

# TREATMENT BEYOND PROGRESSION WITH PEMBROLIZUMAB IN ADVANCED NON-SMALL-CELL LUNG CANCER

Yu-Chen Liu<sup>1</sup>, Kai-Cheng Chang<sup>1</sup>, Hui-Yu Chen<sup>1</sup>

1 Department of Pharmacy, Linkou Chang Gung Memorial Hospital, Taoyuan, Taiwan

Contact: leanne1125@cgmh.org.tw



## Background

While pembrolizumab became a new standard of care in advanced non-small cell lung cancer (aNSCLC), limited studies proved the effectiveness of continuing use of pembrolizumab after disease progression.

## Aim

We aimed to evaluate the effectiveness of treatment beyond progression (TBP) of pembrolizumab in aNSCLC patients.

## Methods

- This multicenter observational study retrospectively analyzed electronic medical records from Chang Gung research database in Taiwan.
- Patients confirmed aNSCLC receiving pembrolizumab (monotherapy or combination therapy) and experienced progression disease between 2016 and December 2021 were enrolled. The first date of disease progression after pembrolizumab used was defined as the index date.
- We defined patients with at least one pembrolizumab within 60 days as TBP group, other patients were defined as switched group. We followed each patient until death, loss of follow-up and end of June 2023.
- The primary outcome was overall survival.
- We also evaluated prognostic factors, including progression pattern, metastatic sites and baseline characteristics by using Cox regression model.

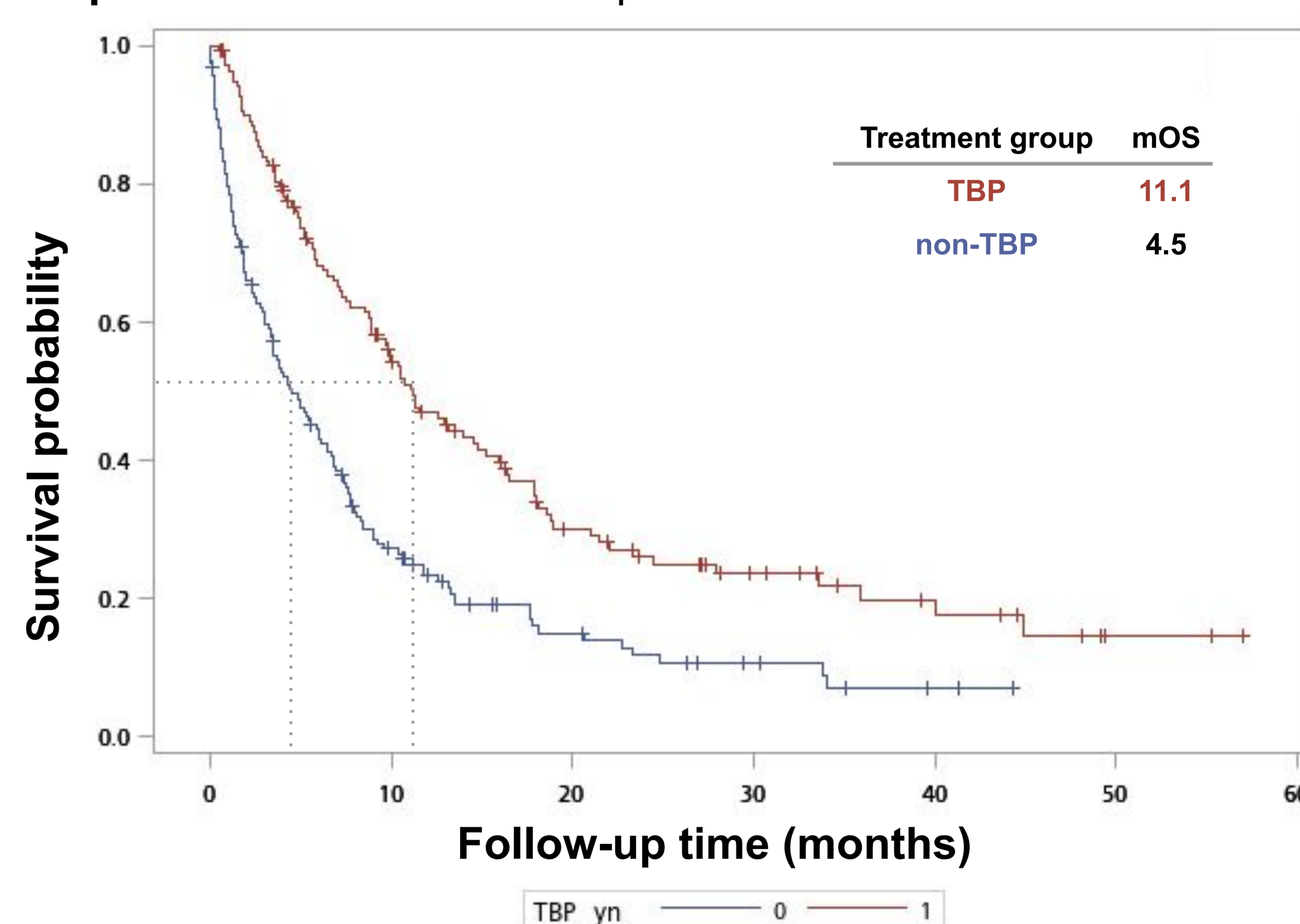
## Result

- A total of 307 aNSCLC were included.
- With median 6.2 (2.0-13.1) months follow-up time, the **TBP group** had a **longer overall survival (OS)** than the switched group (**median OS: 11.1 vs. 4.5 months, P < 0.01**). (Table 1) (Graph 1)

Table 1. Patient Characteristics

Characteristic	TBP (n=141, 45.9%)	non-TBP (n=166, 54.1%)
Age (range)	63.0 (34-89)	63.8 (33-87)
Sex		
Male	40 (28.4%)	42 (25.3%)
Female	101 (71.6%)	124 (74.7%)
ECOG performance		
0	19 (16.8%)	27 (20.6%)
1	83 (73.4%)	92 (70.2%)
PD-L1 ≥ 50%	82 (64%)	89 (58.9%)
Progression pattern		
Enlarge	54 (38.3%)	57 (34.3%)
New metastasis	53 (37.6%)	48 (28.9%)
Both	32 (22.7%)	59 (35.5%)

Graph 1. Survival curve for all patients



## Conclusion

While the TBP group was associated with better OS, additional studies are needed to further validate our findings.