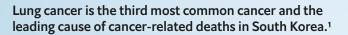
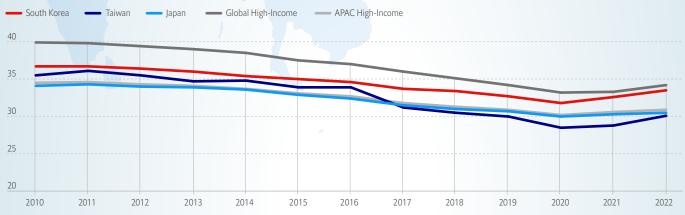
Lung cancer in South Korea: policy response to improving lung cancer care



The age-standardised incidence rates (ASIR) in South Korea are notably higher than other high-income countries in the Asia-Pacific (APAC) region and the high-income countries in East Asia.

Lung cancer incidence rate per 100,000 (2010-2022)



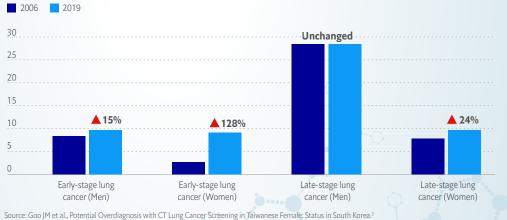
Source: Institute for Health Metrics Evaluation. Used with permission. All rights reserved.² All figures are age-standardised

The overall ASIR for lung cancer has been relatively stable in South Korea, however the lung cancer is increasing among females at a faster rate than among males.

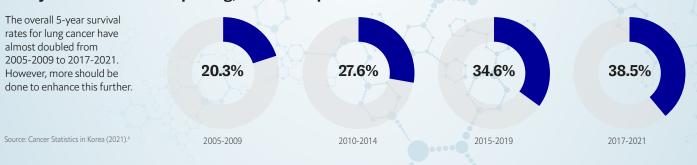


Lung cancer rates in South Korea by gender

Age-standardised incidence per 100,000. Early-stage (localised stage) and late-stage (regional and distant stages).



Five-year survival rates improving, but at slow pace

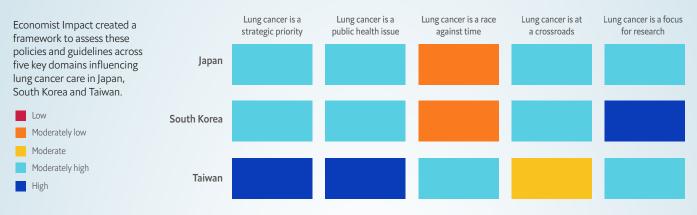


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How prepared is South Korea?

Success against lung cancer requires a wide range of policies or guidelines that impact prevention, early detection, treatment, and patient support throughout the patient journey.



South Korea excels with a 'high' score in the research domain, reflecting its strong investment in research and development (R&D) and a thriving biopharmaceutical sector. The country also performs well in the strategic priority, public health challenge, and lung cancer at crossroads domains, scoring 'moderately high'. In the race against time domain, South Korea's performance is 'moderately low' due to the absence of specific diagnostic referral guidelines and expedited pathways for suspected patients, a concern that has remained unaddressed since the last evaluation.

While South Korea demonstrates overall strong performance, enhancements could focus on:



Formulating a national lung cancer plan with clear targets.



Establishing a dedicated lung cancer patient organisation and involving civil society in the Health Technology Assessment (HTA) process could further enhance care.

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Guidelines for well-defined referral pathways for improved psychological support and improved survivorship programmes.

"We need to build a support system for patients throughout their treatment journey, including during palliative care and psychological support. We also need to have programmes for the survivors. This is important because we want lung cancer patients to live beyond five years in good health."

In Kyu Park

Professor, Department of Thoracic and Cardiovascular Surgery, Seoul National University Hospital, Seoul National University College of Medicine; Chief, Lung Cancer Center, Seoul National University Cancer Hospital; Director of Public Relation, Korean Association for Lung Cancer.

South Korea's effective strategies...

Efforts to improve screening and early detection

South Korea launched the National Lung Cancer Screening
Programme in 2019, targeting smokers and ex-smokers aged 54-74,
based on the successful 2018 Korean Lung Cancer Screening
Project (K-LUCAS) pilot study.⁵

Investment in R&D and innovative pharmaceuticals

Domestic companies are intensifying R&D for producing innovative pharmaceuticals. In 2023, the locally developed drug, Leclaza (lazertinib), secured swift approval and reimbursement coverage for expanded lung cancer treatment.⁸

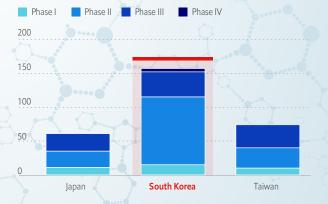
Big data for cancer management

Korea's government is harnessing big data to combat cancer, using comprehensive cancer registry data. The National Cancer Data Center, established in 2021, promotes the creation, use, and secure management of high-quality cancer data.⁹

South Korea's R&D investment

South Korea allocated 4.93% of its GDP to research and development (R&D) expenditures* in 2021.⁶ Furthermore, from 2014 to 2023, South Korea has the highest number of lung cancer clinical trials by phase in the region.⁷

Number of lung cancer clinical trials, 2014-23



Source: World Health Organization. International Clinical Registry Platform.⁷

*According to World Bank the gross domestic expenditures on research and development (R&D), expressed as a percent of GDP, include both capital and current expenditures in the four main sectors: Business enterprise, Government, Higher education and Private non-profit. R&D covers basic research, applied research, and experimental development. Available at: https://databank.worldbank.org/metadataglossary/jobs/series/GB.XPD.RSDV.GD.ZS

The way ahead...



Awareness and accessibility needed for improved lung cancer screening uptake

South Korea's National Lung Cancer Screening Programme, though relatively new, struggles with low uptake rates, with only 23% of eligible individuals screened in 2019 and 2020.¹⁰ One of the key issues identified is the lack of public awareness programmes. While the government does reach out to every eligible individual via mail, **there are no targeted campaigns to encourage screening**.

Another factor impacting the screening uptake, especially among lower-income individuals, is the **accessibility of screening units**. Screening units are available at the provincial level in South Korea. The government regulates these facilities and ensures their quality through audits. Yet, their capacity and expertise differ.¹¹

Enhancing public awareness through targeted multimedia campaigns and improving accessibility particularly in underserved areas, could boost the screening uptake rates.



Regional collaboration could improve lung cancer care

Support patient throughout the lung cancer journey In South Korea, the **process of approving innovative treatments**, particularly anticancer drugs and immunomodulators, can be time-consuming. For instance, in 2020, the median approval period for these types of treatments was 290 days.¹²

Japan, South Korea, and Taiwan, despite the existence of distinct drug approval and reimbursement systems, could gain from regional collaboration. The similarities in genetic backgrounds, lung cancer outcomes, and treatment strategies among these countries present a substantial opportunity for **collaboration in conducting cost-effectiveness analyses**, which could support approval and reimbursement decision-making.

In South Korea the government supports cancer patients by lowering their copayments from 20-30% to 5%.¹³ However, this support system needs to extend **beyond financial benefits**.

Patient organisations, though currently small and unstructured, should be strengthened to **amplify patients' voices and improve care**. The government has begun to include patients in multidisciplinary team care.¹⁴

Experts shared a significant need to **improve psychological support and referral pathways** for lung cancer patients. Additionally, as 5-year survival rates are improving, a robust survivorship programme is needed.

References

- ¹ Cancer Statistics in Korea. Available at https://e-crt.org/journal/view.php?number=3602
- ² Institute for Health Metrics Evaluation. Used with permission. All rights reserved.
- ³ Goo JM, Jung KW, Kim HY, Kim Y. Potential Overdiagnosis with CT Lung Cancer Screening in Taiwanese Female: Status in South Korea. Korean J Radiol. 2022 Jun;23(6):571-573. https://doi.org/10.3348/kjr.2022.0190 ⁴ Cancer Statistics in Korea. Available at https://e-crt.org/journal/view.php?number=3602
- ⁵ Park J, Lee J, Kim Y. Public opinion on implementing the National Lung Cancer Screening Program in Korea. Transl Lung Cancer Res. 2021 Mar;10(3):1355-1367. doi: 10.21037/tlcr-20-865. PMID: 33889515; PMCID: PMC8044494. ⁶ World Bank data. Available at https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?locations=KR

⁷World Health Organization. International Clinical Registry Platform. Available at https://trialsearch.who.int/AdvSearch.aspx

⁸ Expansion of Leclaza's first-line treatment indications offers significant benefits to patients. Available at https://medigatenews.com/news/1573986957

9 National Cancer Center Data. Available at: https://www.cancerdata.re.kr/main/intro/centerIntro

¹⁰ Poon C, Wilsdon T, Sarwar I, Roediger A, Yuan M. Why is the screening rate in lung cancer still low? A seven-country analysis of the factors affecting adoption. Front Public Health. 2023 Nov 9;11:1264342. doi: 10.3389/fpubh.2023.1264342. PMID: 38026274; PMCID: PMC10666168.

¹¹ Park J, Lee J, Kim Y. Public opinion on implementing the National Lung Cancer Screening Program in Korea. Transl Lung Cancer Res. 2021 Mar;10(3):1355-1367. doi: 10.21037/tlcr-20-865. PMID: 33889515; PMCID: PMC8044494. ¹² Choi H, Lee H, Park B, Kim C, Lee J. Changes in the Review Period of Drug Application and a Drug Lag from the FDA and the EMA: An Industry Survey in South Korea Between 2011 and 2020. Ther Innov Regul Sci. 2023 May;57(3):552-560. doi: 10.1007/s43441-022-00486-x. Epub 2022 Dec 20. PMID: 36539577; PMCID: PMC10133380.

¹³ Choi DW, Kim SJ, Kim S, Kim DW, Jeong W, Han KT. Cancer care patterns in South Korea: Types of hospital where patients receive care and outcomes using national health insurance claims data. Cancer Med. 2023 Jul;12(13):14707-14717. doi: 10.1002/cam4.6093. Epub 2023 May 18. PMID: 37199387; PMCID: PMC10358188.

¹⁴ Maeng CH, Ahn HK, Oh SY, Lim S, Kim BS, Kim DY. Practice patterns of multidisciplinary team meetings in Korean cancer care and patient satisfaction with this approach. Korean J Intern Med. 2020 Jan;35(1):205-214. doi: 10.3904/kjim.2019.189. Epub 2019 Dec 6. PMID: 31795023; PMCID: PMC6960038.

To find out more, download our report Breathing in a new era: A comparative analysis of lung cancer policies in Taiwan, South Korea and Japan