

2022 **ASCO**[®]
ANNUAL MEETING

Comparison of quality of life in patients randomized to high-dose once daily (QD) thoracic radiotherapy (TRT) with standard twice daily (BID) TRT in limited stage small cell lung cancer (LS-SCLC) on CALGB 30610 (NCT00632853)

(Alliance for Clinical Trials in Oncology, Sub-study CALGB 70702)

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Background

- CALGB 30610 trial - 70Gy QD TRT was not associated with a superior overall survival compared to 45Gy BID TRT in limited stage small cell lung cancer
- Since both arms appeared to provide similar clinical benefit, other factors such as quality of life may help oncologists decide on the best treatment approach for their patients.

Patients and Methods

- Questionnaires - FACT-L, FACT Trial Outcome Index-Lung Cancer (FACT-L TOI), FACT-Esophageal Cancer Eating and Swallowing Indices, ECOG Acute Esophagitis Scale, Hospital Anxiety and Depression Scale (HADS), the EQ-5D and a single item assessing difficulty swallowing
- Time points - Baseline, 3, 5, 7, 12, 26, and 52 weeks after starting radiation therapy

Patients and Methods

- Assess treatment inconvenience at these time points.
- Primary endpoints - FACT-L TOI and FACT eating and swallowing subscales at 12 weeks
- Mean changes from baseline were compared between arms using general linear mixed models

Results

- 417 patients consented to participate in the patient-reported outcomes substudy
- The completion rate of the questionnaires was 87% at baseline and 71% at week 52

Results

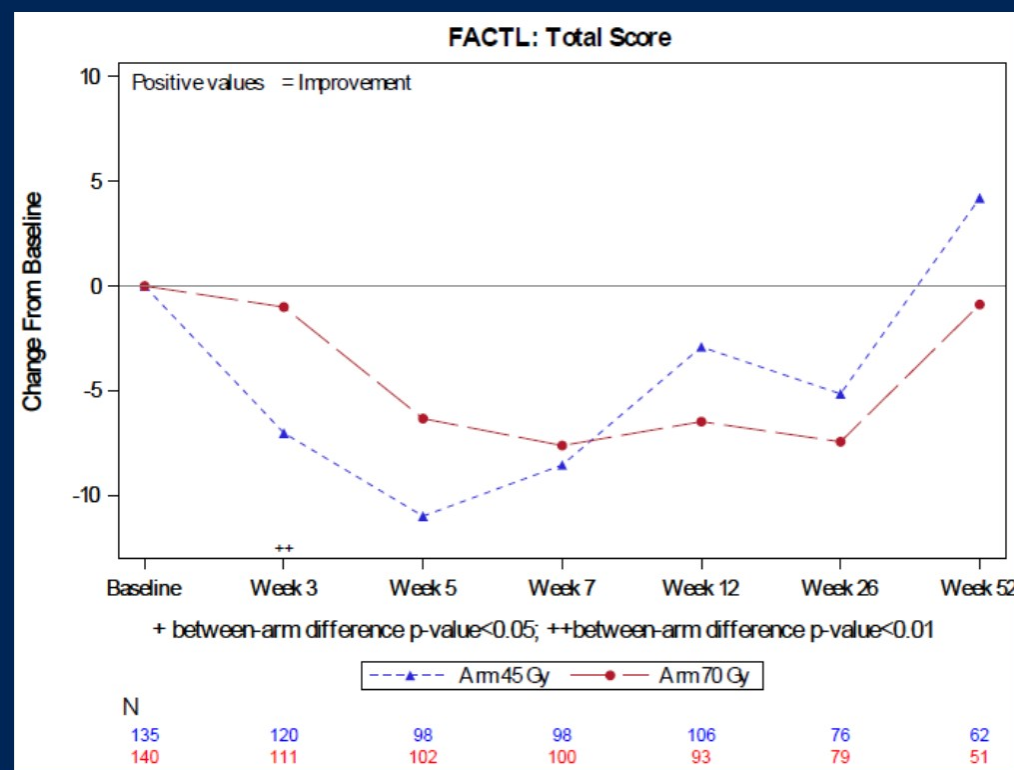
- CALGB 30610 – 646 patients
- 417 patients consented to participate in the patient-reported outcomes substudy
- Baseline PROs – 364 patients
- 342 patients – at least one follow-up PRO
- 340 patients – baseline and at least 1 follow-up PRO
- The completion rate of the questionnaires was 87% at baseline and 71% at week 52

Results - Demographics

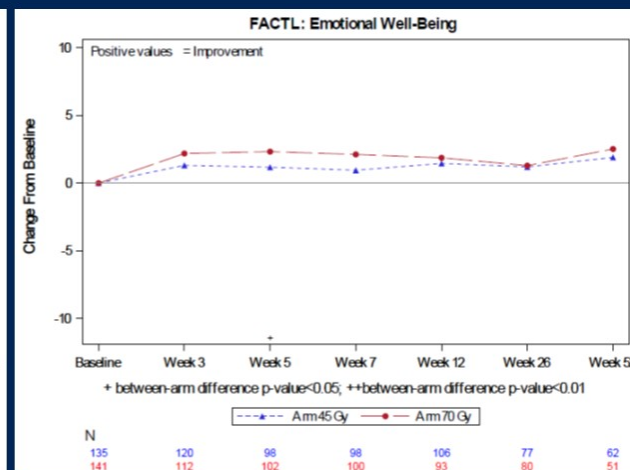
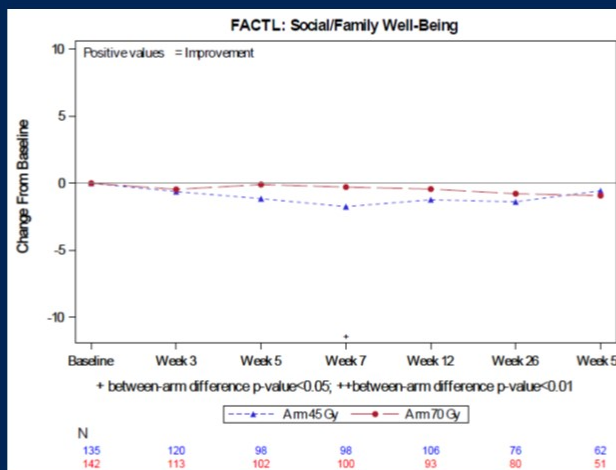
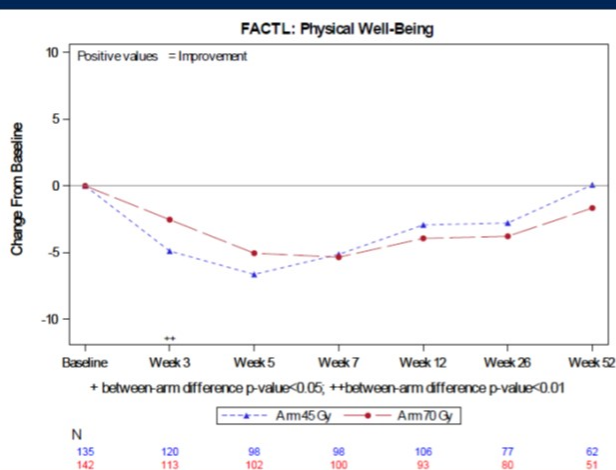
	Treatment Arm	
	45 Gy (N=167)	70 Gy (N=171)
Median Age (yrs) (Range)	64 (42.0, 81.0)	62.0 (37.0, 78.0)
Gender, n (%)		
Male	85 (50.9%)	79 (46.2%)
Female	82 (49.1%)	92 (53.8%)
Race, n (%)		
White	148 (88.6%)	146 (85.4%)
Black or African American	13 (7.8%)	17 (9.9%)
Asian	0 (0.0%)	1 (0.6%)
American Indian or Alaska Native	2 (1.2%)	1 (0.6%)
Ethnicity, n (%)		
Hispanic or Latino	6 (3.6%)	5 (2.9%)
Non-Hispanic	156 (93.4%)	156 (91.2%)
ECOG PS, n (%)		
0	78 (46.7%)	84 (49.1%)
1	82 (49.1%)	76 (44.4%)
2	7 (4.2%)	11 (6.4%)

Results

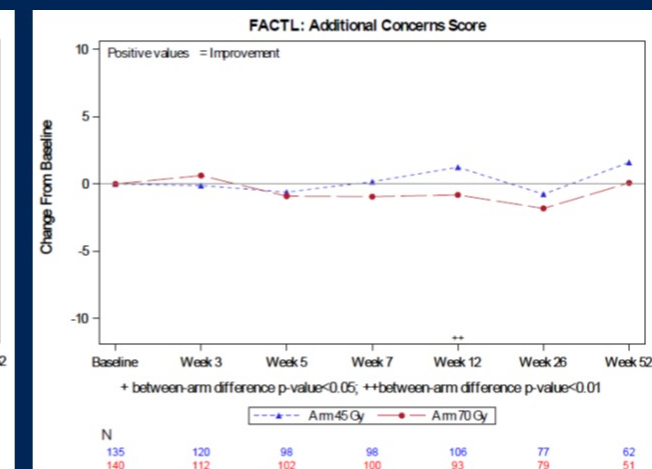
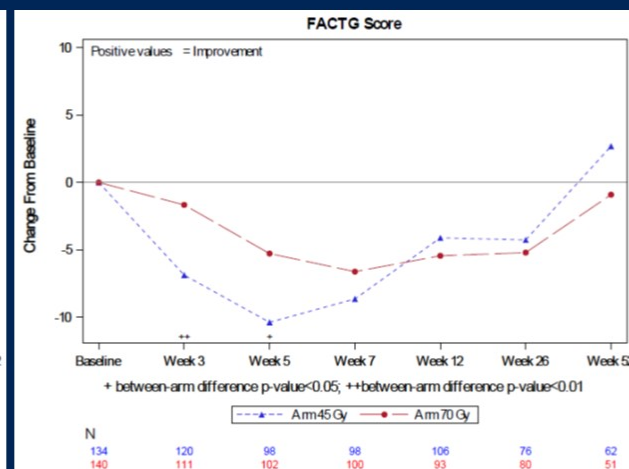
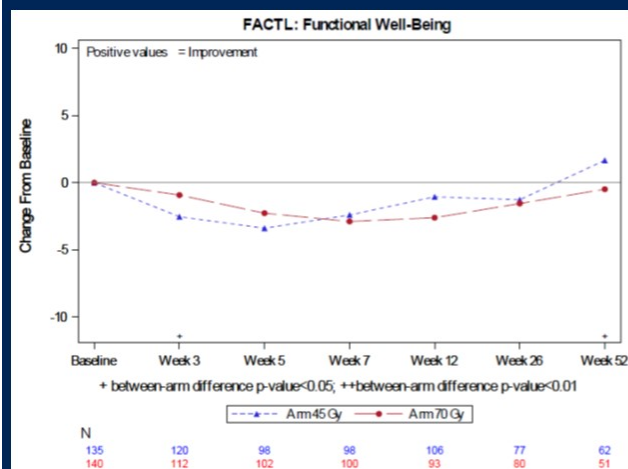
- The FACT-L total score mean worsening was significantly less in the QD arm at week 3 (-1.0 vs -7.0; P=.003)



Results

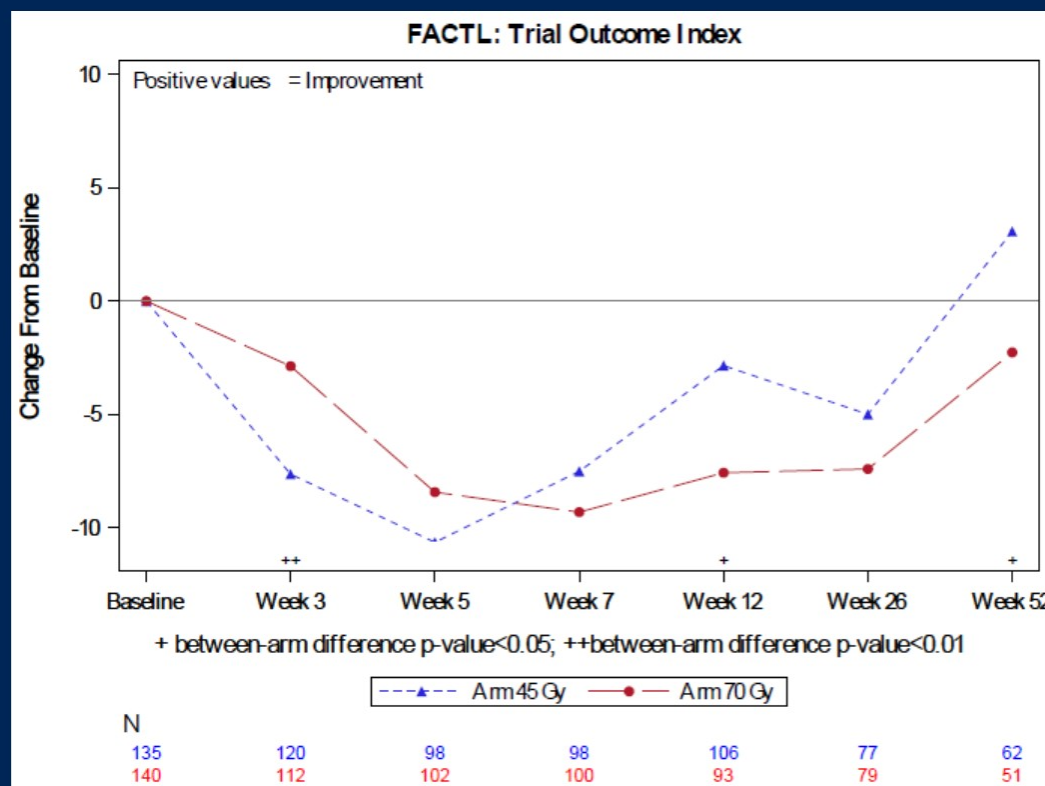


Results



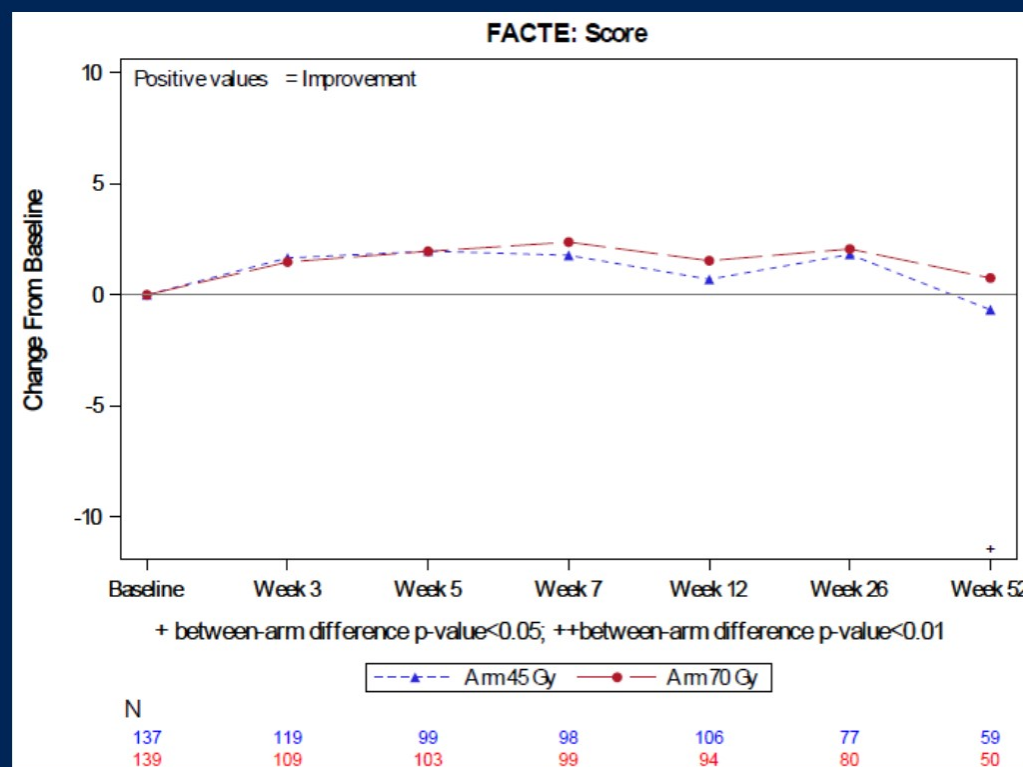
Results

- FACT-L TOI mean worsening
 - Less in the QD arm at week 3 (-2.9 vs -7.6; P=.003)
 - Greater in the QD arm at week 12 (-7.6 vs -2.8; P=.03).



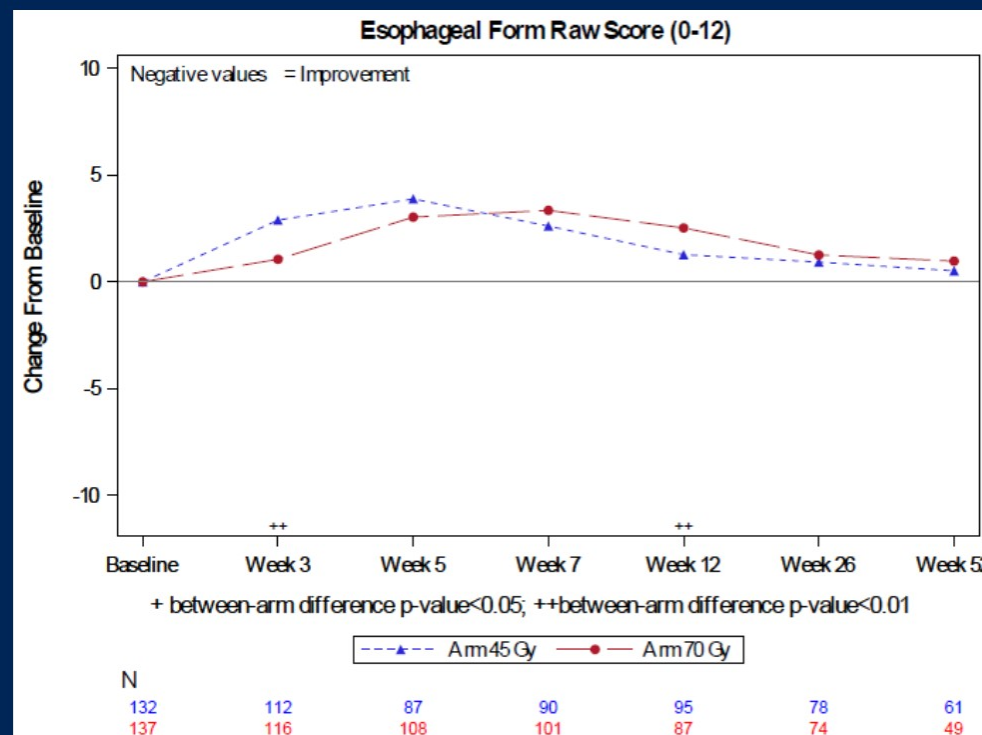
Results

- FACT-E change in score
 - Better in QD arm at week 52 (0.75 vs. -0.68; p=0.05)



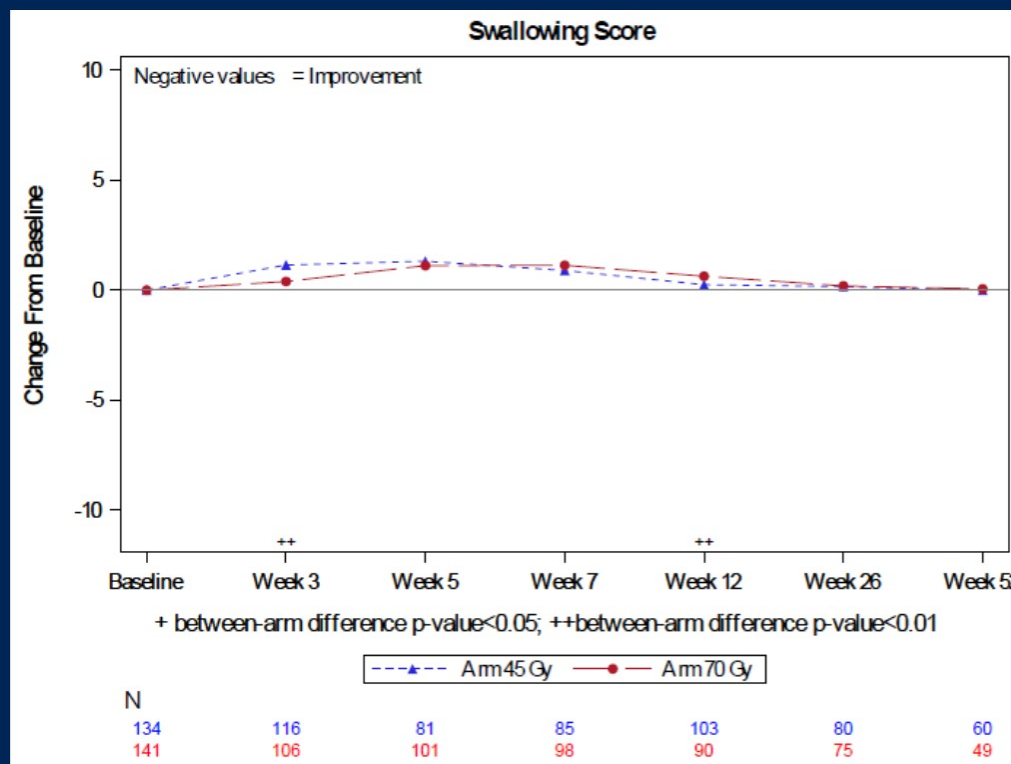
Results

- Acute esophagitis score
 - Worse in the BID arm at week 3 (2.89 vs. 1.06; $p < .001$)
 - Worse in the QD arm at week 12 (2.52 vs. 1.27; $p = 0.002$)



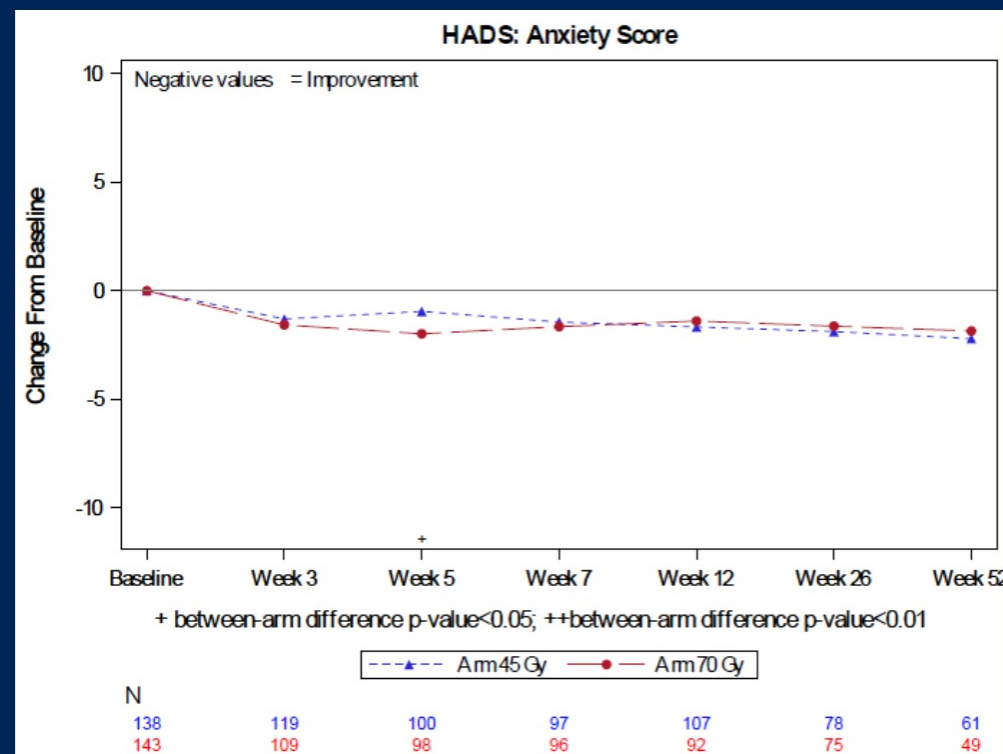
Results

- Difficulty swallowing
 - Greater in BID arm at week 3 (1.14 vs. 0.39; $p < .001$)
 - Greater in the QD arm at week 12 (0.63 vs. 0.24; $p = .005$)



Results

- Mean worsening in HADS anxiety - less in the QD arm at week 5 (-1.99 vs -0.95; P=.03).



Results – Treatment Convenience

	Treatment Arm		Total (N=1485)
	45 Gy (N=352)	70 Gy (N=376)	
Tx Convenience Score, n (%)			
Very inconvenient	53 (15.1%)	74 (19.7%)	127 (17.4%)
Somewhat inconvenient	63 (17.9%)	22 (5.9%)	85 (11.7%)
Somewhat convenient	75 (21.3%)	88 (23.4%)	163 (22.4%)
Very convenient	161 (45.7%)	192 (51.1%)	353 (48.5%)
Convenience Category, n (%)*			
Inconvenient	116 (33.0%)	96 (25.5%)	212 (29.1%)
Convenient	236 (67.0%)	280 (74.5%)	516 (70.9%)

* p<.05

Conclusions

- Both QD and BID radiation regimens were well tolerated.
- The QD arm had better quality of life scores at week 3, but worse scores at week 12
- The QD arm was perceived to be less inconvenient



Thank you