

Background

- Head-and- neck squamous cell carcinoma (HNSCC) is a commonly occurring malignancy in the geriatric population. However, there is a scarcity of data with regard to the efficacy and safety of concurrent chemoradiotherapy (CRT) in these patients.
- We performed a post hoc analysis of a randomized study conducted at our institution to compare the outcomes and toxicities of concurrent CRT in older versus younger patients with HNSCC.

Materials and Methods

- The present analysis is based on a study conducted at Tata Memorial Hospital, Mumbai, India, on patients with locally advanced HNSCC, planned for radical concurrent CRT.
- The patients were randomized to receive cisplatin either once-a-week at a dose of 30 mg/m² or once-in-3-weeks at a dose of 100 mg/m².
- We evaluated the differences in the demographic and clinical features, grade 3 or worse adverse events, compliance to treatment, loco-regional control (LRC), progression-free survival (PFS), and overall survival (OS) between the older (aged ≥ 60 years) and the younger patients.

Results

- Out of 300 patients, 283 (94.3%) comprised the younger cohort (age <60 years) and 17 (5.7%) comprised the older cohort. (Fig.1)
- There was no difference in the occurrence of severe (grade 3/4) toxicities between the two groups.
- At a median follow up of 22 months (range, 3–51 months), the cumulative LRC at 2 years was 67.1% and 100% for the younger and older groups, respectively (P = 0.018). (Fig. 2)
- The estimated median PFS in younger patients was 24.4 months (95% confidence interval, 12.5–36.3), while it was not reached in the older group (P = 0.53). (Fig.3)
- The estimated median OS was 41.3 months in the younger patients but was not reached in the older group (P = 0.613). (Fig.4)

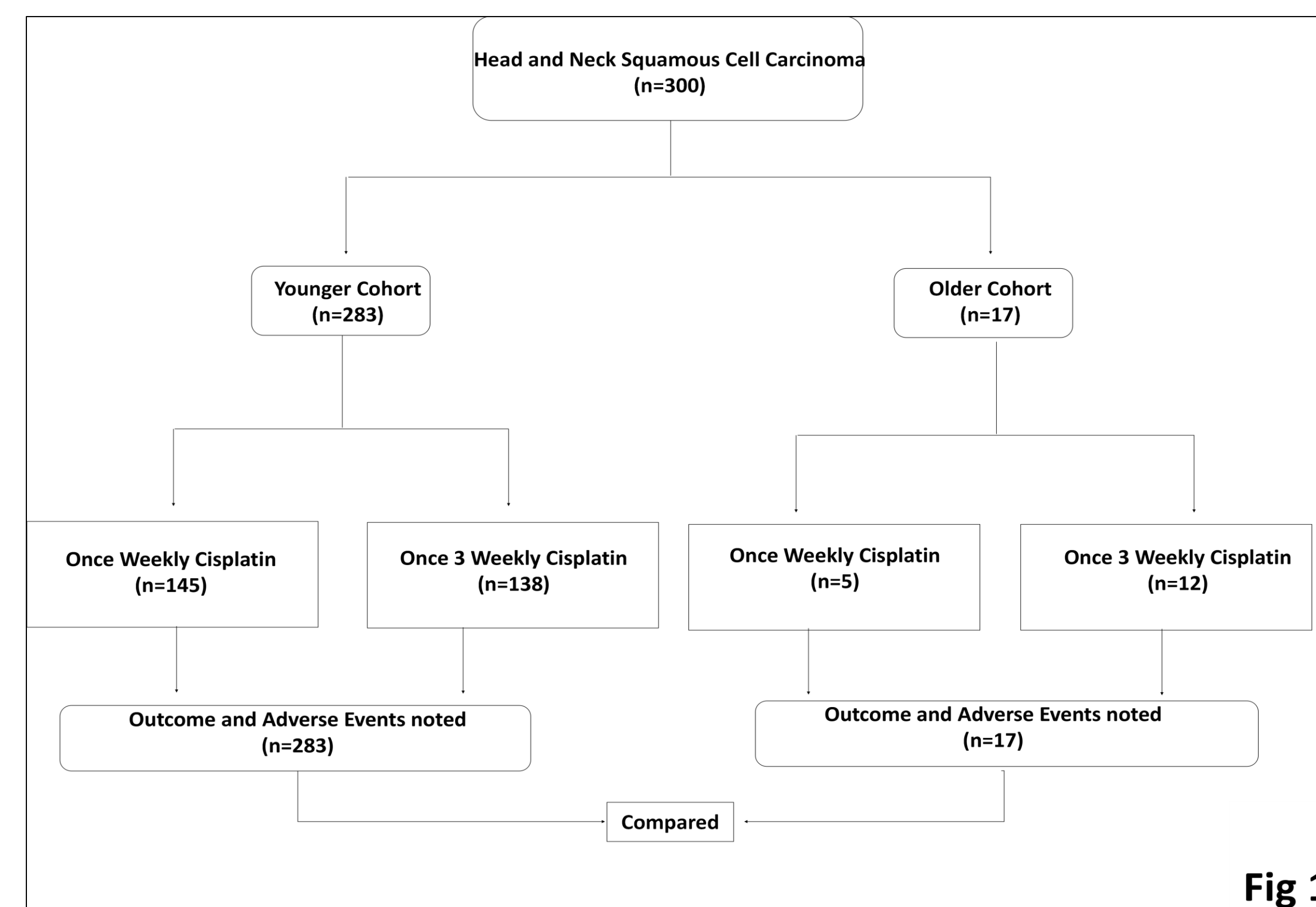


FIG.1 - Flow chart for patient selection and evaluation

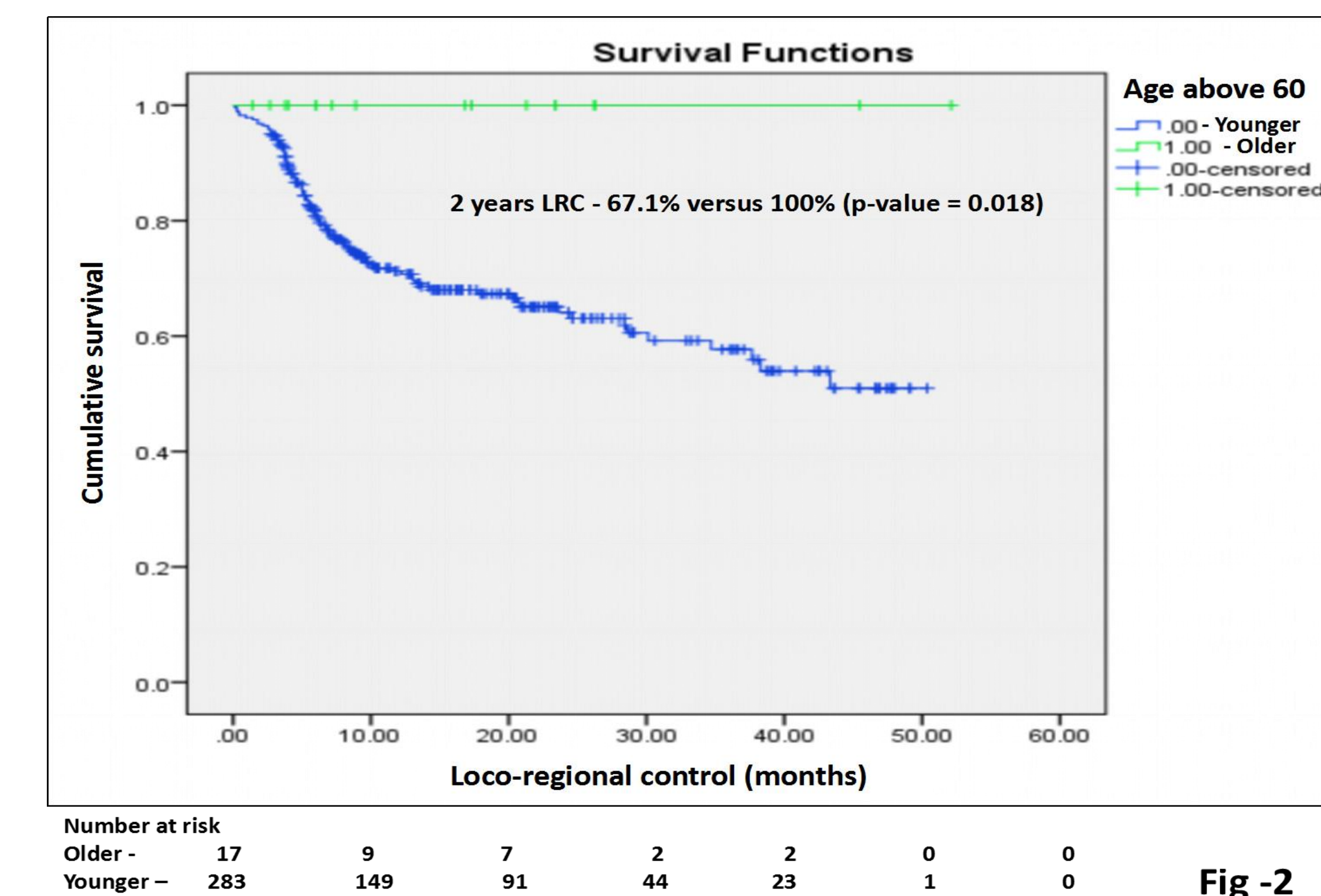


FIG.2 - Kaplan Meier curve showing loco-regional control (LRC) in younger and older patients

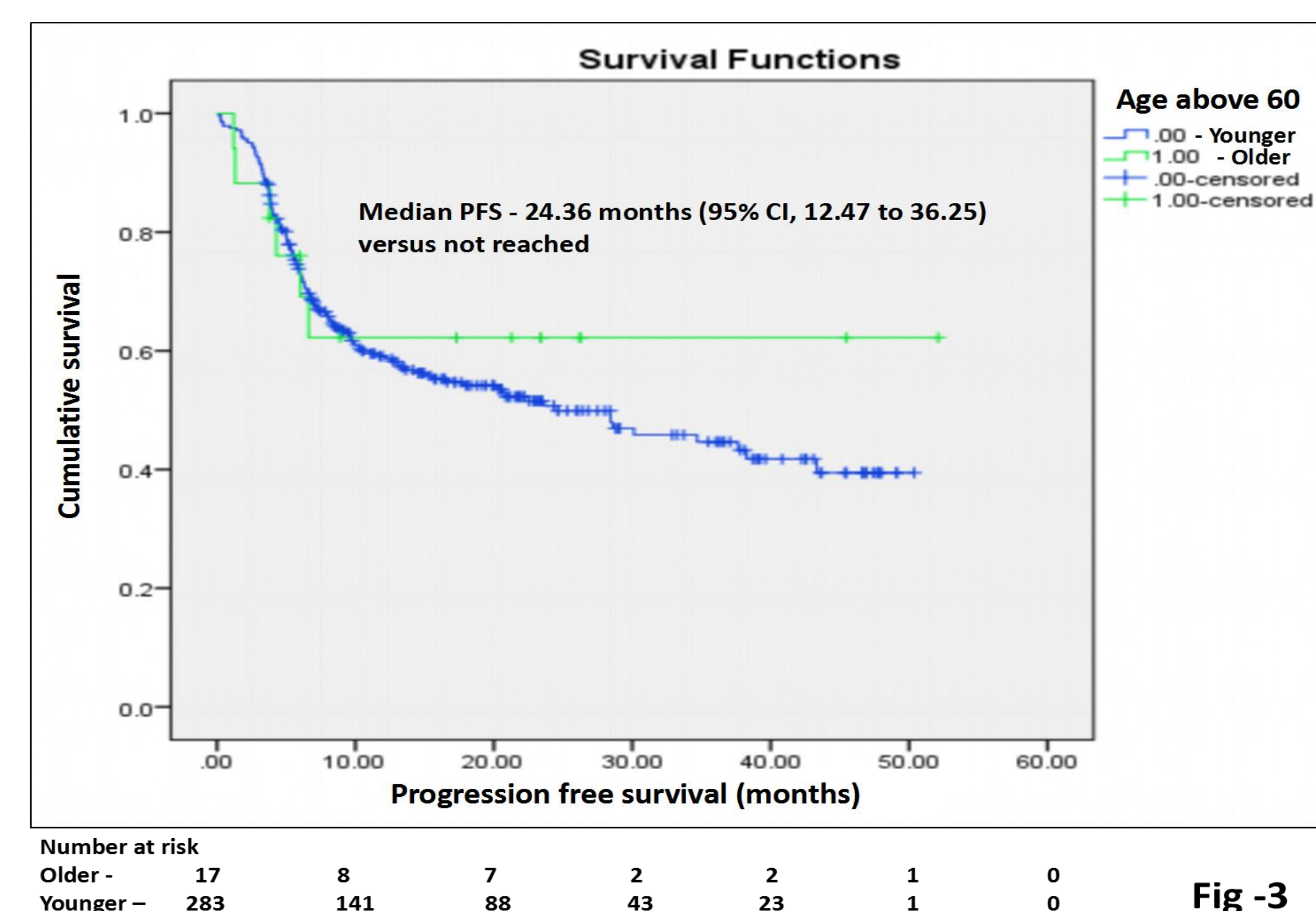


FIG.3 - Kaplan Meier curve showing progression free survival (PFS) in younger and older patients

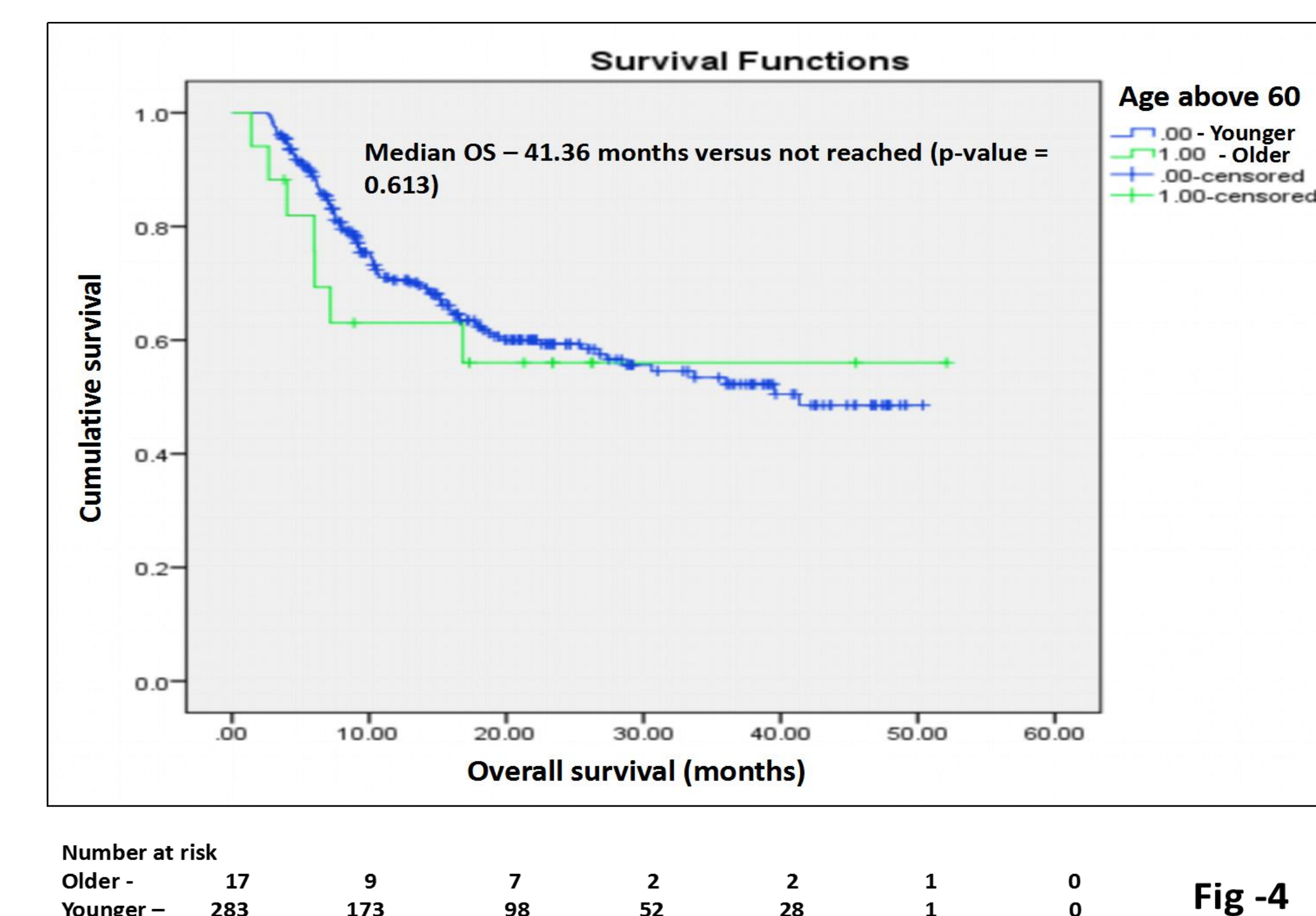


FIG.4 - Kaplan Meier curve showing overall survival (OS) in younger and older patients

Conclusion

- Cisplatin based concurrent CRT appears to be as efficacious in carefully selected fit older patients as in the younger patients.
- The toxicities also appear to be similar in both the groups.