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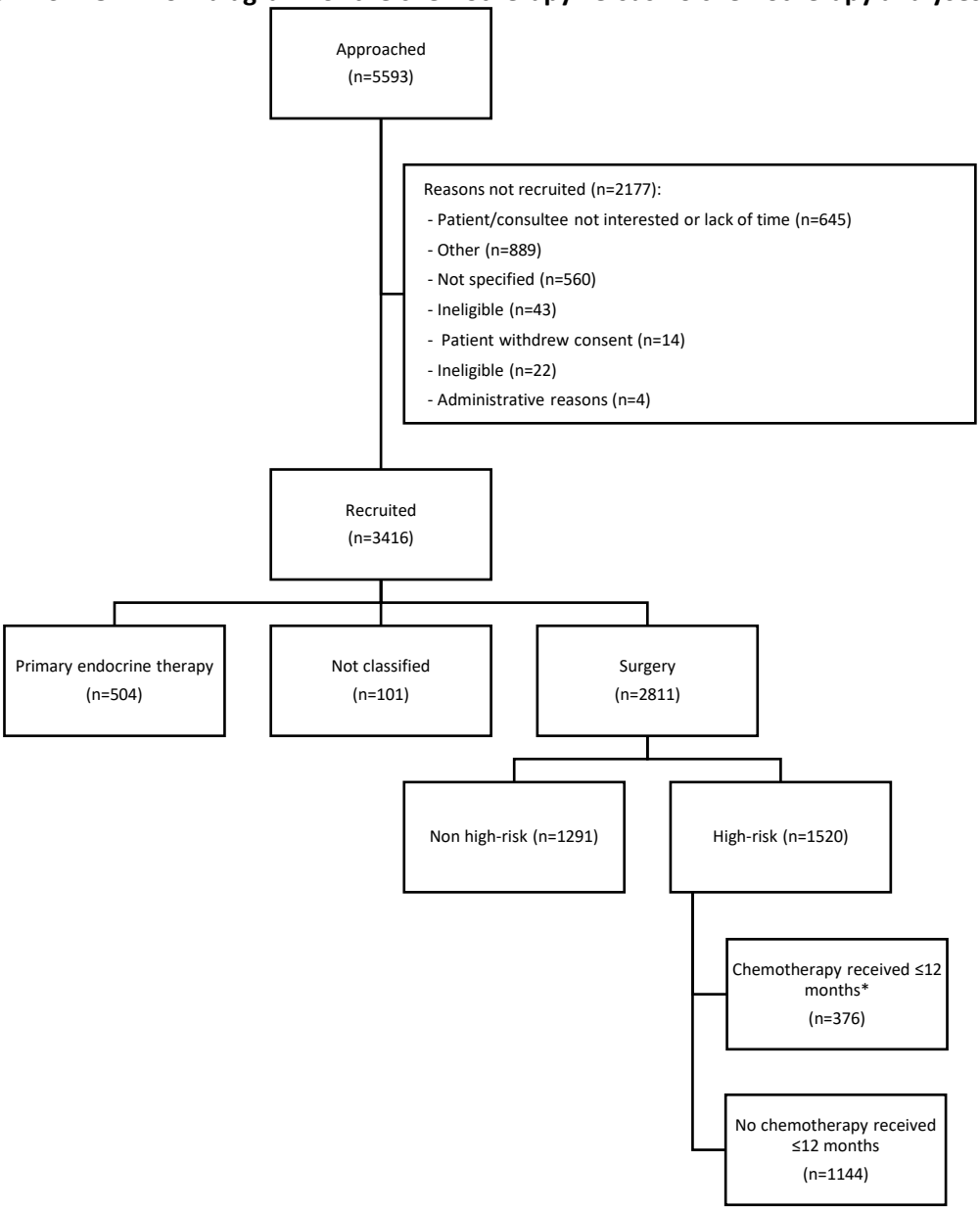
Figure 1 - STROBE flow diagram for the chemotherapy versus no chemotherapy analyses.



* Patients who only received palliative chemotherapy regimens where not counted as having received chemotherapy.

Table 1 – Baseline postoperative tumour and patient characteristics by receipt of chemotherapy.

		Chemotherapy N = 376	No Chemotherapy N = 1144	Total N = 1520
Participation level	Full	304 (80.9%)	816 (71.3%)	1120 (73.7%)
	Partial	68 (18.1%)	284 (24.8%)	352 (23.2%)
	Consultee	4 (1.1%)	44 (3.8%)	48 (3.2%)
Main side	Right	169 (44.9%)	545 (47.6%)	714 (47.0%)
	Left	207 (55.1%)	599 (52.4%)	806 (53.0%)
Tumour size (mm)	n	375	1143	1518
	Mean (SD)	32.9 (20.7)	29.0 (17.5)	29.9 (18.4)
	Median (IQR)	29.0 (21.0, 40.0)	25.0 (18.0, 35.0)	25.0 (18.2, 36.0)
	Min, Max	0, 210	0, 155	0, 210
Tumour size (mm)	<= 20	93 (24.7%)	399 (34.9%)	492 (32.4%)
	21-50	233 (62.0%)	644 (56.3%)	877 (57.7%)
	> 50	49 (13.0%)	100 (8.7%)	149 (9.8%)
	Unknown	1 (0.3%)	1 (0.1%)	2 (0.1%)
Grade	Grade 1	2 (0.5%)	77 (6.7%)	79 (5.2%)
	Grade 2	122 (32.4%)	447 (39.1%)	569 (37.4%)
	Grade 3	247 (65.7%)	617 (53.9%)	864 (56.8%)
	Unknown	5 (1.3%)	3 (0.3%)	8 (0.5%)
Histology	Ductal NST	270 (71.8%)	813 (71.1%)	1083 (71.2%)
	Lobular carcinoma	52 (13.8%)	110 (9.6%)	162 (10.7%)
	Tubular carcinoma	0 (0.0%)	5 (0.4%)	5 (0.3%)
	Mucinous carcinoma	1 (0.3%)	13 (1.1%)	14 (0.9%)
	Other	29 (7.7%)	97 (8.5%)	126 (8.3%)
	Unknown	24 (6.4%)	106 (9.3%)	130 (8.6%)
ER positive?	No	132 (35.1%)	240 (21.0%)	372 (24.5%)

		Chemotherapy N = 376	No Chemotherapy N = 1144	Total N = 1520
	Yes	241 (64.1%)	893 (78.1%)	1134 (74.6%)
	Unknown	3 (0.8%)	11 (1.0%)	14 (0.9%)
HER2 status	Negative	210 (55.9%)	908 (79.4%)	1118 (73.6%)
	Inconclusive	3 (0.8%)	7 (0.6%)	10 (0.7%)
	Positive	159 (42.3%)	173 (15.1%)	332 (21.8%)
	Unknown	4 (1.1%)	56 (4.9%)	60 (3.9%)
Oncotype Dx test performed	No	35 (9.3%)	150 (13.1%)	185 (12.2%)
	Yes	5 (1.3%)	16 (1.4%)	21 (1.4%)
	Not Applicable	252 (67.0%)	434 (37.9%)	686 (45.1%)
	Unknown	84 (22.3%)	544 (47.6%)	628 (41.3%)
Breast surgery	Wide local excision (non wire localised)	113 (30.1%)	412 (36.0%)	525 (34.5%)
	Wire localised wide local excision	43 (11.4%)	150 (13.1%)	193 (12.7%)
	Therapeutic mammoplasty / breast reshaping after WLE	18 (4.8%)	14 (1.2%)	32 (2.1%)
	Mastectomy	186 (49.5%)	549 (48.0%)	735 (48.4%)
	Mastectomy and reconstruction	12 (3.2%)	11 (1.0%)	23 (1.5%)
	Other	4 (1.1%)	8 (0.7%)	12 (0.8%)
Axillary surgery	Axillary sample	11 (2.9%)	38 (3.3%)	49 (3.2%)
	Axillary clearance	136 (36.2%)	247 (21.6%)	383 (25.2%)
	Sentinel lymph node biopsy	200 (53.2%)	725 (63.4%)	925 (60.9%)
	Internal mammary node biopsy	0 (0.0%)	1 (0.1%)	1 (0.1%)
	No axillary surgery	7 (1.9%)	27 (2.4%)	34 (2.2%)
	Unknown	22 (5.9%)	106 (9.3%)	128 (8.4%)
Nodal status	pN0-1mi	175 (46.5%)	508 (44.4%)	683 (44.9%)
	pN1	117 (31.1%)	494 (43.2%)	611 (40.2%)

		Chemotherapy N = 376	No Chemotherapy N = 1144	Total N = 1520
	pN2	52 (13.8%)	95 (8.3%)	147 (9.7%)
	pN3	32 (8.5%)	46 (4.0%)	78 (5.1%)
	pNx	0 (0.0%)	1 (0.1%)	1 (0.1%)
Nottingham Prognostic Index	n	371	1139	1510
	Mean (SD)	5.1 (1.0)	4.7 (0.9)	4.8 (1.0)
	Median (IQR)	4.9 (4.4, 5.7)	4.5 (4.3, 5.3)	4.6 (4.3, 5.4)
	Min, Max	2.4, 10.2	2.1, 8.1	2.1, 10.2
Age	n	376	1144	1520
	Mean (SD)	73.65 (3.33)	77.97 (5.19)	76.90 (5.14)
	Median (IQR)	73.00 (71.00, 76.00)	78.00 (74.00, 81.00)	76.00 (72.00, 80.00)
	Min, Max	69, 87	69, 95	69, 95
Charlson comorbidity index (no age)	n	365	1103	1468
	Mean (SD)	0.79 (1.08)	1.11 (1.38)	1.03 (1.32)
	Median (IQR)	0.00 (0.00, 2.00)	1.00 (0.00, 2.00)	1.00 (0.00, 2.00)
	Min, Max	0, 6	0, 9	0, 9
Charlson calculated probability	n	365	1103	1468
	Mean (SD)	0.56 (0.26)	0.43 (0.29)	0.46 (0.29)
	Median (IQR)	0.77 (0.21, 0.77)	0.53 (0.21, 0.77)	0.53 (0.21, 0.77)
	Min, Max	0, 0.77	0, 0.77	0, 0.77
Number of concurrent medications	n	314	1021	1335
	Mean (SD)	3.66 (2.51)	4.30 (2.69)	4.15 (2.66)
	Median (IQR)	3.00 (2.00, 5.00)	4.00 (2.00, 6.00)	4.00 (2.00, 6.00)
	Min, Max	0, 14	0, 18	0, 18
ADL category	No dependency	303 (80.6%)	760 (66.4%)	1063 (69.9%)
	Mild dependency	33 (8.8%)	146 (12.8%)	179 (11.8%)
	Moderate/severe dependency	16 (4.3%)	136 (11.9%)	152 (10.0%)

		Chemotherapy N = 376	No Chemotherapy N = 1144	Total N = 1520
	Unknown	24 (6.4%)	102 (8.9%)	126 (8.3%)
IADL category	No dependency	315 (83.8%)	776 (67.8%)	1091 (71.8%)
	Mild dependency	26 (6.9%)	124 (10.8%)	150 (9.9%)
	Moderate/severe dependency	10 (2.7%)	136 (11.9%)	146 (9.6%)
	Unknown	25 (6.6%)	108 (9.4%)	133 (8.7%)
MMSE category	Normal function	342 (91.0%)	1004 (87.8%)	1346 (88.6%)
	Mild impairment	28 (7.4%)	111 (9.7%)	139 (9.1%)
	Moderate impairment	4 (1.1%)	14 (1.2%)	18 (1.2%)
	Severe	2 (0.5%)	15 (1.3%)	17 (1.1%)
APG SGA category	Low	299 (79.5%)	869 (76.0%)	1168 (76.8%)
	Moderate	38 (10.1%)	125 (10.9%)	163 (10.7%)
	High	4 (1.1%)	19 (1.7%)	23 (1.5%)
	Unknown	35 (9.3%)	131 (11.5%)	166 (10.9%)
ECOG performance status	Fully active	296 (78.7%)	740 (64.7%)	1036 (68.2%)
	Restricted in physically strenuous activity	59 (15.7%)	284 (24.8%)	343 (22.6%)
	Ambulatory and capable of all selfcare	3 (0.8%)	43 (3.8%)	46 (3.0%)
	Capable of only limited selfcare	2 (0.5%)	18 (1.6%)	20 (1.3%)
	Unknown	16 (4.3%)	59 (5.2%)	75 (4.9%)

Figure 2 – Mean (95% CI) scores over time points for the chemotherapy versus no chemotherapy population measured on the EORTC-QLQ-C30 scale.

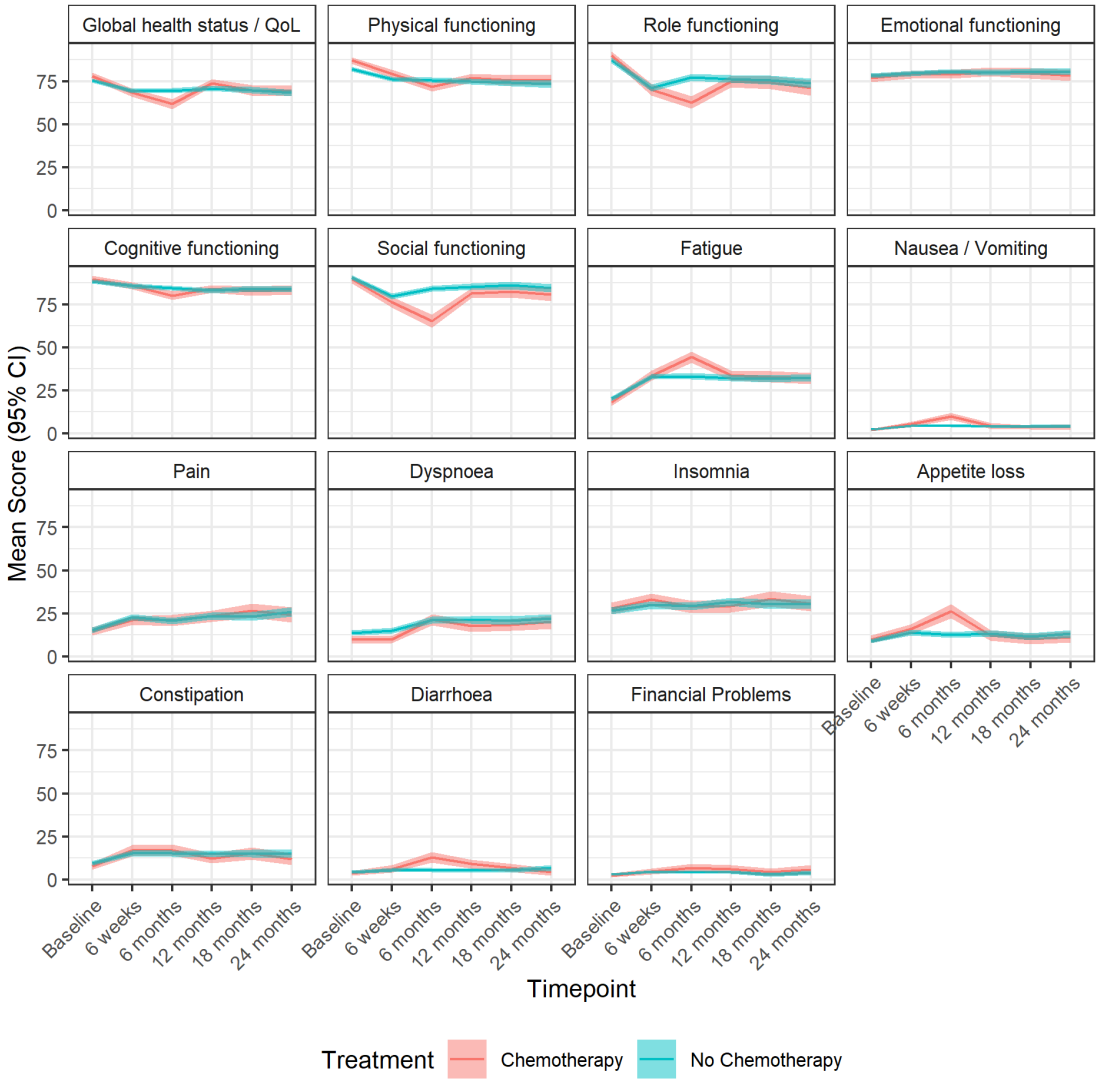


Figure 3 – Mean (95% CI) scores over time points for the chemotherapy versus no chemotherapy population measured on the EORTC-QLQ-B23 scale.

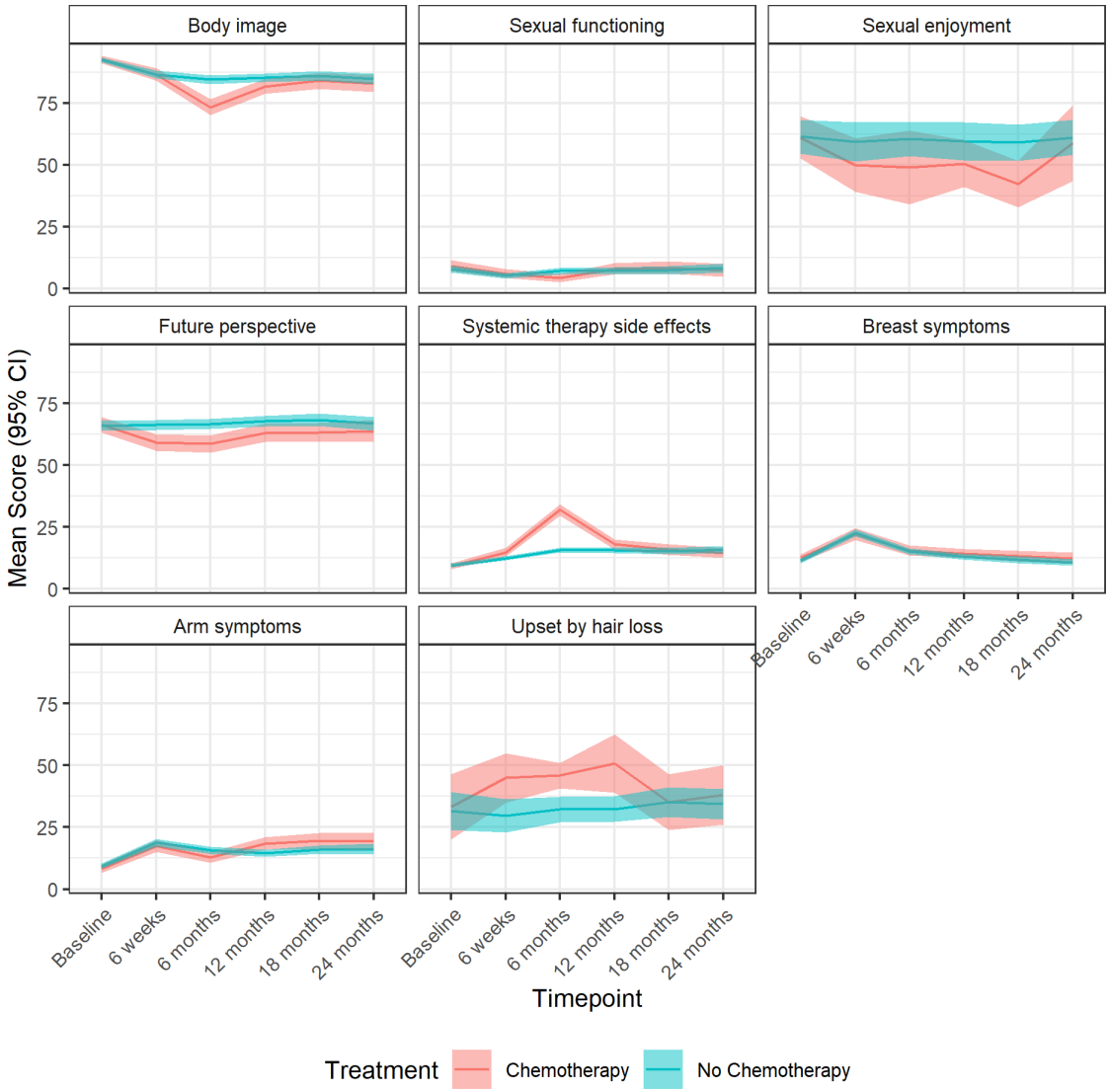


Figure 4 – Mean (95% CI) scores over time points for the chemotherapy versus no chemotherapy population measured on the EORTC-QLQ-ELD15 scale.

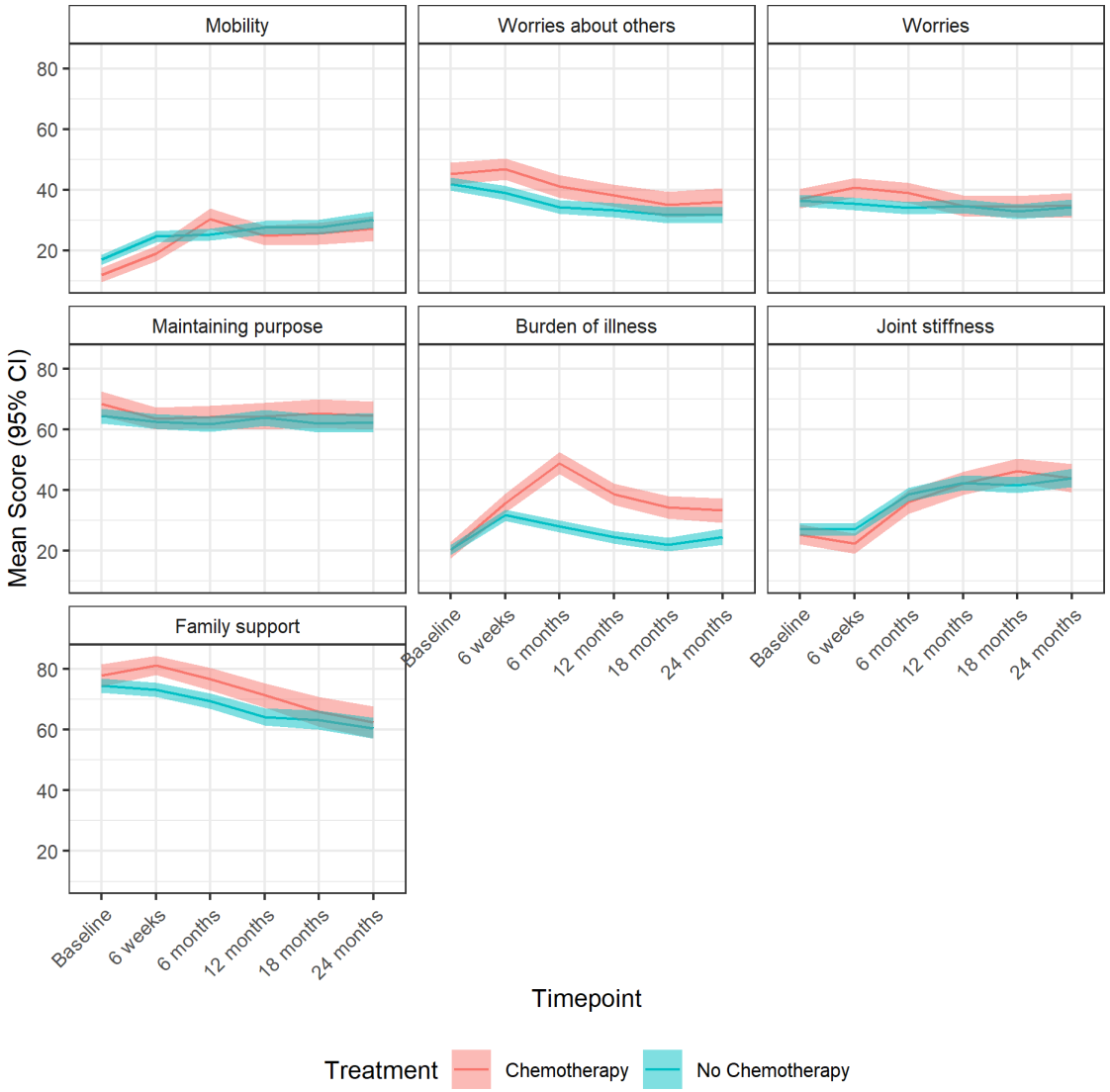
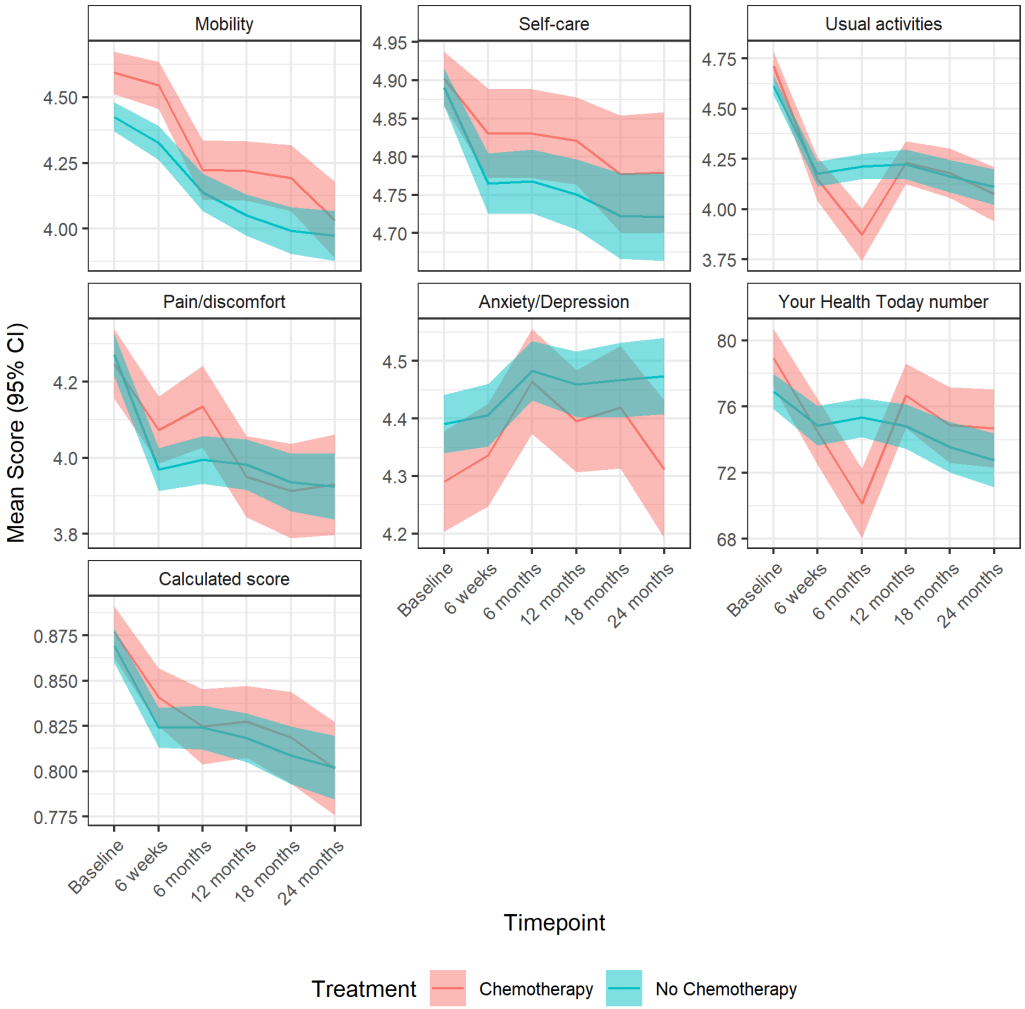


Figure 5 – Mean (95% CI) scores over time points for the chemotherapy versus no chemotherapy population measured on the EQ-5D-5L scale.*



*the calculated score is a single summary number (index value) which reflects the health state in the context of the preferences of the general population of a country/region and is derived by applying a formula attaching weights to each of the levels in each dimension as per the EQ-5D-5L User Guide.