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INTRODUCTION

Real-world evidence (RWE) on **cemiplimab plus chemotherapy** in the Spanish population with advanced non-small cell lung cancer (NSCLC) remains limited.

This study aimed to evaluate **effectiveness, safety, and clinical-biological prognostic factors** in a multicenter real-world cohort.

METHODS

8 Spanish academic centers
52 patients with advanced NSCLC

STUDY DESIGN

Retrospective observational multicenter study

TREATMENT

First-line cemiplimab + histology-directed chemotherapy

FOLLOW-UP

Median follow-up: 23.5 months

SURVIVAL ANALYSIS

PFS and OS analyzed using the Kaplan–Meier method

PROGNOSTIC FACTORS

Univariable and multivariable Cox proportional hazards models

DISCUSSION AND CONCLUSION

First-line cemiplimab plus chemotherapy demonstrates high real-world effectiveness in advanced NSCLC, with an ORR approaching 80%. **Brain and liver metastases identify a high-risk subgroup with a significantly poorer prognosis.**

ACTIONABLE TAKE-AWAY MESSAGE

Assessing metastatic location, particularly brain and liver involvement, may help identify patients at higher risk of poorer outcomes in routine practice.

FUTURE DIRECTION FOR RESEARCH

Prospective validation in larger real-world cohorts is needed to confirm these findings and refine prognostic stratification according to metastatic location.

REFERENCES & ACKNOWLEDGEMENTS

KEY REFERENCES

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- Makharadze T, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in advanced NSCLC: 2-year follow-up from the phase 3 EMPOWER-Lung 3 part 2 trial. J Thorac Oncol. 2023;18:755–768. doi:10.1016/j.jtho.2023.03.008.

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ARTIFICIAL INTELLIGENCE USE DISCLAIMER

OpenAI ChatGPT was used as a supportive tool for language editing, visual layout, and graphical presentation of author-provided aggregate study data.

All data, statistical results, scientific interpretation, and final content were reviewed and approved by the authors. AI did not replace independent clinical or scientific judgment.

RESULTS

First-line cemiplimab plus chemotherapy showed high real-world activity, with an ORR of 79.6%, median PFS of 10.3 months, and median OS of 15.0 months.

ORR
79.6%

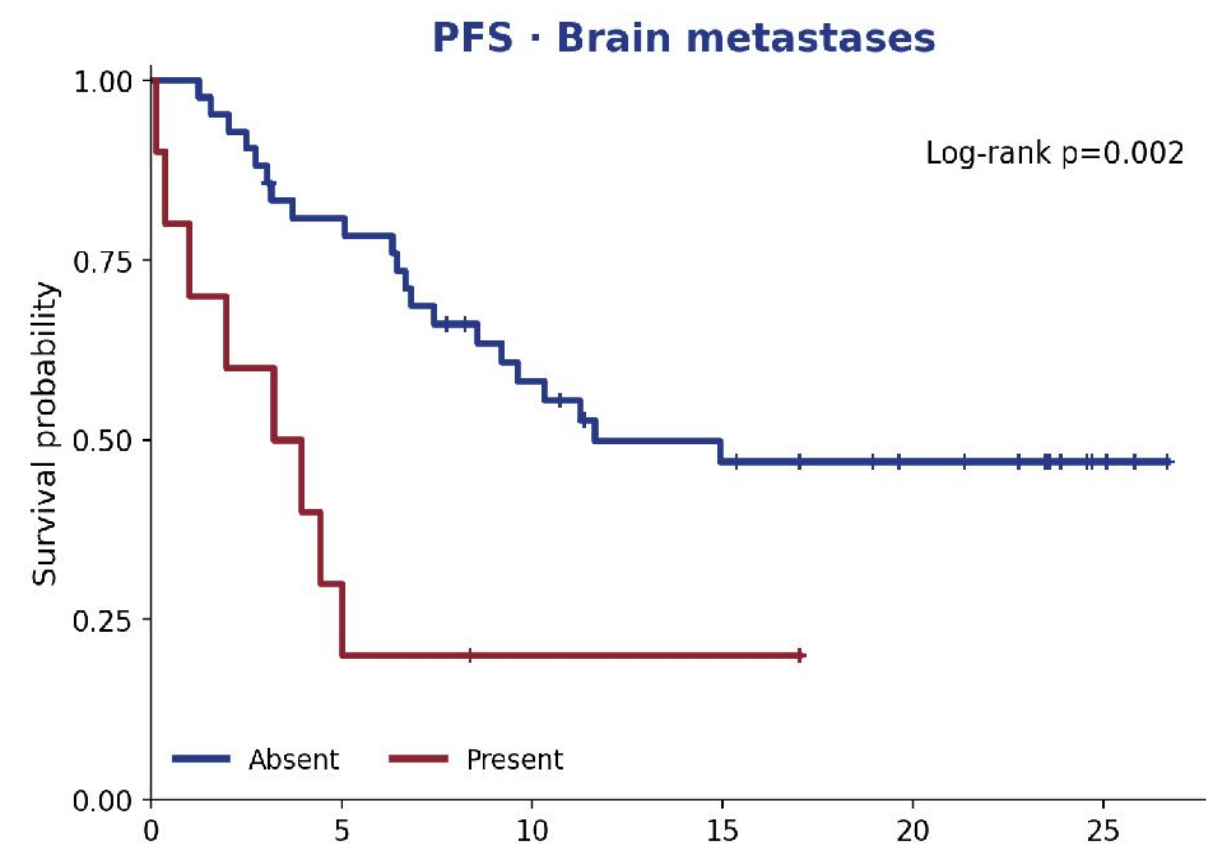
MEDIAN PFS
10.3 months

MEDIAN OS
15.0 months

BASELINE CHARACTERISTICS (n=52)

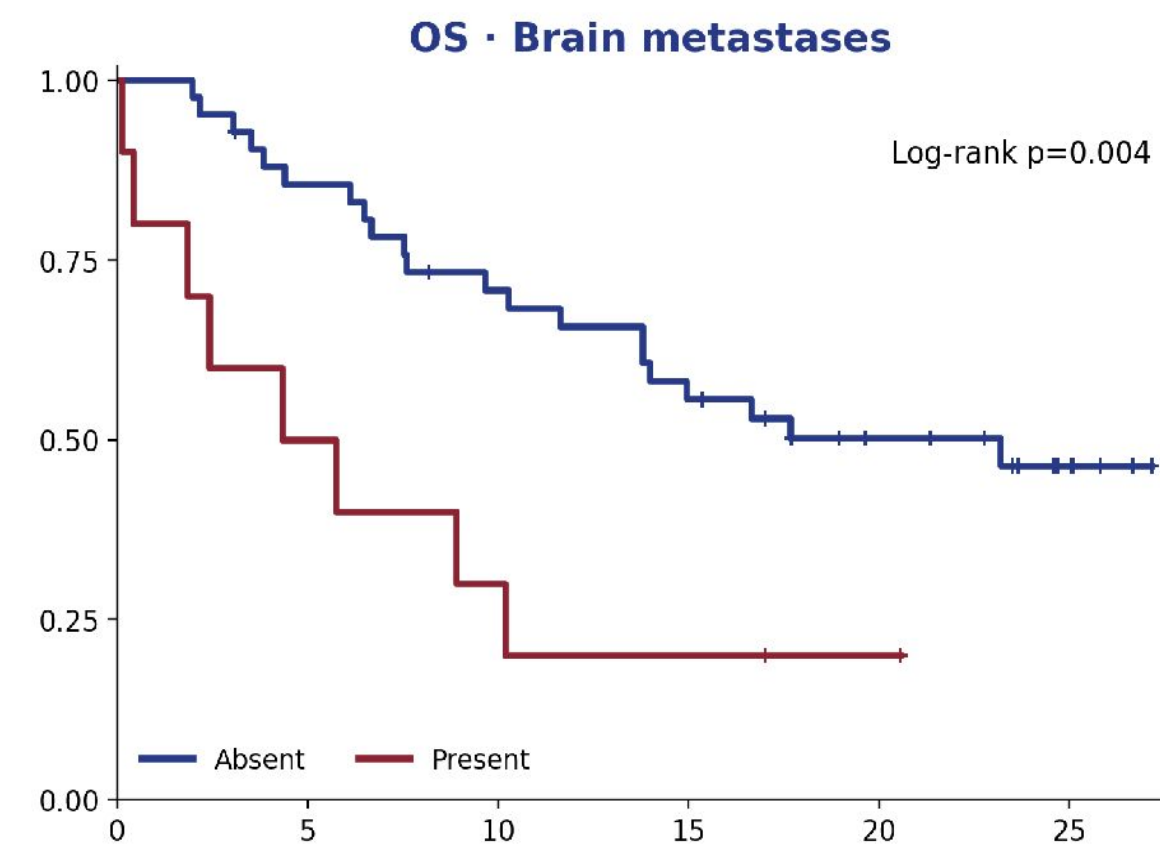
Median age	63.5 y (IQR 14)
Male	76.9%
Adenocarcinoma	75.0%
ECOG PS 1	69.2%
Stage IV	90.4%
PD-L1 ≥50%	48.1%
High LDH	29.4%
dNLR >3	36.5%
Brain metastases	19.2%
Liver metastases	19.2%

SURVIVAL BY METASTATIC SITE



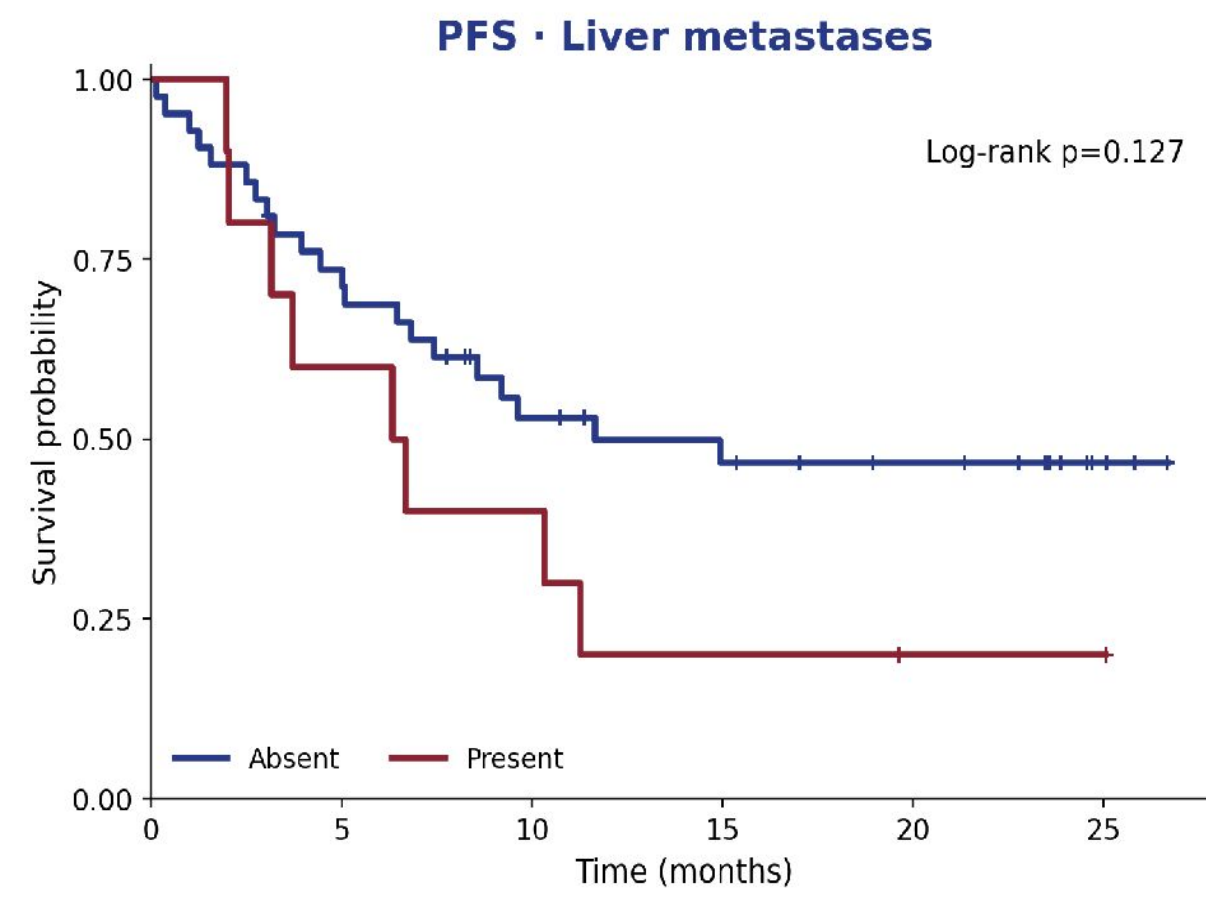
At risk

Absent	42	33	22	16	12	4
Present	10	3	1	1	0	0



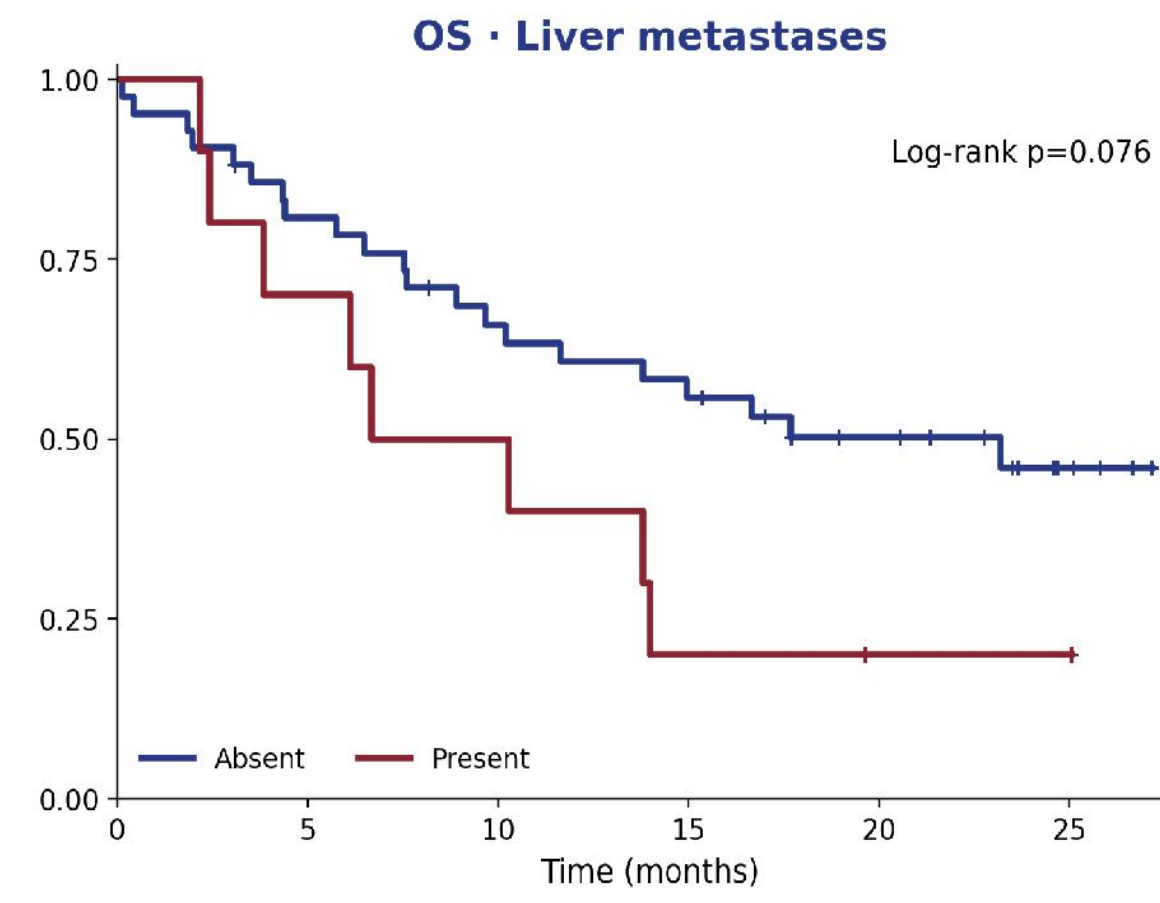
At risk

Absent	42	35	28	22	15	5
Present	10	5	3	2	1	0



At risk

Absent	42	30	19	15	11	3
Present	10	6	4	2	1	1



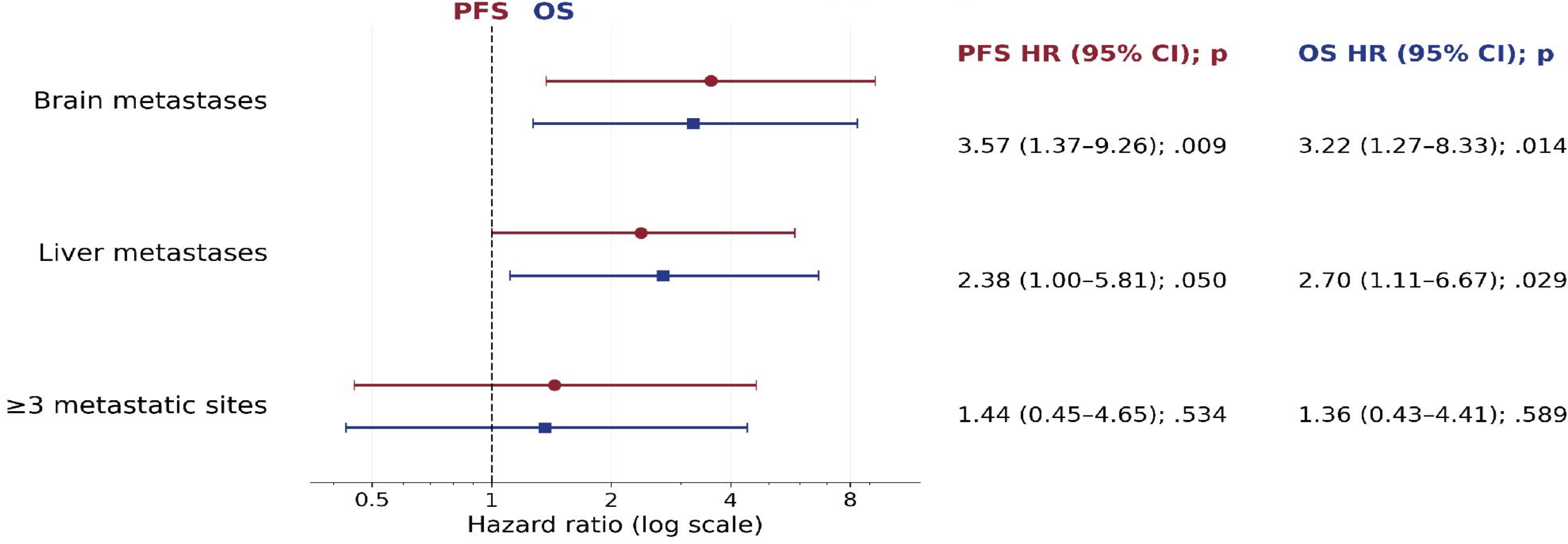
At risk

Absent	42	33	26	22	15	4
Present	10	7	5	2	1	1

PD-L1 expression was not significantly associated with survival (p=0.422).

KM/log-rank analyses are unadjusted; adjusted HRs are shown in the multivariable Cox model below.

MULTIVARIABLE COX MODEL



30% of patients experienced irAEs

IMMUNE-RELATED ADVERSE EVENTS

Of these, 33.3% were grade ≥3

Recorded irAE type, any grade (n=16)

Pulmonary	25.0
Thyroid	12.5
Hepatic	12.5
Digestive	6.3
Other	43.8

Exploratory association: longer PFS/OS with irAEs, but not statistically significant (PFS p=0.132; OS p=0.242).