

Table S1: Indications for consideration of neoadjuvant systemic therapy:

Inoperable breast cancer:
<ul style="list-style-type: none">• Inflammatory breast cancer• Locally advanced breast cancer<ul style="list-style-type: none">◦ N2, N3, T4◦ Fixed to chest wall or skin◦ Edema, Peau d'orange or ulceration
Operable breast cancer:
<ul style="list-style-type: none">• Convert mastectomy to breast conservation surgery• Allow less extensive surgery of the breast or axilla (Sentinel lymph node biopsy vs complete axillary dissection)• Allow for less extensive radiation fields• Allow time for genetic testing and planning• Assess efficacy of treatment, prognosis (TN and HER2 positive) and tailor post-operative therapy• Surgery needs to be delayed (pregnancy, recent extensive thrombosis, COVID-19)
For operable patients, consider based on the following tumor features:
<ul style="list-style-type: none">• Clinical T2 or greater with any N• Clinical T1N1• All TN and HER2 positive except for T1a or T1b• Carefully consider in ER positive patients
Caveats when considering neoadjuvant systemic therapy in operable patients:
<ul style="list-style-type: none">• May still need mastectomy if large span of ductal carcinoma in-situ• Caution if difficult to estimate extent of invasive disease• Possibility of disease progression during systemic therapy (<5%)• Risk of overtreatment• ER positive may not need chemotherapy (Oncotype Dx testing)• HER2 positive may be able to receive less intense regimen for e.g., T1N0 may receive weekly paclitaxel and trastuzumab

Table S2: Management after neoadjuvant chemotherapy

Characteristics	Overall	ER+ HER2+	ER+ HER2-	ER- HER2+	ER- HER2-
N (%)	94(100.0)	18 (19.1)	26 (27.7)	10 (10.6)	40 (42.6)
Downstaging of tumor – Yes	85 (91.4)	16 (88.9)	23 (92.0)	10 (100.0)	36 (90.0)
Downstaging of axilla – Yes	31 (33.0)	6 (33.3)	4 (15.4)	7 (70.0)	14 (35.0)
Surgery <ul style="list-style-type: none"> • Lumpectomy • Mastectomy • Bilateral Mastectomy 	53 (57.6) 39 (41.9) 22 (23.7)	8 (44.4) 10 (55.6) 6 (33.3)	14 (56.0) 11 (44.0) 6 (24.0)	5 (50.0) 5 (50.0) 2 (20.0)	27 (67.5) 13 (32.5) 8 (20.0)
Axillary Management					
Sentinel Lymph Node Biopsy	59 (100)	9 (15.3)	10 (17.0)	9 (15.3)	31 (52.5)
Complete Axillary Node Dissection	34 (100)	9 (26.5)	15 (44.1)	1 (2.9)	9 (26.5)
Adjuvant Radiation <ul style="list-style-type: none"> • Yes 	79 (84.0)	14 (77.8)	24 (92.3)	8 (80.0)	33 (82.5)
Areas of Radiation therapy					
Chest Wall	27 (28.7)	7 (38.9)	10 (38.5)	3 (30.0)	7 (17.5)
Breast	50 (53.2)	6 (33.3)	14 (53.8)	5 (50.0)	25 (62.5)
Internal Mammary	33 (35.1)	6 (33.3)	14 (53.8)	5 (50.0)	8 (20.0)
Supraclavicular	47 (49.5)	10 (55.6)	17 (65.4)	5 (50.0)	15 (37.5)
Axilla	46 (49.5)	10 (55.6)	16 (61.5)	6 (60.0)	14 (35.0)
Dosage of Radiation <ul style="list-style-type: none"> • Standard fractionation • Hypofractionation 	42 (54.5) 33 (42.9)	7 (50.0) 7 (50.0)	16 (69.6) 6 (26.1)	6 (75.0) 2 (25.0)	13 (40.6) 18 (56.3)
Adjuvant systemic therapy <ul style="list-style-type: none"> • Chemotherapy • Hormone therapy • HER2 directed therapy 	66 (71.0) 16 (17.0) 39 (41.5) 29 (30.9)	18 (100.0) 2 (11.1) 14 (77.8) 18 (100.0)	24 (96.0) 2 (7.7) 24 (92.3) 1 (3.8)	9 (90.0) 0 (0.0) 1 (10.0) 9 (90.0)	15 (37.5) 12 (30.0) 0 (0.0) 1 (2.5)

Abbreviations: ER: Estrogen receptor, HER2: Human Epidermal Growth Factor Receptor 2