



# READ IT BEFORE YOUR PATIENTS

## Lung

### Toward Improved Outcomes for Patients With Lung Cancer Globally: The Essential Role of Radiology and Nuclear Medicine

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#### PURPOSE

Key to achieving better population-based outcomes for patients with lung cancer is the improvement of medical imaging and nuclear medicine infrastructure globally. This paper aims to outline why and spark relevant health systems strengthening.

#### METHODS

The paper synthesises the global lung cancer landscape, imaging referral guidelines (including resource-stratified ones), the reliance of TNM staging upon imaging, relevant multinational health technology assessments, and precisely how treatment selection and in turn patient outcomes hinge upon imaging findings. The final discussion presents data on current global gaps in both diagnostics (including imaging) and therapies and how, informed by such data, improved population-based outcomes are tangible through strategic planning.

#### RESULTS

Imaging findings are central to appropriate lung cancer patient management and can variably lead to life-prolonging interventions and/or to life-enhancing palliative measures. Early-stage lung cancer can be treated with curative intent but, unfortunately, most patients with lung cancer still present at advanced stages and many patients lack access to both diagnostics and therapies. Furthermore, half of lung cancer cases occur in low- and middle-income countries. The role of medical imaging and nuclear medicine in lung cancer management, as outlined herein, may help inform strategic planning.

#### CONCLUSION

Lung cancer is the number one cancer killer worldwide. The essential role that medical imaging and nuclear medicine play in early diagnosis and disease staging cannot be overstated, pivotal in selecting the many patients for whom measurably improved outcomes are attainable. Prevention synergised with patient-centered, compassionate, high-quality lung cancer management provision mandate that strategic population-based planning, including universal health coverage strategies, should extend well beyond the scope of disease prevention to include both curative and noncurative treatment options for the millions afflicted with lung cancer.