Network radiotherapy treatment protocol for Breast

SECTION 1: Treatment aims and regimes	
Radical/adjuvant/palliative radiotherapy to the breast and chest wall	
Radiotherapy	
Intent and indications	Regime, technique and RCR
C50-BR-40.05(I)15 Breast **C50-CW-40.05(I)15 Chest wall** *Radical/adjuvant radiotherapy*	• 40.05 Gy in 15 fractions, daily over 19-21 days • NCCC - Isocentric field or conformal • JCUH - Dynamic MLC • Prescribed to median dose (D50%) PTV • RCR2, two missed fractions
C50-BR-26(I)5 Breast **C50-CW-26(I)5 Chest wall** *Radical/adjuvant radiotherapy*	• 26 Gy in 5 fractions, daily over 5-7 days • NCCC - Isocentric field or conformal • JCUH - Dynamic MLC • Prescribed to median dose (D50%) PTV • RCR2, two missed fractions
C50-BRSC-40.05(I)15 Breast + Nodes **C50-CWSC-40.05(I)15 Chest wall + Nodes** *Radical/adjuvant radiotherapy* ++	• 40.05 Gy in 15 fractions, daily over 19-21 days • NCCC - Isocentric field or conformal • JCUH - Dynamic MLC • Prescribed to median dose (D50%) PTV • RCR2, two missed fractions
C50-BRSCIMC-40.05(I)15 Breast + Nodes including IMC **C50-CWSCIMC-40.05(I)15 Chest wall + Nodes including IMC** *Radical/adjuvant radiotherapy*	• 40.05 Gy in 15 fractions, daily over 19-21 days • NCCC - Isocentric field or conformal • JCUH - VMAT • Prescribed to median dose (D50%) PTV • RCR2, two missed fractions
C50-BRSC-26(I)5 Breast + Nodes excluding IMC **C50-CWSC-26(I)5 Chest wall + Nodes excluding IMC** *Radical/adjuvant radiotherapy* *at CCO discretion	• 26 Gy in 5 fractions, daily over 5-7 days • NCCC - Isocentric field or conformal • JCUH - Dynamic MLC • Prescribed to median dose (D50%) PTV • RCR2, two missed fractions
Tumour bed boost *With radical/adjuvant radiotherapy* • All patients under the age of 40 years • Consider for patients <50 years. May reasonably be omitted in G1-2, ER+, Her2- tumours. • Consider age of 50-60 with higher risk features, especially grade 3 and/or extensive intraduct component, involved margins not amenable to further surgery. • Consider >60 years with involved margins not amenable to further surgery.	• Following 40Gy in 15#; Boost 13.35 Gy in 5 fractions, daily over 5-7 days • JCUH only - Following 26Gy in 5#; Boost 10 Gy in 5 fractions, daily over 5-7 days • Where max skin to pectoralis distance at level of boost < 4cm consider electron boost • NCCC Where distance > 5cm consider VMAT photon boost • Depths between 4-5 cm at clinician discretion • DIBH patients for photon boost irrespective of depth • Electron boost prescribed to Dmax. • Photon boost prescribed to D50% of PTV_Boost • RCR2, two missed fractions

C50-PARTIALBR-26(I)5 Partial breast *Radical/adjuvant radiotherapy* • >50 years • Unifocal disease <= 3cm (excluding classical lobular) • Nodes 0 • Grade 1/2 • Margins 1mm • No NACT but primary hormones permitted	• 26 Gy in 5 fractions, daily over 5-7 days • Isocentric field or conformal • Prescribed to median dose (D50%) PTV • NCCC only - Consider DIBH if Left sided Lower inner quadrant • JCUH only - Consider DIBH if Left sided JCUH • RCR2, two missed fractions
C50-32(I)4 Breast (NCCC only) *Palliative radiotherapy* Palliative whole breast for frail patients	• 32 Gy in 4 fractions weekly • Isocentric field or conformal • Prescribed to median dose (D50%) PTV • RCR3, two missed fractions
C50-26(I)5 Breast *Palliative radiotherapy* Palliative whole breast. Also consider for whole breast and nodal patients with significant co-morbidities	• 26 Gy in 5 fractions, daily over 5-7 days • Isocentric field or conformal • Prescribed to median dose (D50%) PTV • RCR3, two missed fractions
Chemotherapy	
Adjuvant Chemotherapy and Adjuvant Radiotherapy Scheduling • Defer radiotherapy a minimum 3 weeks post chemotherapy with anthracycline/taxanes • Trastuzumab/pertuzumab may be given concurrently with radiotherapy. • Kadcyla may be given concurrently with 15 fraction regime but **NOT** 5 fraction (Fast Forward) regime. Capecitabine may NOT be given concurrently with radiotherapy • It is the shared responsibility of the clinical oncologist and the clinician prescribing the chemotherapy to ensure treatment are correctly scheduled.	