

**Table S1** Details of key experts

Country	Expert name	Affiliation
KSA	Dr. Ahmed Al Iehebe	King Faisal Specialist Hospital & Research Center (Jeddah)
KSA	Dr. Ameen Alomair	King Faisal Specialist Hospital & Research Center (Riyadh)
UAE	Professor Humaid Al Shamsi	Burjeel Hospital
South Africa	Professor Coenraad Koegelenberg	Tygerberg Hospital
Lebanon	Dr. Arafat Tfayli	American University of Bierut
Jordan	Dr. Khaled Al Asad	University of Jordan
Turkey	Dr. Ugar Selek	Koç University School of Medicine, Istanbul
Egypt	Professor Ashraf Madkour	Ain Shams University
Egypt	Professor Mohsen Mukhtar	Al-Kasr Al-Aini Medical School
UAE	Dr. Bassam Mahboub	Dubai Health Authority

All the key experts were specialized in the field of oncology and were affiliated with countries of the MEA region. An advisory board meeting took place wherein experts gathered for deliberations. Following extensive discussions and exchanges of insights about lung cancer screening and early detection, this consensus paper was collaboratively developed. KSA, Kingdom of Saudi Arabia; UAE, United Arab Emirates; MEA, Middle East and Africa.

**Table S2** Genetic driver mutations associated with lung cancer in the MEA region

Gene	Common variants	Prevalence	Age	Smoking status	Prognostic significance
<i>EGFR</i>	Mutations in exons 19 and 21	10–16% in Western populations, 40–50% in Asians	Younger patients	Never smokers	Response to specific TKIs, T790M predictor of resistance
<i>ALK</i>	<i>EML4-ALK</i> variants	1–10% of NSCLC	Younger patients	Never smokers	Aggressive tumors, response to specific TKIs
<i>ROS1</i>	<i>CD74-ROS1</i> variants	0.9–2.6% of NSCLC	Younger patients	Never smokers	Less aggressive tumors, response to specific TKIs
<i>KRAS</i>	Mutations in codons 12 and 13	30–40% of NSCLC, more common in Caucasians	Older ages	Smokers	Not clear
<i>BRAF</i>	Mutations in exon 15	2–4% of NSCLC	No age specificity	Smokers	Not clear
<i>MET</i>	Mutations in exon 14, amplification	Mutations in 1–10% of NSCLC, amplification in 5–22%	Older ages	Smokers	Resistance to EGFR-TKIs. Response to MET inhibitors
<i>HER2</i>	Mutations in exons 18–21, amplification	Mutations in 2–3% and amplifications in 2–5% of adenocarcinomas	Not clear	Mutations in never-smokers and amplifications in ex-smokers	Not clear

Data are adapted from “Druggable genetic alterations in NSCLC” (<https://encyclopedia.pub/entry/6428#>) and Fois *et al. Int J Mol Sci* 2021 (45). MEA, Middle East and Africa; EGFR, epidermal growth factor receptor; ALK, anaplastic lymphoma kinase; ROS1, c-ros oncogene 1; KRAS, Kirsten rat sarcoma virus; BRAF, V-raf murine sarcoma oncogene homolog B1; MET, mesenchymal-epithelial transition factor; HER2, human epidermal growth factor receptor 2; TKIs, tyrosine kinase inhibitors; EML4, echinoderm microtubule-associated protein-like 4; NSCLC, non-small cell lung cancer.

**Table S3** Key trials for lung cancer screening

Trial	Criteria for positive identification
NLST	Non-calcified nodules $\geq 4$ mm
I-ELCAP	At least one solid or partly solid non-calcified pulmonary nodule $\geq 5$ mm; or at least one nonsolid non-calcified pulmonary nodule $\geq 8$ mm
NELSON	For (part) solid lung nodules, a volume $>500$ mm <sup>3</sup> , and for (part) solid or nonsolid nodules with a volume-doubling time of $<400$ days
ITALUNG	At least one non-calcified solid nodules $\geq 5$ mm or a non-solid nodule $\geq 10$ mm or the presence of a part-solid nodule

NLST, National Lung Screening Trial; I-ELCAP, International Early Lung Cancer Action Project; NELSON, Nederlands-Leuven Longkanker Screenings Onderzoek; ITALUNG, Italian Lung.