Outcome Analysis of Neoadjuvant Chemo-immunotherapy for Resectable NSCLC: A Single Center Experience

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Background

- ➤ Neoadjuvant chemo/immunotherapy is an emerging standard for resectable stage Ib-III NSCLC
- ➤ Morbidity of neoadjuvant therapy and surgical outcomes need to be defined
- ➤Our Aims:
- Evaluate outcomes (overall survival, recurrence free survival) after nedoadjuvant chemo/immunotherapy and surgery at our center
- Define complications/toxicity of this neoadjuvant regimen

Patients

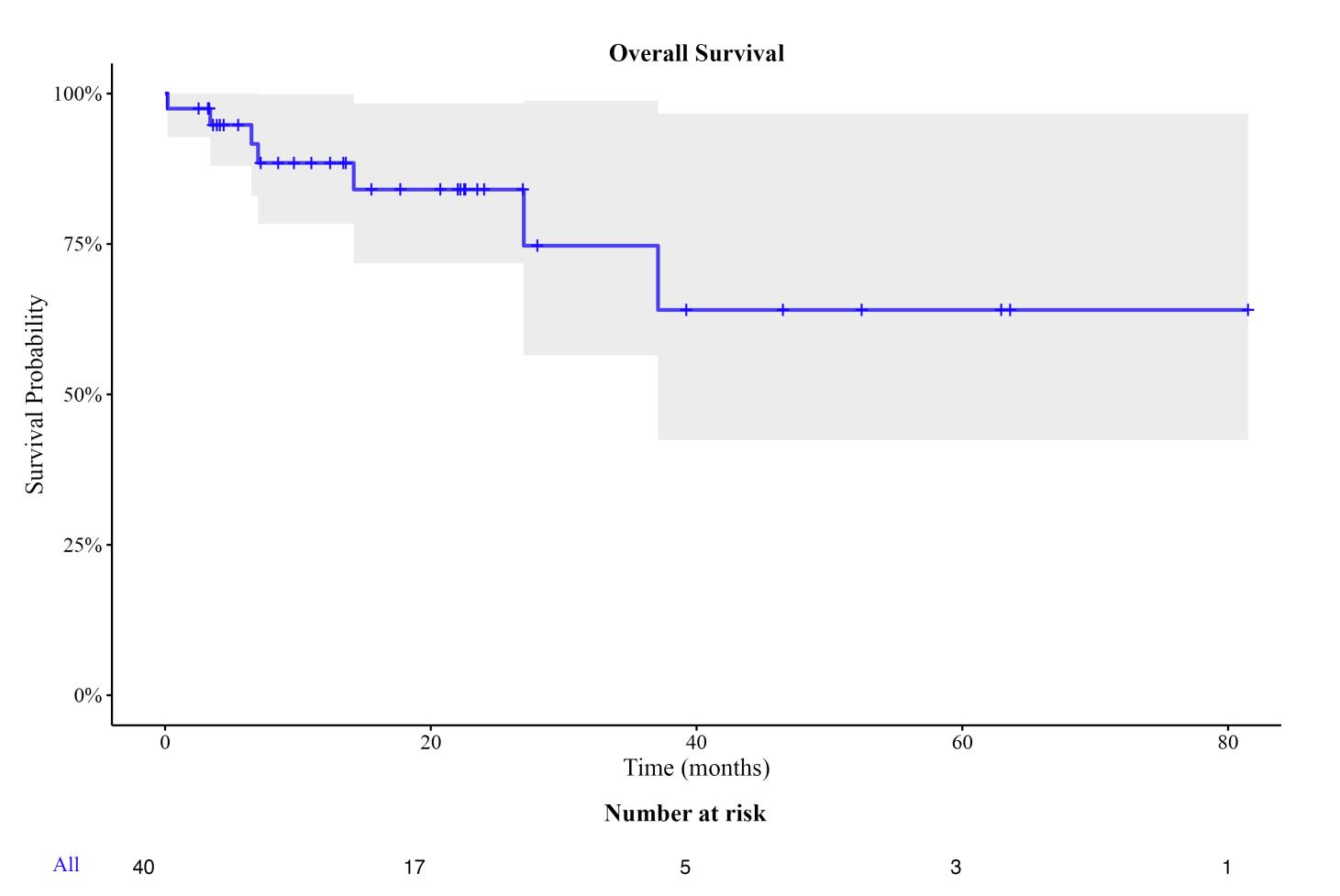
Characteristics	Median (Range)
Age	67 (53-81)
Smoking Pack Years	31 (0-100)
Histology	N (%)
Adenocarcinoma: n (%)	16 (51.6)
Squamous cell carcinoma: n (%)	12 (38.7)
Adenosquamous: n (%)	1 (3.2)
Poorly differentiated carcinoma;	1 (3.2)
Large cell carcinoma	1 (3.2)
ICIs agent	N (%)
Nivolumab	17 (54.8)
Pembrolizumab	11 (35.5)
Durvalumab	2 (6.4)
Nivolumab + Durvalumab	1 (3.2)
Clinical stage	N (%)
IA	1 (3.2)
IB	1 (3.2)
IIB	8 (25.8)
IIIA	21 (67.7)

Methods

➤ Patients diagnosed with resectable NSCLC (stage Ib-IIIA) between January 2017 and December 2023, who underwent neoadjuvant chemo/immunotherapy

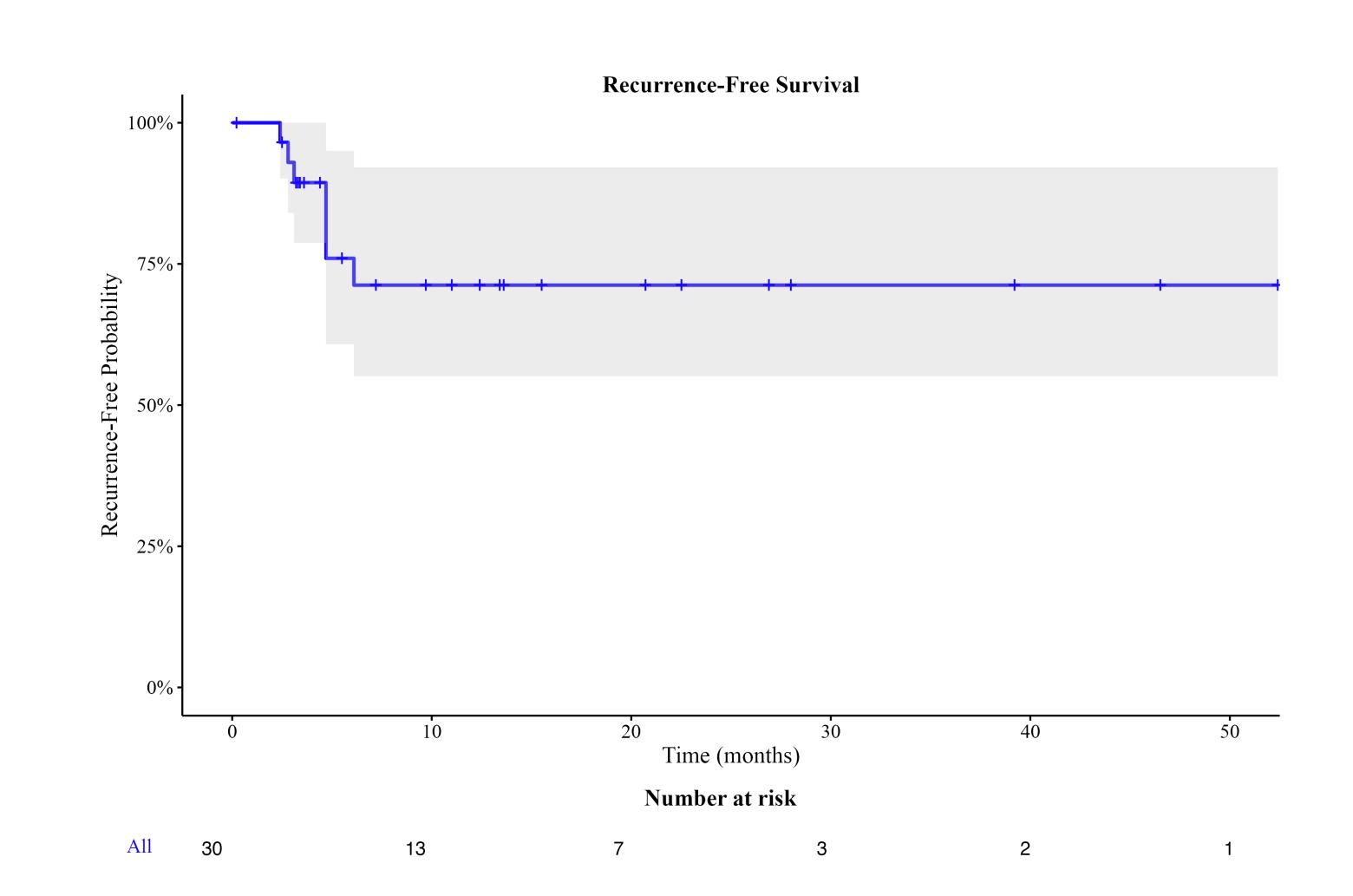
➤ Kaplan Meier Analysis was Performed for Overall Survival and Recurrence Free Survival

➤ Median follow up 13.5 months



Results

- Estimated OS 88% (78% 100%) at 1 year, 5 year 64% (42% 97%)
- Complete pathological response was observed in 7 patients (22.6%), and major pathological response in 9 patients (29.0%)
- >2% perioperative mortality



Conclusions & Future Aims

- ➤ Surgery After Neoadjuvant Chemo/Immuno is Safe: 74% of Surgeries Performed Minimally Invasively, with 2% mortality, 100% R0 resection
- ➤ Neoadjuvant therapy was tolerated: 10% grade III toxicity, 90% patients completed neoadjuvant therapy
- Future Aims: Prospective analysis of outcomes in a multicenter cohort

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