

2025-RA-3200-WCLC: Tumor Treating Fields for Patients with Metastatic Non-small Cell Lung Cancer: Real World First Experience

Conference on Lung Cancer

Miami Cancer Institute

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INTRODUCTION

- **Tumor Treating Fields (TTFields)** are frequency-specific alternating electric fields
 - Disrupt mitosis of cancer cells¹
 - May elicit a downstream antitumor immune effect²
- FDA-approved in 10/2024 for the treatment of metastatic non-small cell lung cancer (mNSCLC)
- Overall survival benefit reported in the phase III LUNAR study³
- The objective of this analysis was to report the following outcomes for patients treated in the United States post-FDA approval:
 - Demographics
 - Usage
 - Systemic therapy

METHODS

- Data were collected from the devicemanufacturer database for patients with mNSCLC that:
 - Progressed on or after platinumbased therapy
 - Were prescribed TTFields by a certified prescriber
- Baseline patient characteristics and treatment details were collated
- Usage was calculated for those who had used the device for at least one month

DISCUSSION AND CONCLUSION

Actionable Take Away Message

- Growth in TTFields uptake was observed after FDA-approval for patients with mNSCLC
- Most patients were treated with an immune-checkpoint inhibitor (ICI)
- Usage patterns appear similar to those observed in the phase III LUNAR study

Future Direction for Research

Further patterns of use and toxicity data will be important to assess utility and benefit of TTFields with contemporary systemic therapies of mNSCLC in real life clinical practice

REFERENCES

¹Giladi, M et al. Scientific Reports 2015, doi:10.1038/srep18046

²Voloshin, T et al. Cancer Immunology, Immunotherapy 2020, doi:10.1007/s00262-020-02534-7

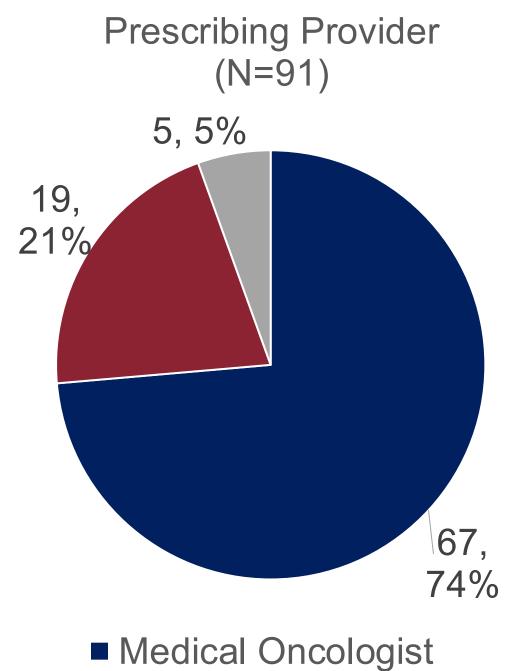
³Leal, T et al. The Lancet Oncology 2023, doi:10.1016/S1470-2045(23)00344-3

RESULTS

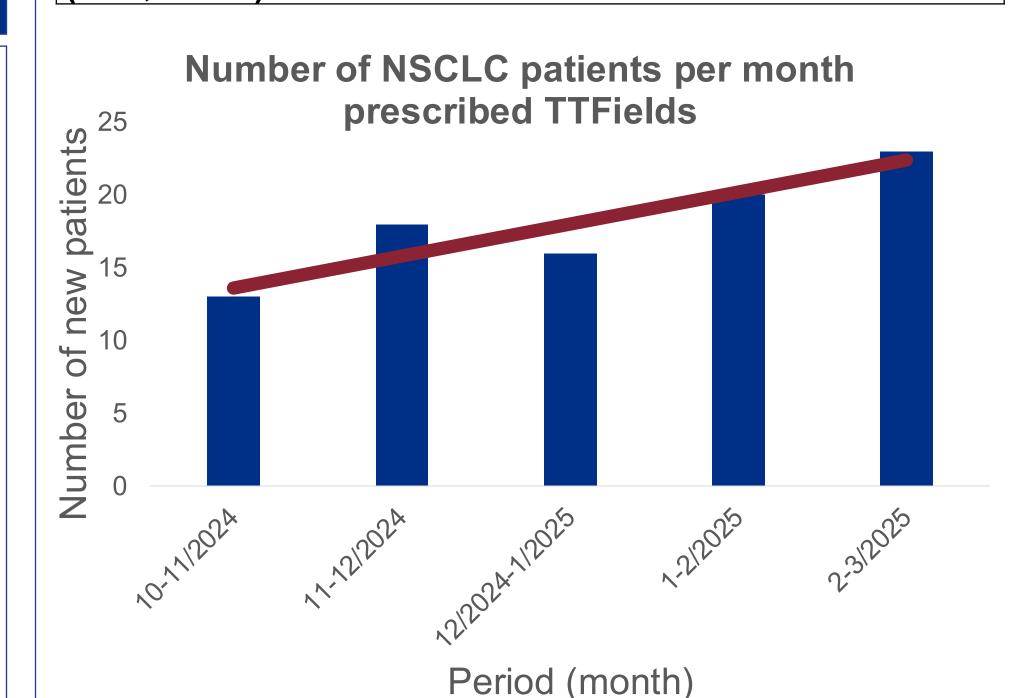
- The data cutoff window for this analysis was March 7, 2025
- A total of 91 patients were prescribed TTFields
- 62 patients (68%) were able to start TTFields

Patient and Treatment Characteristics (N=62)

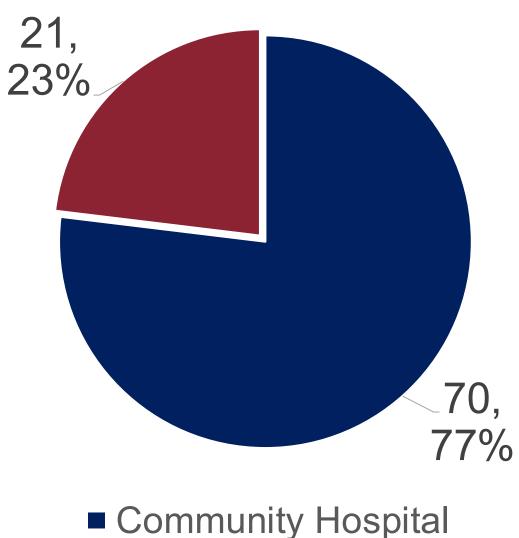
Patient and Treatment Characteristics (N=62)	
Variable	N (%)
Age at Diagnosis, median (IQR)	66 (60-72)
Sex	
Female	34 (55)
Male	28 (45)
Histology	
Adenocarcinoma	43 (69)
Squamous cell carcinoma	16 (26)
Other	3 (5)
Concurrent systemic therapy	
Docetaxel-based	27 (44)
ICI	32 (52)
Both	3 (5)
ICI used in any treatment line	
Yes	58 (94)
No	4 (6)
TTFields usage, median hours per day	12 (9-16)
(IQR, N=32)	•



- Radiation Oncologist
- Other Disciplines







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