Treatment Patterns of Advanced EGFR-Positive Non-Small Cell Lung Cancer (NSCLC) in Latin America

Alves JS1, Watanabe de Oliveira R1, Tayar DO, Medina Y2, Osorio M3, Tabares M4, Tamayo C5, Kano B6, Muller Bernz I6

1Janssen-Cilag Farmaceutica, São Paulo, Brazil, 2 Janssen Pharmaceutical Companies of Johnson & Johnson, Bogotá D.C, CUN, Colombia, 3 IQVIA, Mexico City, DF, Mexico, 4IQVIA, Ciudad Autonoma de Buenos Aires, Argentina, 5IQVIA, Bogotá, CUN, Colombia, 6IQVIA, São Paulo, Brazil

INTRODUCTION

- Non-small cell lung cancer (NSCLC) is a common and lethal cancer. Epidermal growth factor receptor (EGFR) is a frequent mutation in NSCLC associated with a high clinical and economic burden for healthcare systems.
- There is an evidence need on characterizing treatment patterns and unmet needs in LATAM to support decision-making and improve patient outcomes

OBJECTIVES

- To describe the treatment patterns and diagnostic procedures of patients with NSCLC EGFR+ in Argentina, Brazil, Colombia and Mexico.

METHODS

A pragmatic literature review was conducted to identify evidence on treatment patterns and local guidelines for EGFR+ NSCLC.

This literature review facilitated the develop of a questionnaire for the gathering treatment patterns for advanced EGFR+ NSCLC across different treatment lines, to be used during individual double-blinded semi-structured online interviews with key-opinion leaders in the four selected countries.

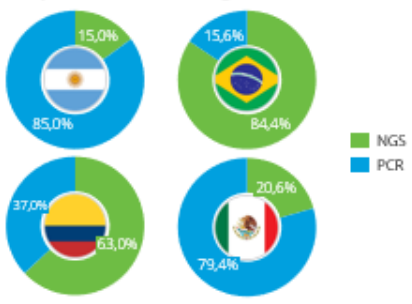
Fourty interviews were conducted (10 per country) between January and February 2023, each lasting up to 2 hours. The collected individual data were compiled, and data regarding diagnostic procedures, first-line treatment, and second-line treatment are presented as frequencies (in %) by country.“

The perspectives taken into account in the study were as follows: Argentina - Social Security system; Brazil, - private healthcare; Colombia - General Social Security System in Health (SGSSS); and Mexico - a combination of both public and private healthcare systems.“

RESULTS

Biomarker diagnosis methods vary across countries in the region, with higher prevalence of Next Generation Sequencing (NGS) reported in Brazil and Colombia, whilst Polymerase chain reaction (PCR) is still most prevalent method in Argentina and Mexico (**Figure 1**). Industry-sponsored programs were consistently cited as the primary source of funding."

FIGURE 1. Reported use biomarker diagnosis methods



1st line treatment:

The results for the 1st line are summarized in the **Figure 2**.

Colombia: The choice of treatment for EGFR+ NSCLC favored by healthcare professionals in Colombia is Osimertinib (67.6%).

Mexico: 1st generation of TKIs is the default choice for treating EGFR+ NSCLC (42,2%).

Argentina: Healthcare professionals were predominantly favor Osimertinib as the treatment option for EGFR+ NSCLC (48%).

Brazil: Osimertinib stands out as the choice for first-line option for treating NSCLC EGFR+ (76.9%), followed by 1st gen TKI (20.9%).

2nd line treatment:

The results for the 2nd line are summarized in the Figure 3.

Colombia: Healthcare professionals reported chemotherapy as the preferred second treatment option for EGFR+ NSCLC (32.9%).

Mexico: The second treatment option for EGFR+ NSCLC is composed of different combinations of chemotherapy, specifically Carboplatin + Pemetrexed at 22.2%.

Argentina: More than half of experts reported chemotherapy as the most prevalent second treatment option for EGFR+ NSCLC, especially Carboplatin + Pemetrexed (55.0%).

Brazil: It was reported that Carboplatin + Pemetrexed + Bevacizumab + Atezolizumab (22.2%) was the most reported option post-progression in EGFR+ NSCLC.

FIGURE 2. 1st line treatment

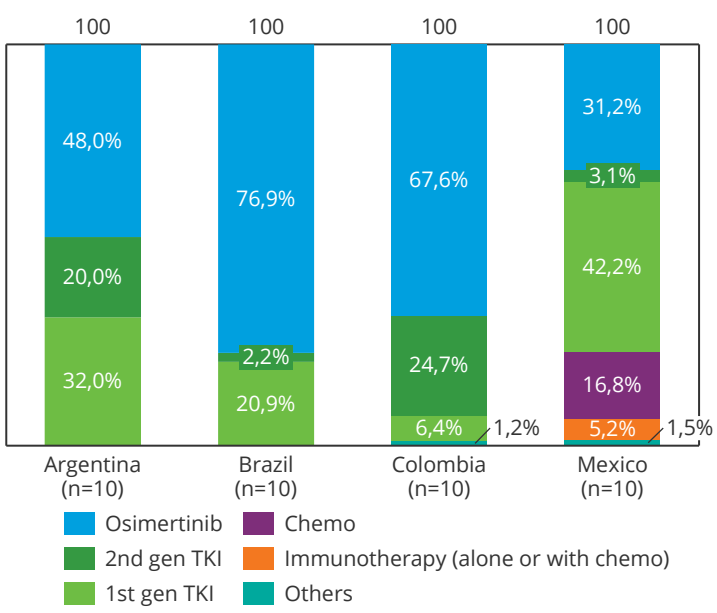
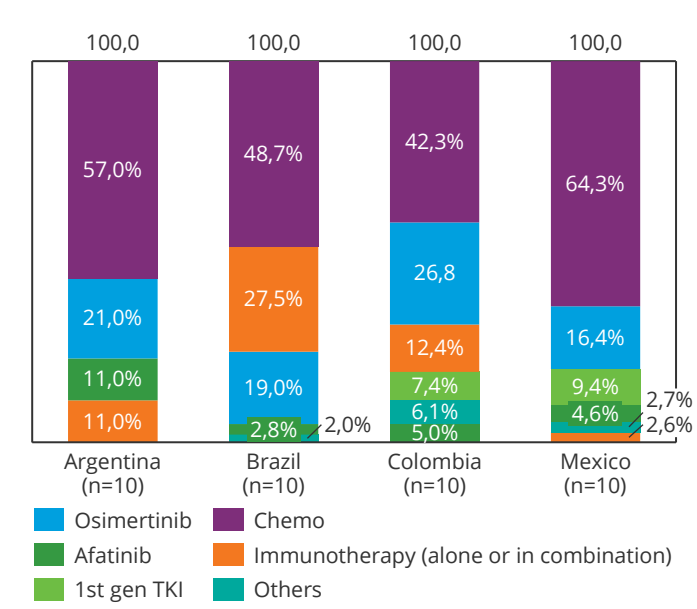


FIGURE 3. 2nd line treatment



KEY TAKEAWAY

Lack of access to new therapies, particularly a need for improved access to new targeted therapies in both initial and subsequent lines of treatment, along with the implementation of (NGS) technology, represents a significant unmet need in Latin American countries for EGFR+ NSCLC patients.

CONCLUSIONS

Physicians most frequently reported treating their patients with Osimertinib or 1st generation TKIs. Once patient progresses, options like chemotherapy are the most used for second and subsequent lines.

Information on the use of targeted-therapies in first and second-line treatment for the management of EGFR+ NSCLC is critical for decision makers, due to the high impact on health outcomes and impact on the patients' quality of life.

ACKNOWLEDGMENTS

We extend our heartfelt gratitude to the experts who generously shared their invaluable insights and expertise, making this research possible. Your contributions have been instrumental in shaping our understanding of this complex subject."

LUNG CANCER

REFERENCES:

Tian X, Gu T, Lee M-H, Dong Z. Challenge and countermeasures for EGFR targeted therapy in non-small cell lung cancer. Biochimica et Biophysica Acta (BBA) - Reviews on Cancer. 2022;1877(1):188645.

Harrison PT, Vyse S, Huang PH. Rare epidermal growth factor receptor (EGFR) mutations in non-small cell lung cancer. Semin Cancer Biol. 2020;61:167-79.

Rajendra A, Noronha V, Joshi A, Patil VM, Menon N, Prabhash K. Epidermal growth factor receptor-mutated non-small-cell lung cancer: A primer on contemporary management. Cancer Research, Statistics, and Treatment. 2019;

Presented at ISPOR EUROPE | Copenhagen, Denmark | 12-15 November 2023.