Poster: HSD9

Access to Precision Medicine in Mexico: Differences of Therapy Patterns for ALK+ and EGFR+ Non-Small Cell Lung Cancer (NSCLC) Patients

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Introduction

- Lung cancer (LC) is one of the leading causes of premature mortality in Mexico. It was the second most diagnosed cancer and the leading cause of mortality in 2020.
- Around 98% of patients with Non-Small Cell Lung Cancer (NSCLC) in Mexico are diagnosed with locally advanced or metastatic stages due to the absence of early clinical symptoms and the lack of screening programs. From these patients, about 35% present an epidermal growth factor receptor mutation (EGFR+) and 7.6% anaplastic lymphoma kinase rearrangements (ALK+).
- Diagnosis and treatment for NSCLC in Mexico follow international standards, however, the fragmented healthcare system in Mexico often conditions treatments according to what is available in each institution even though there is a wide number of therapies approved in the country.

Objective

- Describe the main characteristics of adult patients with NSCLC in Mexico and characterize the therapy patterns for ALK+ and EGFR+ NSCLC patients in both private and public healthcare sectors between July 2021 and June 2022 using real-world data available in the country.

Materials and Methods

- This was an observational, descriptive, cross-sectional study using real-world data from a sample of 330 adult NSCLC patients who received care from oncologists between July 2021 and June 2022.
- We used the IQVIA Oncology Dynamics Database to perform descriptive analyses regarding demographic characteristics and characterize therapy patterns for ALK+ and EGFR+ patients in both private and public sectors.

Results

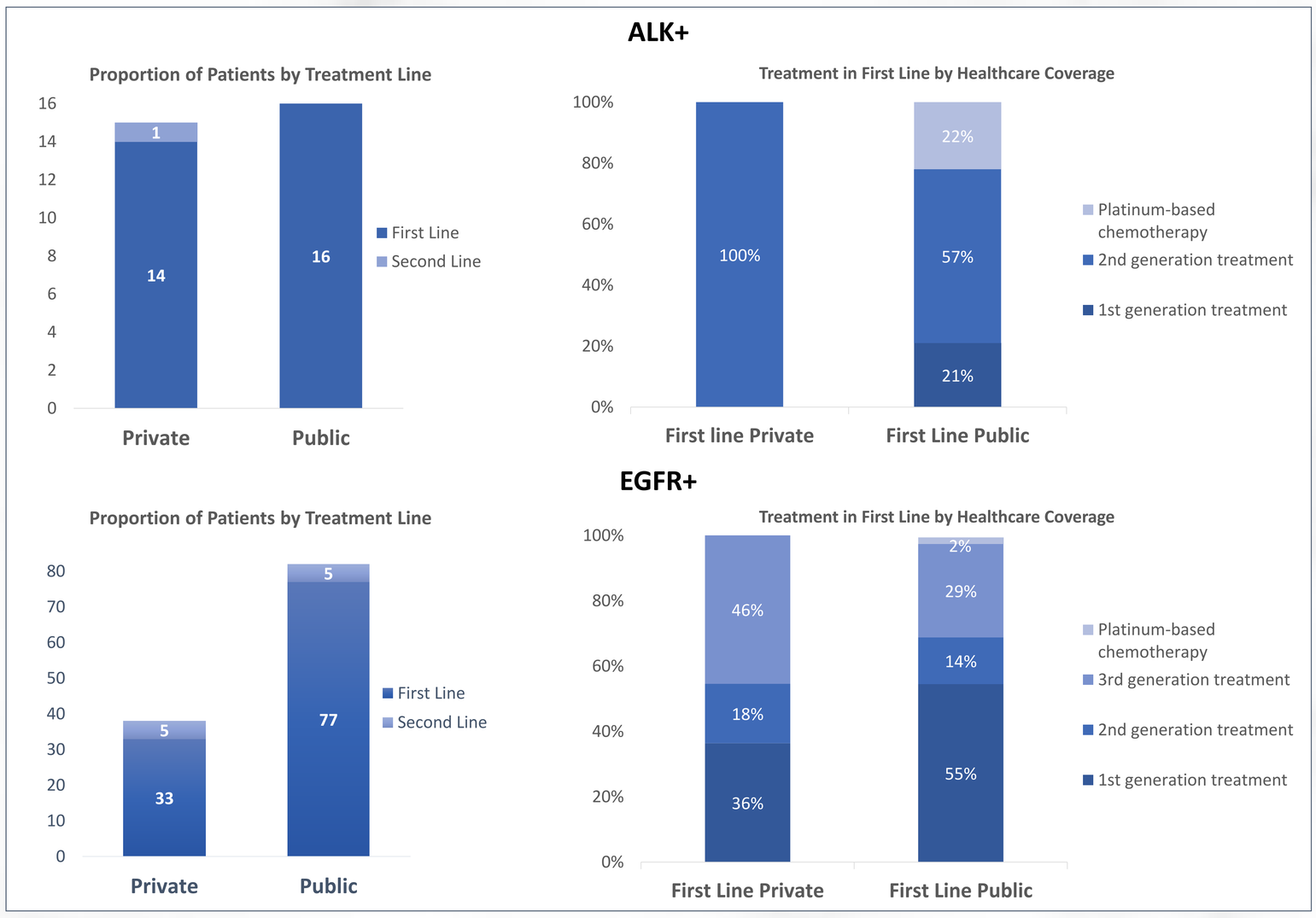
- From the 330 patients analyzed, 64.5% were from public & 35.5% from private, 120 (36%) were EGFR+ and 31 (9%) were ALK+.
- For the ALK+ patients in 1L, all were treated with targeted therapies in private sector, while 88% were treated with targeted therapies and 20% with platinum-based chemotherapy. For EGFR+ patients in 1L, targeted therapy was given to ,only 2% were receiving PBC in the public sector

Table 1. Demographics & patient characteristics per sector

	Private	Public*	Overall
N (%)	117 (35.5)	213 (64.5)	330 (100)
Gender - N (%)			
Female	43 (36.8)	75 (35.2)	118 (35.8)
Male	74 (63.2)	138 (64.8)	212 (64.2)
Age group - N (%)			
21-40 years old	0 (0.0)	13 (6.1)	13 (3.9)
41-50 years old	13 (11.1)	27 (12.7)	40 (12.1)
51-60 years old	40 (34.2)	77 (36.2)	117 (35.5)
61-70 years old	50 (42.7)	68 (31.9)	118 (35.8)
71+ years old	14 (12.0)	28 (13.1)	42 (12.7)
Stage at diagnosis - N (%)			
I	1 (0.9)	1 (0.5)	2 (0.6)
II	3 (2.5)	4 (1.9)	7 (2.1)
III	1 (0.9)	6 (2.8)	7 (2.1)
IV	112 (95.7)	202 (94.8)	314 (95.2)
ALK Status - N (%)			
Not tested	25 (21.3)	84 (39.2)	109 (33.0)
Awaiting results	1 (0.9)	10 (4.7)	11 (3.3)
No (wild)	76 (65.0)	104 (48.6)	180 (54.3)
Yes (mutant)	15 (12.8)	16 (7.5)	31 (9.4)
EGFR Status - N (%)			
Not tested	13 (11.2)	59 (27.7)	72 (21.8)
Awaiting results	0 (0.0)	9 (4.2)	9 (2.7)
No (wild)	66 (56.4)	63 (29.6)	129 (39.1)
Yes (mutant)	38 (32.5)	82 (38.5)	120 (36.4)

*Public: Includes all institutions in public sector from Mexico: IMSS, ISSSTE SSA, PEMEX, SEDENA, SEMAR.

Figure 1. Treatment patterns for ALK+ and EGFR+ patients per sector (private/public)



ALK+ treatments: 1st Gen: crizotinib, 2nd Gen: alectinib, brigatinib. EGFR+ treatments: 1st Gen: gefitinib, 2nd Gen: afatinib, erlotinib, 3rd Gen: osimertinib.

Conclusions

- Differences in between sectors are mainly due to a lower level of testing in the public sector.
- Targeted therapies are the standard of care in the private sector whereas the public sector has a high use of targeted therapies for EGFR+ but a lower use for ALK+. This inequality in access to innovative therapies for ALK+ patients in the public sector may result in a higher out-of-pocket expense for patients.

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