



Lung Cancer Factsheet: Insights & Key Developments

Key Insights on Lung Cancer Care and Infrastructure

Core Pillars:

- 1. Infrastructure
- 2. Treatment Access, Research Funding and Awareness Campaigns
- 3. Survival Rates, Early Detection and Palliative Care
- 4. Utilization of Biomarkers
- 5. Clinical Guidelines
- 6. Reimbursement
- 7. Lung Cancer Screening

Lung cancer remains one of the most prevalent cancers worldwide, affecting millions of individuals each year. Despite advancements in diagnostics, treatment, and awareness, disparities in access to care, molecular testing, and specialized centers persist.

This factsheet provides a comprehensive overview of key pillars shaping lung cancer care, including specialized infrastructure, treatment accessibility, research funding, early detection, and palliative care.

- Incidence share: Among the top 8-10 cancers in men; less common in women
- Incidence rate:
- Overall: Approximately 8-10 per 100,000 population
- Men: Around 15–18 per 100,000
- Women: Approximately 2-4 per 100,000
- Total new cases (latest data ~2021): Roughly 700-800 cases per year
- Daily diagnoses: About 2 new cases per day
- Deaths: Approximately 450-500 deaths annually
- 5-year survival rate: Generally poor; most cases detected at late stages; early-stage 5-year survival can reach 40-50%, but overall much lower
- Most affected age group: Primarily adults aged 60 and above; median age at diagnosis ~62 years
- Screening participation: No national lung screening program; early detection remains limited; CT scans are used opportunistically, mainly in high-risk groups like smokers; access to diagnostics and awareness remain moderate





- World-class tertiary hospitals such as Cleveland Clinic Abu Dhabi, Sheikh Shakhbout Medical City, Tawam Hospital, and Dubai Hospital offer full lung cancer diagnostics and treatment, including PET-CT, EBUS, thoracic surgery, stereotactic radiotherapy (SBRT).
- · Strong integration of oncology services across MOHAP, SEHA, and DHA systems.
- Private sector also offers cutting-edge services (e.g., Mediclinic, American Hospital Dubai).

Opportunity

- Establish satellite lung cancer clinics with advanced diagnostics in underserved Emirates.
- Expand use of mobile diagnostics and remote consults via tele-oncology.

Weaknes

- · Geographic disp northern Emirat Al Khaimah, Fuja fewer specialist centers.
- · Over-reliance or tertiary centers logistical delays populations.

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Weakness	
 Geographic disparities— northern Emirates (Ajman, Ras Al Khaimah, Fujairah) have fewer specialist oncology centers. 	1
 Over-reliance on urban tertiary centers, causing logistical delays for some populations. 	5. Advanced nationwide infrastructure, widespread availability in public and private sectors, integration with clinical practice.
	4. Strong infrastructure in major hospitals and cancer centers, some regional disparities.
	3. Moderate infrastructure, primarily in private settings or research institutions.
Threats	2. Limited infrastructure, available only in select centers or for high-cost private testing.
 Increasing incidence may overwhelm current system capacity. Dependence on international staff may impact service continuity. 	Minimal or no infrastructure, testing mostly unavailable or sent abroad.

Specialized

Centers

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Country

South Africa

Kenya

Nigeria

Egypt

Morocco

Algeria

Ethiopia

India

Japan

South Korea

China

Thailand

Singapore

United Kingdom

Germany

France

Netherlands

Sweden

Italy

Spain

Poland

Mexico

Brazil

Argentina

Chile

Colombia

United States

Canada

Australia

New Zealand

Greece

Rwanda

Uganda

Serbia

Saudi Arabia

UAE

Syria

Indonesia

Vietnam

Philippines

Russia

Malaysia

Genetic & Molecular

Testing Infrastructure



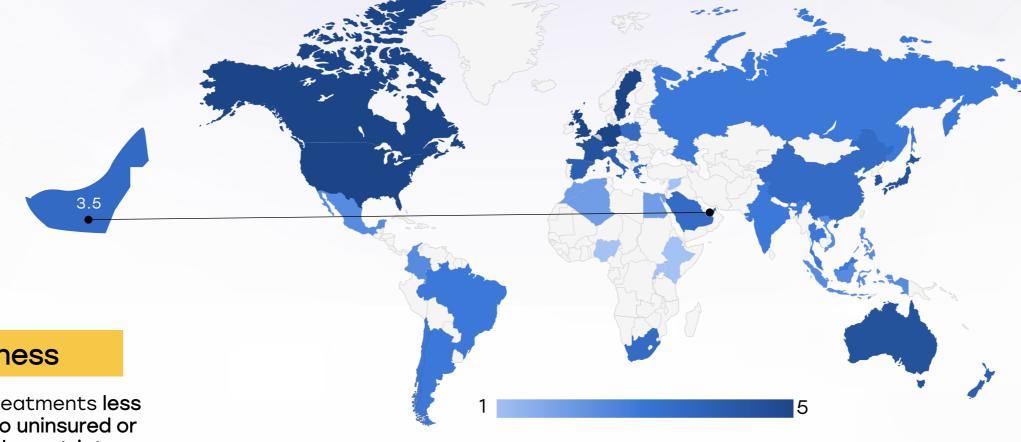
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Treatment Access, Research Funding and Awareness Campaigns

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Strengths

- Wide access to advanced treatments including targeted therapies (EGFR, ALK inhibitors), immunotherapy (nivolumab, pembrolizumab) in both public and private sectors.
- National campaigns on tobacco control, clean air, and lung health promoted by MOHAP and Emirates Oncology Society.
- Free cancer care for Emiratis; subsidized care for residents via insurance.

Opportunity

- Encourage multicenter clinical trials with global partners (AstraZeneca, Roche, Novartis).
- Targeted awareness campaigns for non-smoking-related lung cancer (increasing among women and nonsmokers).

Weakness

- Advanced treatments less accessible to uninsured or underinsured expatriates, especially labor migrants.
- Limited local lung cancer research and clinical trials.

- High cost of immunotherapies may strain reimbursement models.
- Continued urban-centric campaigns may miss highrisk groups in labor accommodations.

- 5. Strong healthcare infrastructure with comprehensive treatment access, high research funding, and nationwide awareness campaigns. Patients have access to advanced therapies, clinical trials, and widespread early detection programs.
- 4. Well-developed system with good treatment availability, strong research funding, and effective but regionally focused awareness campaigns. Some disparities may exist in rural areas or between public and private sectors.
- 3. Moderate development, with specialized treatments available in major hospitals, research funding concentrated on specific cancers, and occasional but limited awareness efforts. Healthcare access may be restricted by cost or geography.
- 2. Limited system where cancer treatment is available only in select urban centers, research funding is minimal or sporadic, and awareness campaigns are rare or underfunded. Patients often face long wait times or financial barriers.
- 1. Poor infrastructure with severe barriers to treatment, little to no research funding, and lack of structured awareness campaigns. Cancer care is largely inaccessible, with many patients relying on out-of-pocket expenses or external aid.

Country	Treatment Access	Research Funding	Awareness Campaigns
South Africa	0	<u> </u>	<u> </u>
Kenya			
Nigeria			
Egypt			
Morocco			
Algeria			
Ethiopia			
India	<u> </u>		\bigcirc
Japan			
South Korea			
China	0	<u> </u>	0
Thailand	<u> </u>		<u> </u>
Singapore			
United Kingdom			
Germany			
France			
Netherlands			
Sweden			
Italy			0
Spain			0
Poland	0	\bigcirc	<u> </u>
Mexico	<u> </u>		<u> </u>
Brazil	<u> </u>	\bigcirc	<u> </u>
Argentina	<u> </u>	\bigcirc	<u> </u>
Chile	<u> </u>	\bigcirc	<u> </u>
Colombia			<u> </u>
United States			
Canada			
Australia			
New Zealand	0		0
Greece	0	<u> </u>	<u> </u>
Rwanda			
Uganda			
Serbia	0	<u> </u>	<u> </u>
Saudi Arabia	0	\bigcirc	
UAE	0	<u> </u>	
Syria			
Indonesia	<u> </u>		<u> </u>
Vietnam	<u> </u>	0	<u> </u>
Philippines			<u> </u>
Russia	0	<u> </u>	<u> </u>
Malaysia			



UAE

Survival Rates, Early Detection and Palliative Care

Strengths Weakr

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- Early-stage diagnosis cases at Cleveland Clinic and Tawam show 5-year survival ~60%.
- Palliative care services growing within hospice, home-based care, and cancer centers.
- Modern radiotherapy (IMRT, SBRT) increases curative options in inoperable cases.

Opportunity

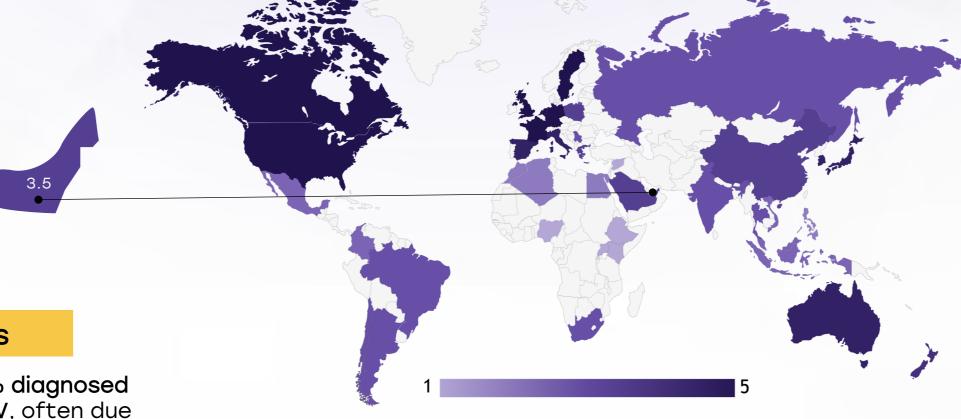
- Launch risk-based early detection programs in primary care and occupational health systems.
- Strengthen communitybased palliative care in northern Emirates.

Weakness
 Around 55-65% diagnosed at Stage III or IV, often due to late symptom onset and non-screened high-risk

individuals.

 Palliative care still not uniformly accessible across all Emirates.

- Expats may delay care due to financial or employment insecurity.
- Stigma around cancer may limit proactive screening.



- 5. High survival rates, strong early detection programs, and well-established palliative care services. Patients have access to timely diagnosis, advanced treatments, and comprehensive end-of-life care.
- 4. Good survival rates, effective early detection efforts, and accessible but regionally limited palliative care. Some disparities may exist in rural areas or for specific cancer types.
- 3. Moderate survival rates, early detection available but not widespread, and palliative care services mainly in urban centers. Some patients experience delays in diagnosis or limited end-of-life care.
- 2. Low survival rates, early detection efforts are inconsistent or underfunded, and palliative care is minimal or only available in select hospitals. Cancer patients face significant access barriers.
- 1. Very low survival rates, poor early detection infrastructure, and almost no palliative care services. Many patients are diagnosed late and lack proper support for pain management and end-of-life care.

Country	Survival Rates	Early Detection	Palliative Care
South Africa	<u> </u>	<u> </u>	<u> </u>
Kenya			
Nigeria			
Egypt	0		
Morocco			
Algeria			
Ethiopia			
India	<u> </u>	0	<u> </u>
Japan		0	
South Korea		0	
China	<u> </u>	<u> </u>	0
Thailand	<u> </u>	<u> </u>	<u> </u>
Singapore			
United Kingdom			
Germany			
France			
Netherlands			
Sweden			
Italy		0	
Spain			
Poland	<u> </u>	<u> </u>	0
Mexico	0	<u> </u>	0
Brazil	<u> </u>	<u> </u>	0
Argentina	<u> </u>	<u> </u>	<u> </u>
Chile	<u> </u>	<u> </u>	<u> </u>
Colombia	0	<u> </u>	
United States			
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New Zealand			
Greece	\bigcirc		
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Uganda			
Serbia			
Saudi Arabia			
UAE			
Syria			
Indonesia	<u> </u>		<u> </u>
Vietnam	<u> </u>		<u> </u>
Philippines			<u> </u>
Russia	0	<u> </u>	<u> </u>
Malaysia			0



UAE Utilization of Biomarkers

Strengths

- Comprehensive biomarker testing available, including EGFR, ALK, ROS1, BRAF, PD-L1 in major centers.
- Biomarkers routinely used to personalize treatment.

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Opportunity

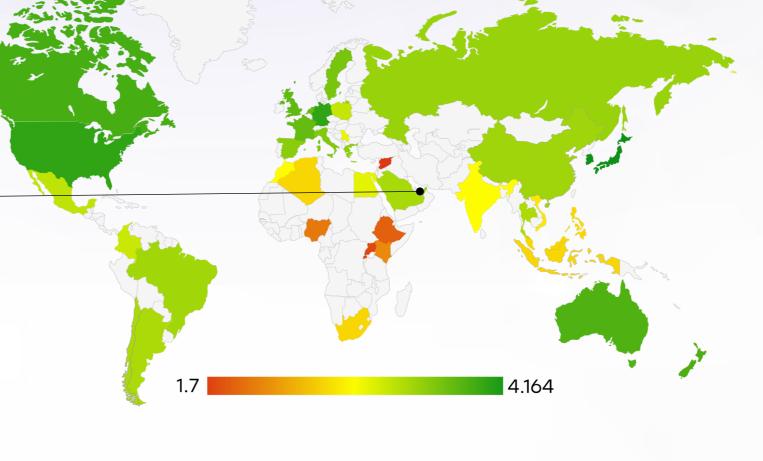
- Integrate biomarker testing into national health insurance coverage for all cases.
- Establish UAE-wide genomic cancer database.

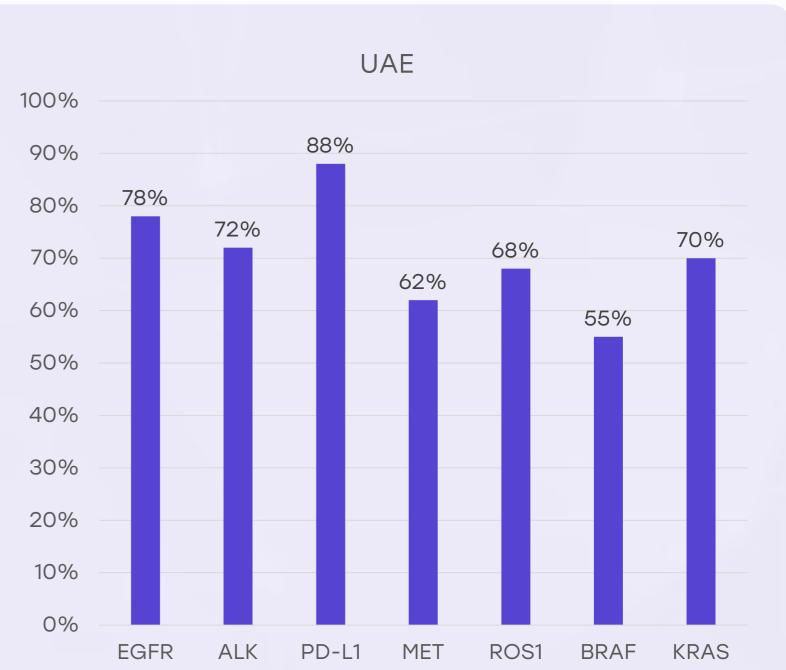
Weakness

- Biomarker access is limited in some midtier or insurancerestricted private hospitals.
- Lack of centralized national testing registry to track trends and improve equity.

- Variability in testing turnaround and quality among providers.
- Gaps in clinician training in next-gen sequencing interpretation.

- 5. Biomarker testing is widely available and routinely performed as part of standard clinical practice. Strong integration into treatment decisions, with national coverage and reimbursement ensuring accessibility.
 - 4. Biomarker testing is commonly used, but access may be limited in certain regions or patient groups. Some disparities exist in coverage or affordability, but it is still a crucial part of cancer diagnostics
- 3. Moderate utilization, often restricted to major hospitals or private healthcare settings. Some patients may not receive biomarker testing due to cost or limited availability in public healthcare systems.
- 2. Biomarker testing is available but underutilized, with significant barriers such as high costs, lack of awareness, or limited infrastructure. Many patients may not receive recommended biomarker assessments.
- 1. Biomarker testing is rarely performed, often due to lack of infrastructure, awareness, or financial barriers. Patients typically do not receive targeted therapies based on biomarker status.









- National protocols based on NCCN and ESMO adapted by MOHAP, SEHA, DHA and used in major centers.
- MDT (Multidisciplinary Team) approach widely implemented.

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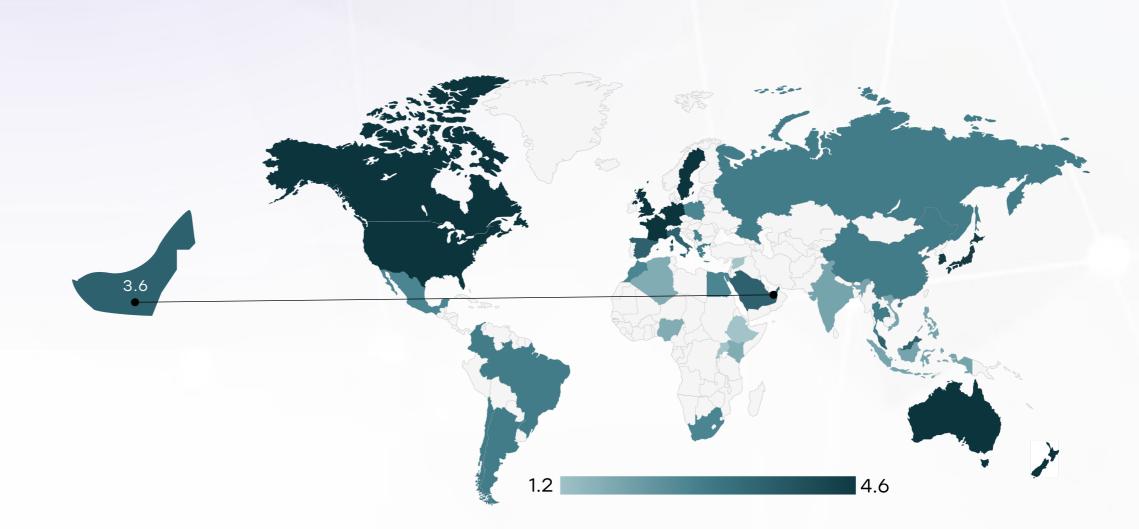
Opportunity

- Create UAE-adapted tiered guidelines to suit public-private ecosystem.
- Introduce CME modules with real-case scenarios for GPs.

Weakness

- Disparities in guideline adherence among lower-tier private providers.
- Guidelines not yet adapted for migrantspecific challenges (e.g., language, delayed presentation).

- Fragmented implementation in absence of national clinical audit system.
- Non-alignment of public and private coverage policies with guidelines.



	Very High	High	Medium	Low	Very Low
Clinical Guideline Implementation	×	0	*	*	*
Feasibility of Integration	*	0	*	*	*
Adoption of International Guidelines	*	0	*	*	*
Engagement with Updates	*	*	0	*	*
ESMO Guidelines Implementation	×	0	*	*	*





- Free cancer care for Emiratis and robust insurance coverage in Abu Dhabi (Thiqa) and Dubai (Saada).
- Several insurance plans now cover targeted therapies and diagnostics.

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Opportunity

- Policy reform to standardize cancer care coverage for all residents.
- Explore cancer solidarity fund for high-cost drugs and biomarker tests.

Weakness

- Unequal coverage among expats, especially those under basic or employerrestricted plans.
- Expensive treatments often require copayment or preauthorization, delaying timely access.

- Rapid growth in drug costs may challenge sustainability.
- Out-of-pocket burden for middle- and lowincome expats could lead to care avoidance.



- A structured reimbursement system exists, ensuring biomarker testing is covered through national healthcare systems, insurance, or public-private partnerships. Patients face no direct financial burden.
- A reimbursement framework is in place, but patients may still have out-of-pocket expenses such as co-pays, limited coverage, or financial caps on testing.
- No formal reimbursement system exists, meaning patients must fully cover the cost of biomarker testing out-of-pocket.

Country	Reimbursement Framework	No-cost Access
United States		
United Kingdom		
Canada		
Australia		
Germany		
France		
Netherlands		
Sweden		
Italy		
Spain		
Poland		
Japan		
South Korea		
China	0	
India	0	0
Singapore		
Thailand		
South Africa	0	0
Kenya	0	0
Nigeria	0	0
Egypt	0	0
Morocco	0	0
Algeria		
Ethiopia	0	0
Mexico		
Brazil		
Argentina		
Chile		
Colombia		
New Zealand		
Greece		
Rwanda	0	0
Uganda	0	0
Serbia		
Saudi Arabia		
UAE		
Syria	0	
Indonesia		0
Vietnam		0
Philippines		\bigcirc
Russia		
Malaysia		





- Pilot LDCT (Low-Dose CT) programs initiated in Dubai and Abu Dhabi targeting smokers over 50.
- Government supports tobacco cessation and risk reduction campaigns.

Opportunity

- Launch national screening registry for LDCT with follow-up tracking.
- Partner with industries and MOHAP for occupational screening rollouts.

Weakness

- No nationwide screening program— LDCT coverage still low and opportunistic.
- Lack of public awareness among high-risk groups such as male labor workers, taxi drivers.

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- Screening costs may deter participation among uninsured groups.
- Risk of overdiagnosis without proper triage pathways.

Country	Lung Cancer Screening
United States	Annual LDCT (50-80 years, high-risk smokers)
United Kingdom	LDCT for high-risk individuals (55-74 years)
Canada	LDCT for high-risk individuals (55-74 years)
Australia	No national program, high-risk groups advised LDCT
Germany	No national program, under evaluation
France	No national LDCT screening
Netherlands	Participating in European screening studies
Sweden	No national LDCT screening
Italy	Regional pilot LDCT screening
Spain	No national LDCT program
Poland	No national program
Japan	No national LDCT program
South Korea	LDCT for high-risk individuals (50-74 years)
China	No national LDCT program
India	No national LDCT program
Singapore	No national LDCT program
Saudi Arabia	No national LDCT program; some hospital-based opportunistic screening
UAE	No national LDCT program; early-stage pilot studies ongoing in select hospitals
Syria	No national LDCT program; screening not prioritized due to conflict
Malaysia	No program; high-risk CT pilots

Country	Lung Cancer Screening
Thailand	No national LDCT program
South Africa	No national LDCT program
Kenya	No national LDCT program
Nigeria	No national LDCT program
Egypt	No national LDCT program
Morocco	No national LDCT program
Algeria	No national LDCT program
Ethiopia	No national LDCT program
Mexico	No national LDCT program
Brazil	No national LDCT program
Argentina	No national LDCT program
Chile	No national LDCT program
Colombia	No national LDCT program
New Zealand	No national LDCT program
Greece	No national LDCT program
Rwanda	No national LDCT program
Uganda	No national LDCT program
Serbia	No national LDCT program
Indonesia	No national LDCT program; opportunistic screening in private sector
Vietnam	No national LDCT program; early pilot screening studies in Hanoi and Ho Chi Minh
Philippines	No national LDCT program; feasibility and awareness programs under discussion
Russia	No formal national LDCT program; regional pilot screening programs in large cities