

Supplementary Table S1**Patient characteristics by ER status in the Uppsala cohort (n= 249, missing: 4)**

Characteristic	ER positive n (%)	ER negative n (%)
	215 (86)	34 (14)
PR		
Positive	203 (94)	23 (68)
Negative	12 (6)	11 (32)
Mean age	62	62
Tumour size		
<20 mm	100 (47)	11 (36)
≥20 mm	115 (53)	23 (64)
Elston grade		
I	63 (30)	2 (6)
II	116 (54)	11 (32)
III	34 (16)	21 (62)
Missing cases: 2		
Nodal status		
Negative	137 (66)	20 (62)
Positive	72 (34)	12 (38)
Missing cases: 8		
Systemic adjuvant therapy*		
None	120 (56)	21 (62)
Endocrine	69 (32)	10 (29)
Chemotherapy	21 (10)	3 (9)
Both	4 (2)	0 (0)
Missing cases: 6		
Ki67		
<10%	96 (49)	6 (18)
≥10%	100 (51)	27 (82)
Missing cases: 20		
PAM50 subtype		
Basal	20 (9)	16 (47)
<i>ERBB2</i>	26 (12)	15 (44)
Luminal A	75 (35)	2 (6)
Luminal B	52 (24)	0 (0)
Normal-like	42 (20)	1 (3)

*Endocrine or Chemotherapy refers to each treatment alone or in combination with radiotherapy.