

Phase III Randomized Trial of
Postoperative **A**djuvant Conventional
Radiation (3DCRT) versus Image Guided
Intensity Modulated Radiotherapy (IG-
IMRT) in **C**ervical Cancer (PARCER):
Final Analysis

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Disclosures

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Background

- Postoperative Radiation indicated for Cervix and Endometrial Cancers.
- Increase in GI symptom burden and toxicity in long term survivors after adjuvant radiation
- Phase II Studies
 - RTOG 0418/ RTCMIENDOMETRE demonstrated 27-28% acute GI toxicity with IMRT
 - No comparator arm
- Phase III Trial
 - NRG 1203: Improvement in patient reported outcomes at wk 5 and year 1 with IMRT as compared to 3DCRT.
 - No difference at 3 years with IMRT.
- Lack of Clarity on Long Term Impact of Postoperative IMRT

Hypothesis

IG-IMRT will improve late GI toxicity free survival in patients undergoing adjuvant RT for cervix cancer.

Conducted across 3 clinical sites of Tata Memorial Centre

NCT01279135/CTRI2012/120349

Study Eligibility

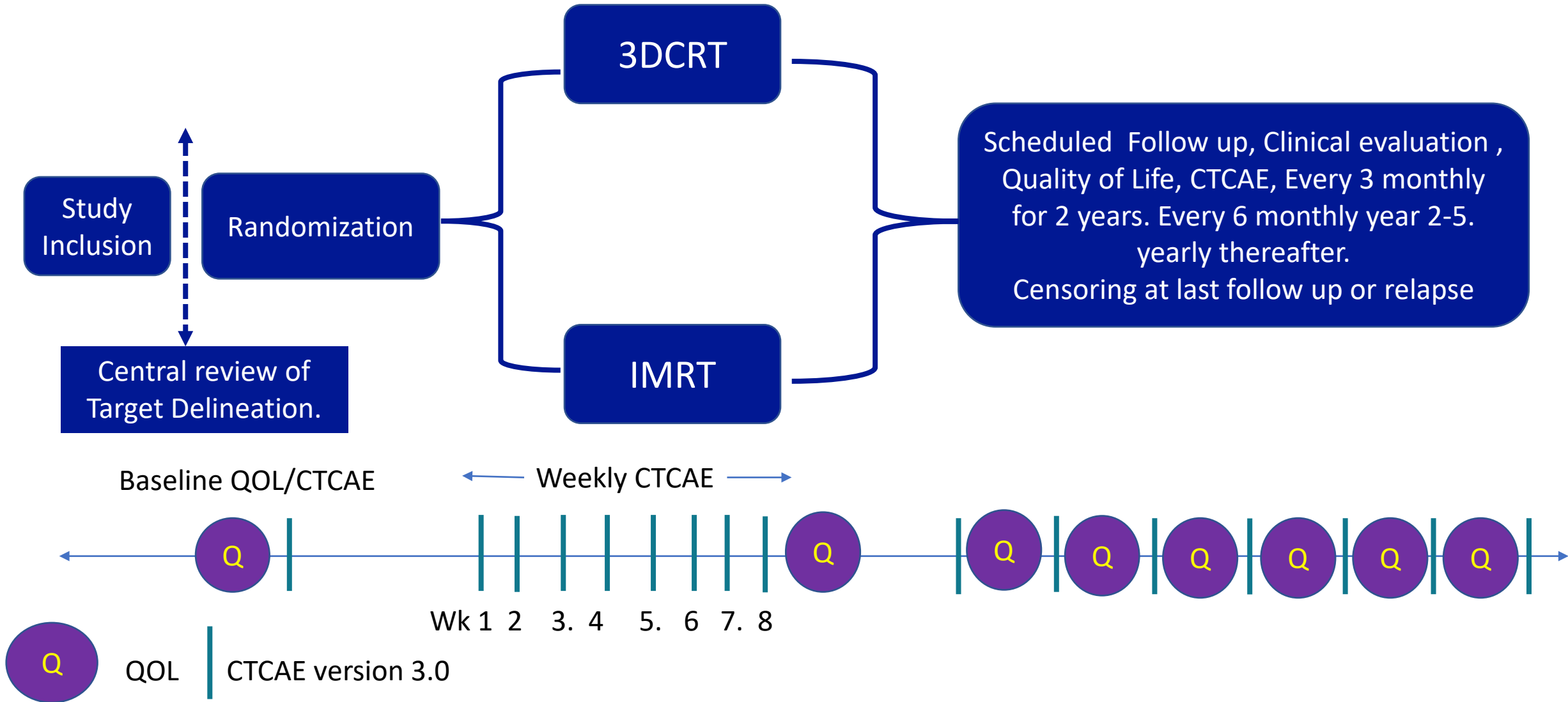
Inclusion Criteria

- Cervical Cancer
- Age >18 years
- Type III Hysterectomy with intermediate or high risk features
- Type I/II hysterectomy necessitating adjuvant CRT

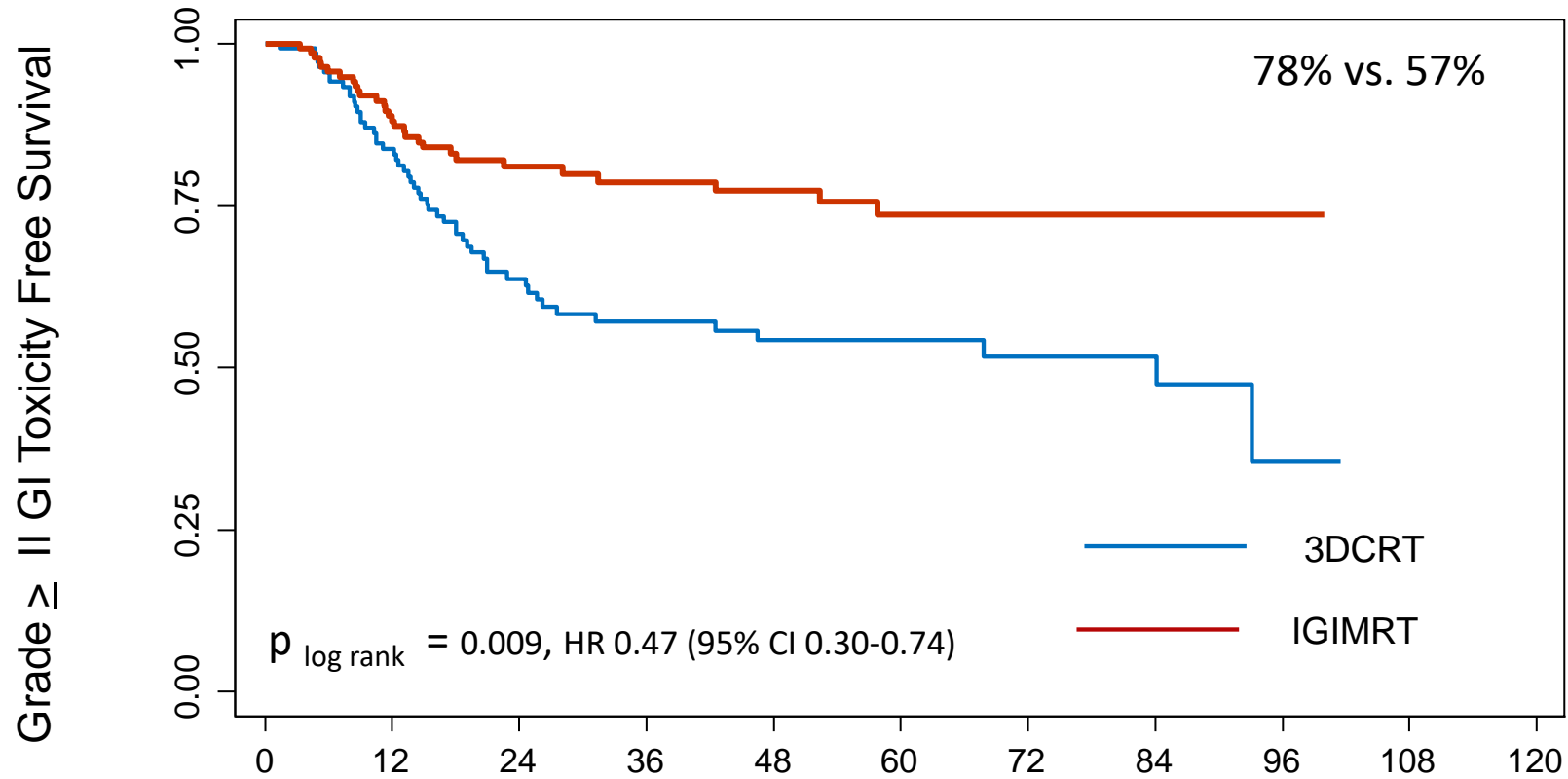
Exclusion Criteria

- Positive Para aortic nodes or indication for extended field RT.
- History of multiple previous abdominal surgeries/radiation
- Any medical condition predisposing to bowel toxicity

Trial Schema: PARCER



Primary Endpoint



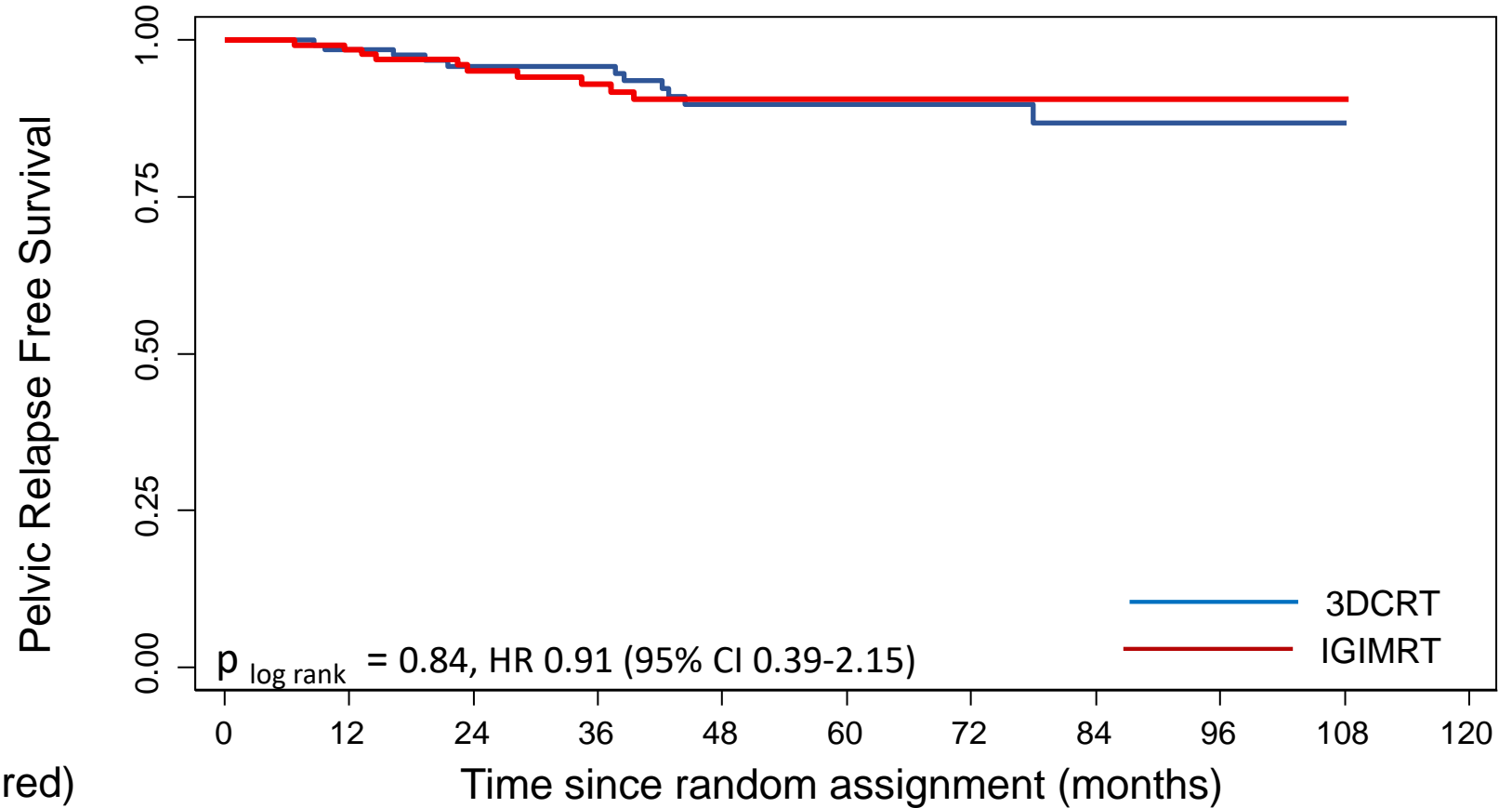
Number at risk (number censored)

Time since random assignment (months)

3DCRT	141 (19)	101 (19)	60 (10)	44 (3)	39 (12)	27 (9)	17 (5)	12 (8)	2 (2)	0 (0)	0
IGIMRT	142 (14)	112 (28)	76 (13)	61 (11)	49 (12)	35 (12)	23 (12)	11 (9)	2 (2)	0 (0)	0

Adjusted for stratification factors- RT type and Sx type

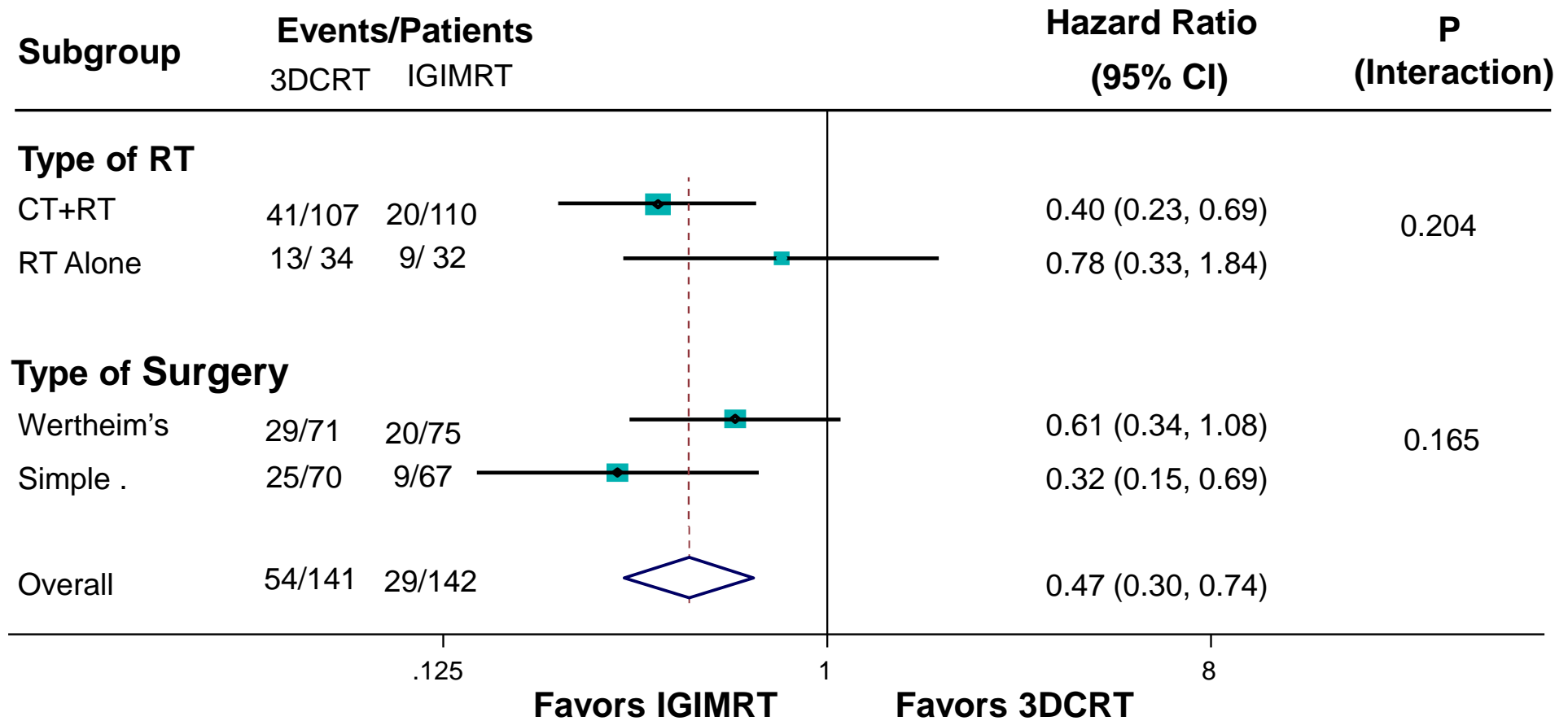
Pelvic Relapse Free Survival



Number at risk (No. censored)

3DCRT	141	(13)	124	(21)	100	(17)	80	(17)	63	(20)	43	(11)	32	(9)	23	(15)	8	(7)	1	(0)	0
IGIMRT	142	(11)	127	(24)	99	(17)	80	(18)	62	(15)	47	(17)	30	(10)	20	(11)	9	(7)	2	(2)	0

Planned Subgroup Analysis



Conclusions

- IG-IMRT is superior to 3DCRT in reducing Late GI toxicity in women undergoing postoperative pelvic RT.
- Greater Benefit of IG-IMRT in those receiving radio-sensitizing concurrent chemotherapy.
- No difference in tumour control rates in the pelvis with use of IG-IMRT
- IG-IMRT should represent the new standard of care for postoperative pelvic RT in women with gynecological cancers.