

Real-world analysis of outcomes of first-line chemo-immunotherapy in patients with extensive disease small cell lung cancer (ED-SCLC)

Núria Zellweger¹, Sabine Schmid², Martina Bertschinger³, Christine Waibel⁴, Ferdinando Cerciello⁵, Patrizia Frösch⁶, Michael Mark⁷, Adrienne Bettini⁸, Pirmin Häuptle⁹, Veronika Blum¹⁰, Tanja Litke¹¹, Fabrice Helfenstein¹¹, Martin Früh², Laetitia Mauti³, Sacha Rothschild¹

¹University Hospital Basel, Basel, ²Cantonal Hospital St. Gallen, ³Cantonal Hospital Winterthur, Winterthur, ⁴Cantonal Hospital Baden, Baden, ⁵University Hospital Bern, Bern, ⁶Oncology Institute of Southern Switzerland, Locarno, ⁷Cantonal Hospital Graubünden, Chur, ⁸Hospital Fribourg, Fribourg, Switzerland, ⁹Cantonal Hospital Baselland, Liestal, ¹⁰Cantonal Hospital Lucerne, Lucerne ¹¹University Hospital Basel, Clinical Trial Unit, Basel

BACKGROUND

- SCLC accounts for approximately 13% of lung cancer diagnoses¹
- Platinum and etoposide in combination with an anti-PD-L1 inhibitor is standard of care 1st-line therapy in patients with ED-SCLC based on the 2-month improvement in median overall survival (OS) in two randomized phase III trials^{2,3}
- Yet, the efficacy and safety of first line chemo-immunotherapy in patients with ED-SCLC in a real-world setting remains unclear

RESEARCH QUESTION

- How does real-world data of 1st-line anti-PD-L1 inhibition in combination with platinum-based chemotherapy for ED-SCLC compare to results of pivotal trials?

METHODS

- Retrospective analysis in 10 Swiss cancer centers between 10/2018 and 10/2021
- Inclusion criteria
 - ED-SCLC
 - 1st-line treatment with platinum-based chemotherapy + anti-PD-L1 inhibitor
- Assessment of overall response rate (ORR) using RECIST v1.1
- Analysis of progression-free survival (PFS) and OS using Kaplan-Meier method
- Statistical analysis with SAS v 9.4
- Approved by Ethics Committee Northwest and Central Switzerland (2021-01228)

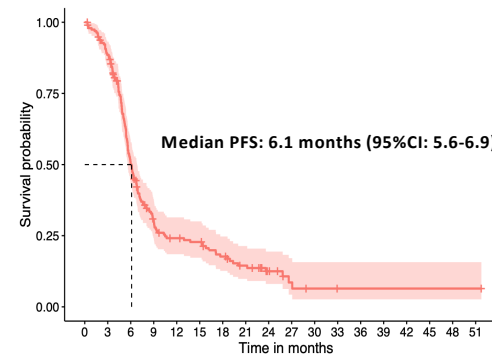
PATIENT CHARACTERISTICS

	n = 200
Gender	
• Female	41.5 %
• Male	58.5 %
ECOG Performance Status (PS)	
• 0	22.1 %
• 1	52.6 %
• ≥2	25.3 %
Smoking history	
• Current	62.5 %
• Former	37.5 %
Stage at initial diagnosis	
• LD-SCLC	7.5 %
• ED-SCLC	92.5 %
Brain metastasis at diagnosis	24.5 %
Liver metastasis at diagnosis	39.0 %

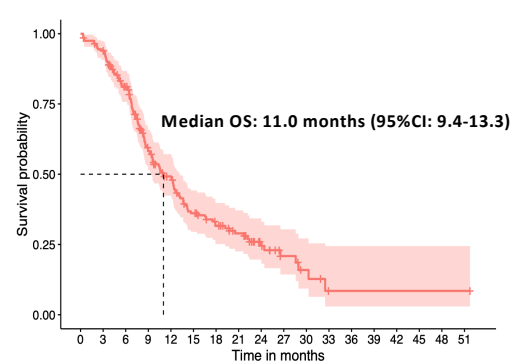
TREATMENT CHARACTERISTICS

	n = 200
Anti-PD-L1 inhibitor	
• Atezolizumab	95.5 %
• Durvalumab	4.5 %
Chemotherapy	
• Cisplatin	7 %
• Carboplatin	93 %

PROGRESSION-FREE SURVIVAL



OVERALL SURVIVAL



RESPONSE RATES

Complete remission (CR)	4.6%
Partial remission (PR)	70.6%
Stable disease (SD)	10.8%
Progressive disease (PD)	13.9%
Overall response rate (ORR)	45.2%
Median duration of response	2.6 months

MOST FREQUENT SITES OF TUMOR PROGRESSION

Primary lung tumor	21.5 %
Lymph nodes	19.5 %
Brain	15.4 %
Bone	6.7 %
Pleura	6.2 %

ADVERSE EVENTS

Immune-related adverse events	25 %
Treatment interruption	22 %

CONCLUSIONS

- One of the largest retrospective analysis of patients with ED-SCLC treated with 1st-line chemo-immunotherapy including patients with ECOG PS ≥2
- Platinum-based chemotherapy with an anti-PD-L1 inhibitor is feasible with no unexpected toxicities and clinical efficacy that is similar to the results of pivotal trials
- Evaluation of predictive markers for response to chemo-immunotherapy is needed and tissue analysis of our patient cohort is ongoing

REFERENCES

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CORRESPONDENCE

Núria Zellweger – nuria.zellweger@usb.ch
Sacha Rothschild – sacha.rothschild@usb.ch