



ELEVATING LUNG CANCER CARE IN SPAIN

Sustaining Innovation While Closing Equity Gaps

EXECUTIVE SUMMARY

Spain is among Europe's leaders in lung cancer care, offering universal coverage, broad access to targeted therapies, and widespread biomarker testing. Comprehensive cancer centers, participation in global trials, and well-aligned national clinical guidelines provide a strong foundation for precision medicine. Yet challenges persist: regional variation in early detection, inconsistent re-biopsy practices, and delays in new therapy access due to decentralized health governance.

As a **Leading-level system**, Spain must now harmonize care delivery across autonomous communities and accelerate integration of next-generation tools like liquid biopsy, HER2-mutant NSCLC treatments, and artificial intelligence in diagnostics.

INTRODUCTION

Lung cancer is the **leading cause of cancer death** in Spain, with over **30,000 new cases annually**, and a growing burden of adenocarcinoma in non-smokers. Spain has embraced precision oncology with routine **EGFR, ALK, ROS1, BRAF, MET, RET, KRAS G12C, and PD-L1** testing. National guidelines from **SEOM and GECP** align with international protocols, and immunotherapies and targeted agents are broadly reimbursed.

However, implementation across Spain's 17 autonomous communities remains uneven, with delays in adopting new molecular diagnostics and treatments in some regions. Screening is not yet nationally implemented, and many patients are still diagnosed at advanced stages. Spain's position as a continental leader depends on aligning national excellence with consistent regional delivery.

CURRENT FRAMEWORK/SITUATION

Spain offers universal healthcare through the **Sistema Nacional de Salud (SNS)**. Tertiary centers such as **Hospital Vall d'Hebron, MD Anderson Madrid, and Hospital Clínic de Barcelona** offer advanced diagnostics and clinical trial access. Biomarker testing is reimbursed and often centralized through regional molecular networks. Immunotherapy and targeted therapies, including **osimertinib, alectinib, sotorasib, and nivolumab**, are available to eligible patients.

Nevertheless, access to newer agents may face delays due to regional HTA and formulary decisions. Re-biopsy and molecular re-testing at progression are not uniformly applied, and early detection remains limited, especially among underserved or rural populations. National cancer registries and clinical audit mechanisms exist but lack consistent HER2- or mutation-stratified survival reporting.



LUNG CANCER IN SPAIN

Key Issues and Policy Recommendations

Pillar	Fact	Barrier	Policy Recommendations
Infrastructure	Spain has an extensive network of accredited cancer centers and molecular labs...	...but regional disparities affect access to advanced diagnostics and clinical pathways.	Establish national lung cancer delivery standards and fund molecular hubs in underserved areas.
Access to Treatment	Most EMA-approved immunotherapies and targeted therapies are reimbursed...	...but adoption of new therapies varies by region, with delays in some autonomous communities.	Harmonize drug access timelines by creating fast-track pathways for precision therapies across all regions.
Research & Innovation	Spain participates actively in global and EU lung cancer trials...	...but trial recruitment is concentrated in major urban centers.	Expand trial networks into regional hospitals and create national platforms for patient-trial matching.
Awareness & Education	Awareness of lung cancer symptoms and smoking risks is moderately high...	...but stigma and late presentation remain common, especially in non-smokers and women.	Launch awareness campaigns tailored to younger and non-smoking populations to promote earlier help-seeking.
Survival Rates	Survival has improved for NSCLC due to therapy advances...	...but variation exists by region, and data is not disaggregated by mutation.	Require mutation- and subtype-specific survival reporting in national audits and cancer registries.
Early Detection & Palliative Care	No national LDCT screening program exists yet...	...and participation in pilot programs has been uneven.	Launch a coordinated national LDCT screening program with clear eligibility & quality controls.
Biomarker	EGFR, ALK, ROS1, KRAS G12C, BRAF, RET, MET, and PD-L1 are routinely tested upfront...	...but re-testing at relapse and HER2 mutation detection are inconsistently applied.	Mandate re-biopsy and HER2 inclusion in standard panels and expand liquid biopsy access.
Clinical Guidelines	SEOM and GECP guidelines align with ESMO and are regularly updated...	...but their regional implementation is inconsistent.	Integrate guideline adherence metrics into hospital quality audits and provide digital decision tools.
Reimbursement	New drugs are funded nationally, but timelines vary post-EMA approval...	...due to decentralized pricing and reimbursement processes.	Streamline national-regional coordination to shorten approval-to-access timeframes for lung cancer therapies.
Screening	Pilot LDCT programs have been implemented regionally...	...but national rollout is lacking, and high-risk populations are under-reached.	Scale up LDCT screening nationally, with outreach to smokers, ex-smokers, and at-risk occupational groups.



CONCLUSION

Spain has developed a **high-performing and innovative** lung cancer system with advanced diagnostics and widely available therapies. Its next step is to align regional systems under a coordinated national strategy that ensures equitable implementation of best practices. By addressing variation in diagnostics, treatment timelines, and early detection, Spain can set a continental standard for equitable precision oncology.



KEY POLICY MESSAGES

1

Spain has near-universal access to advanced lung cancer care but faces equity and timeline challenges across autonomous regions.

2

Routine molecular testing is widespread, yet re-biopsy at progression and HER2 testing require standardization.

3

A national LDCT screening strategy is essential to enable earlier-stage diagnosis and reduce mortality.

4

Harmonization of therapy access and monitoring of real-world outcomes will elevate Spain's leadership position.

CALL TO ACTION

- **Implement a national LDCT lung cancer screening program**, integrating risk stratification and primary care referral.
- **Mandate re-biopsy and HER2 mutation testing** in clinical guidelines, supported by liquid biopsy infrastructure.
- **Accelerate reimbursement of new therapies** across regions through centralized HTA-regional coordination mechanisms.
- **Expand public education campaigns** targeting non-smokers, women, and underserved regions to reduce diagnostic delays.
- **Publish regionally stratified mutation-specific outcomes** to guide policy improvements and ensure uniform excellence.