

## Adjuvant Nivolumab for residual disease post neoadjuvant chemoradiation and surgery in Esophageal Squamous cell carcinoma—Are we there yet?

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### INTRODUCTION & AIM

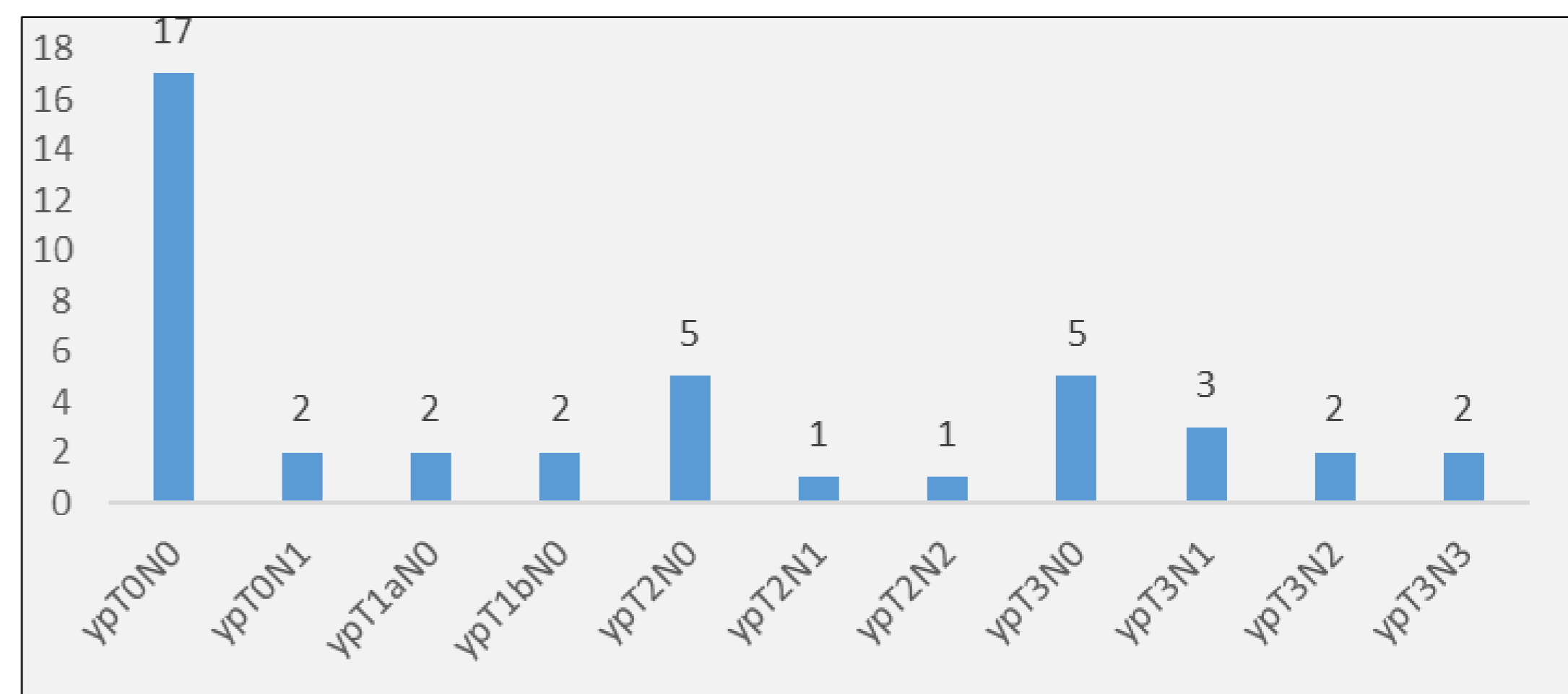
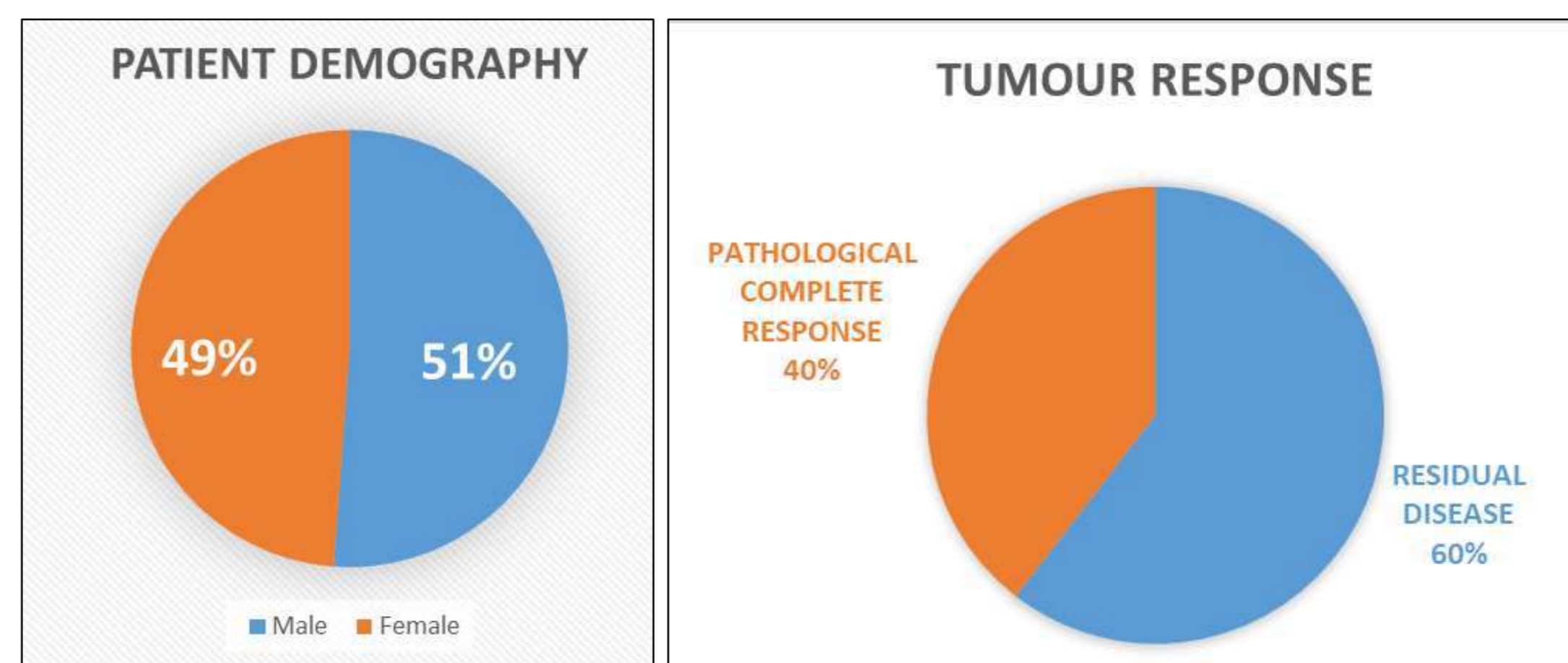
- Esophageal carcinoma is one of the most aggressive malignant diseases.
- At present, neoadjuvant chemotherapy and chemoradiotherapy are regarded as the standard modalities for the treatment of locally advanced esophageal cancers based on several landmark trials.
- Patients receiving neoadjuvant therapy and reaching a pathological complete response have better survival and fewer recurrence risk.
- In those not achieving pathological CR, Nivolumab is recommended as per NCCN, ESMO and ASCO guidelines.
- Benefit of adjuvant Nivolumab was shown in CheckMate577 trial.
- At median follow-up of 24.4months, median disease free survival was twice as long with nivolumab (22.4 versus 11months, HR for disease progression or death was 0.69).
- The benefits were seen across all patient subgroups. Overall survival data were not mature. It was well tolerated.
- But is this feasible in our developing country as most of the patients are not able to afford this expensive medication.

### METHOD

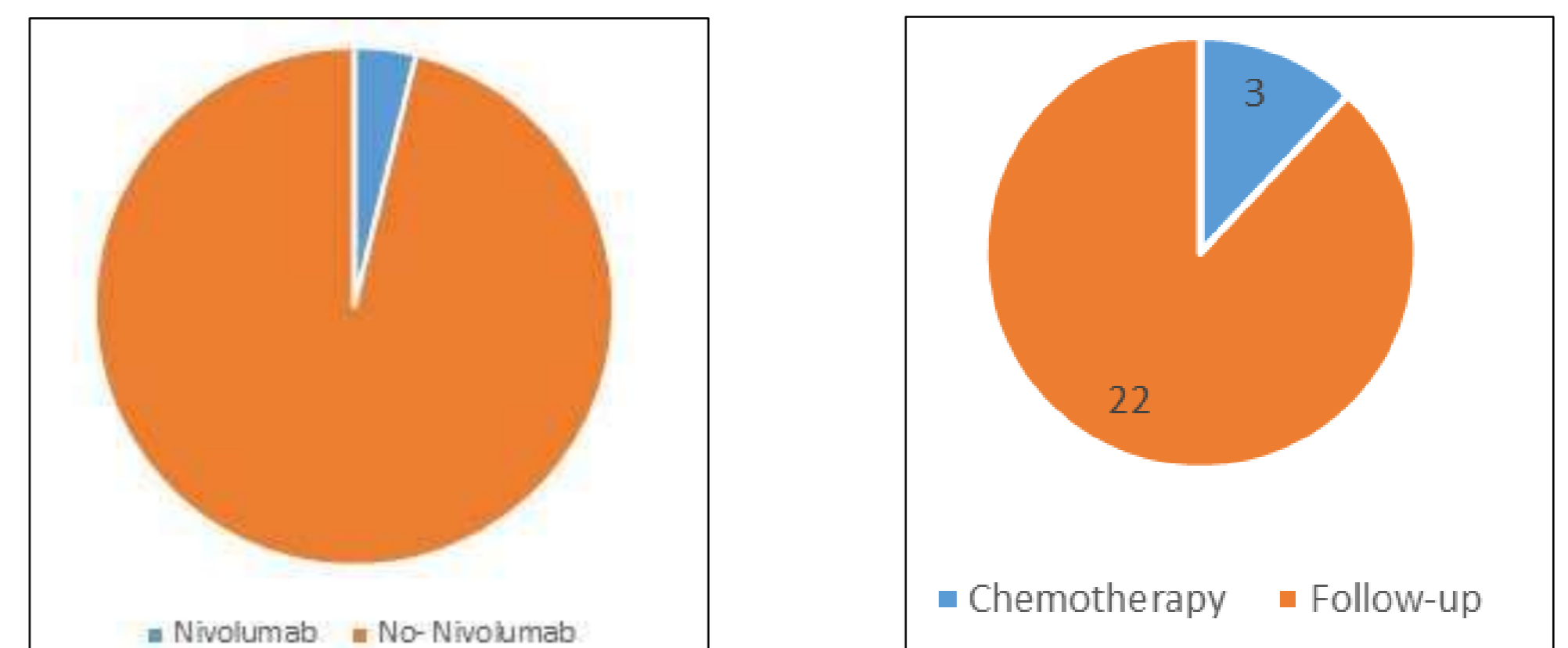
- In our institution we conducted a retrospective study of esophageal squamous cell carcinoma patients who underwent neoadjuvant CROSS protocol followed by surgery for a period of 4 years.
- Patients received five weekly cycles of paclitaxel and carboplatin with concurrent radiotherapy (41.4 Gy in 23 fractions, 5 days per week) followed by surgery.
- Based on residual disease adjuvant Nivolumab was offered.
- The information regarding patient's health status after their most recent appointment was gathered through a combination of reviewing their medical records and making phone calls to directly contact them to ask about their current condition.

### RESULTS & DISCUSSION

- Total of 43 patients underwent cross protocol followed by surgery.
- Mean age of patients was 55.9yrs.
- There were 22 males (51.2%) and 21 females (48.8%).
- Of the total forty three(43) esophageal squamous cell carcinoma patients, seventeen(17) patients had complete pathologic response(39.5%).
- Out of the twenty six(26) patients with residual disease, only one(1) patient received adjuvant nivolumab.
- Three patients underwent chemotherapy and rest were on follow-up.
- We have had 4 deaths, 2 unrelated to cancer and 2 by recurrence .
- There were 3 recurrences in patients who did not take Nivolumab. Two patients had lung metastasis and one patient had loco-regional recurrence. Two of these patients succumbed to disease, another patient is currently on Nivolumab .
- Average follow-up of our patients is 20 months as of now .
- Overall survival is not reached.
- No toxicity was observed in them.



### ADJUVANT TREATMENT



### CONCLUSION

- Nivolumab was approved as adjuvant therapy for patients with residual disease post NACTRT as per CROSS trial in 2021.
- Four years have passed, however no robust data is available from India.
- It is less accessible for most Indian patients due to its high price.
- Government programs or insurance schemes could potentially subsidize the cost of nivolumab to improve patient access.
- Though guidelines recommend adjuvant nivolumab for patients with residual disease, cost constraints prevent most of them from getting benefit in developing countries like India.
- What further can be done to delay the recurrence and gain better disease free survival, many studies are required.

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