Patients coping with mesothelioma experienced higher levels of toxicity on CheckMate743 regimen than reported in trials

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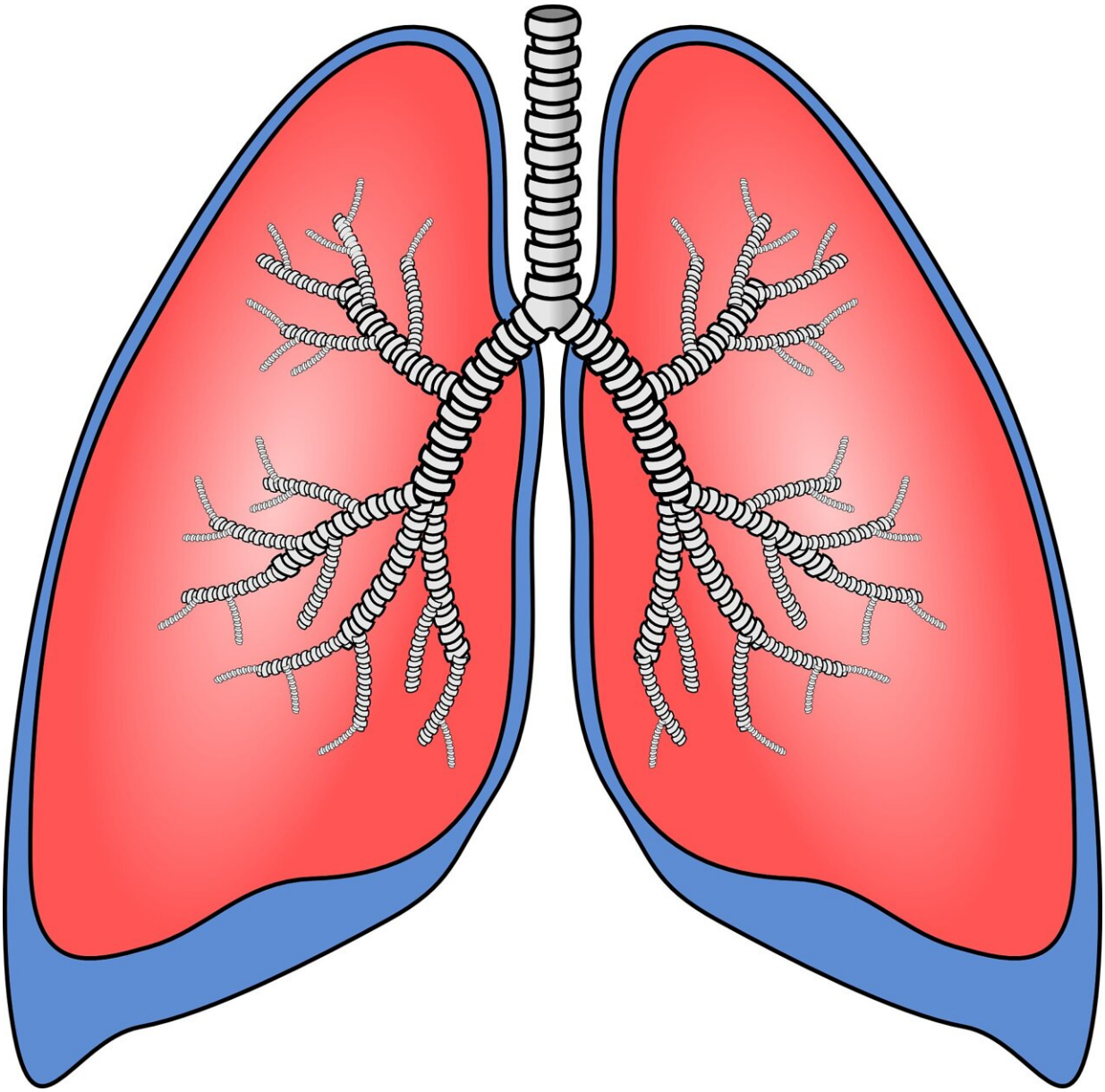

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Based on results from the CheckMate743 trial, the dual regimen of ipilimumab and nivolumab is the standard of care for the treatment of unresectable pleural mesothelioma. However, research published today in the *Journal of Thoracic Oncology (JTO)* showed that a group of

Australian patients treated with that immunotherapy combination experienced higher levels of toxicity than were reported in the clinical trial results.

Australia has one of the highest rates of asbestos-associated diseases, and mesothelioma remains an area of unmet need with a five-year overall survival (OS) rate of 10%.

First-line immunotherapy with ipilimumab and nivolumab is now a standard of care for resectable pleural mesothelioma following the CheckMate743 (CM743) trial, with supportive data from the later-line single-arm MAPS2 trial. RIOMeso examines the survival and toxicity of this regimen in real-world practice.

Dr. Ned McNamee of The Kinghorn Cancer Centre & St. Vincent's Hospital, Darlinghurst, Australia, and fellow researchers retrospectively collected demographic and clinicopathological data from 119 Australian patients across 11 medical centers who underwent treatment with ipilimumab and nivolumab in both first-line and subsequent settings for pleural mesothelioma. Survival outcomes were assessed using the Kaplan-Meier method, and toxicity was evaluated through the CTCAE v5.0.

The median age was 72, 83% were male, 92% were ECOG ≤1, 50% were past or current smokers, and 78% had known asbestos exposure. 50% were epithelioid, 19% sarcomatoid, 14% biphasic, and 17% unavailable. Ipilimumab and nivolumab were used in first-line therapy in 75% of patients.

- Median overall survival (mOS) for the entire cohort was 14.5 months.
- First-line use of ipilimumab and nivolumab was observed in 75% of patients.
- Patients treated in the second or later-line had a mOS of 15.4

months.
- No statistically significant difference in mOS was found between epithelioid and non-epithelioid histology.
- Approximately 24% of patients experienced CTCAE grade ≥ 3 adverse events, with colitis being the most frequent.

The RIOMeso study marks a significant milestone as the first detailed report of real-world survival and toxicity outcomes in Australian patients undergoing ipilimumab and nivolumab treatment for pleural mesothelioma., according to Dr. McNamee. The findings suggest that, in real-world practice, combination immunotherapy may have poorer survival outcomes and appear more toxic compared with clinical trial data, emphasizing the importance of understanding the treatment landscape beyond controlled trial settings.

However, Dr. McNamee urged caution in interpreting these results.

"There is certainly survival benefit of the Checkmate743 regimen over chemotherapy, especially in the non-epithelioid group; however, perhaps there is more equipoise in epithelioid patients. Careful patient selection may mitigate some of the risk of toxicity, but our study demonstrates that the non-chemotherapy option is not necessarily less toxic," he said.

More information: N. McNamee et al, Brief Report: Real-world toxicity and survival of combination immunotherapy in pleural mesothelioma—RIOMeso, *Journal of Thoracic Oncology* (2023). DOI: 10.1016/j.jtho.2023.11.014

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