

Quality of Life and Economic Burden of Advanced Non-Small Cell Lung Cancer in Medium and Small Markets (MED&SM): A Systematic Literature Review

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Objectives: This review aims to describe the quality of life (QoL) and economic burden (EB) in advanced non-small cell lung cancer (aNSCLC) in MED&SM, which remains understudied due to limited research on patients from these regions. Patients enrolled in clinical studies from the top nine (i.e., large) pharmaceutical markets, in terms of sales, represent over 50% of trial participants.

Methods: A systematic literature review (SLR) assessed QoL and EB studies in aNSCLC in MED&SM. Fourteen countries were selected to represent the geographic and economic diversity: Argentina, Australia, Brazil, Indonesia, Israel, Malaysia, Mexico, New Zealand, Saudi Arabia, Singapore, South Korea, Thailand, Turkey, and United Arab Emirates. The SLR adhered to PRISMA guidelines, searching multiple databases, including Medline and EmBase, for articles and conference abstracts of prospective and retrospective studies published between 2012–2023.

Results: Our SLR identified 29 studies from MED&SM, with QoL and/or EB data available in published form for only eight countries. QoL studies consisted of prospective cohort studies and cross-sectional surveys using QLQ-C30, EQ-5D, and QLQ-LC13. QoL differences were observed across countries, with average utility scores from 0.3 (Thailand) to 0.8 (Turkey). QoL generally declined with successive treatment rounds. Even at later stages, progression-free patients reported better QoL compared to those with disease progression. EB studies primarily relied on retrospective data and government price lists. Lifetime treatment costs for one aNSCLC patient, expressed as percentage of per capita GDP, ranged within 70%–241%. Lifetime costs per patient varied from US\$5,221 (Thailand) to US\$164,280 (Singapore), depending on the treatment and country.

Conclusion: Systematic comparison of QoL and EB in aNSCLC patients within MED&SM is challenging due to limited data availability. Nevertheless, aNSCLC substantially impacts QoL and healthcare expenditures in these regions. Preventing disease progression improves patient QoL, and introduction of novel treatments for aNSCLC may enhance patient QoL and reduce EB.