.64-1.10)		1.01 (0.82-1.24)	
ER status				
Negative	0.75 (0.51-1.10)	0.95	1.05 (0.79-1.39)	0.61
Positive	0.69 (0.53-0.91)		0.85 (0.70-1.05)	
Unknown	0.66 (0.44-0.98)		0.92 (0.67-1.26)	
Prior chemotherapy				
No	0.55 (0.42-0.73)	0.045	0.87 (0.71-1.06)	0.36
Yes	0.83 (0.64-1.09)		1.00 (0.80-1.24)	
ER positive women Prior chemotherapy				

No	0.62 (0.43-0.90)	0.41	0.79 (0.60-1.03)	0.37
Yes	0.78 (0.53-1.15)		0.94 (0.69-1.28)	

* negative (no nodes affected); positive (≥ 1 node affected)

Supplementary Table 5. Hazard ratios for event free survival associated with Goserelin, according to nodal status, prior chemotherapy and whether women took tamoxifen or not

Nodal status	Prior chemotherapy	Women who did not take tamoxifen		Women who took tamoxifen	
		No. of women	Hazard ratio (95% confidence interval)	No. of women	Hazard ratio (95% confidence interval)
Negative	No	416	0.60 (0.44-0.81)	831	0.86 (0.68-1.09)
Negative	Yes	48	0.55 (0.17-1.80)	133	0.69 (0.36-1.30)
Positive	No	36	0.39 (0.14-1.09)	155	0.78 (0.51-1.20)
Positive	Yes	403	0.91 (0.69-1.21)	531	1.08 (0.85-1.37)