Prompt recognition and treatment found effective for lung disease in patients who received new drug for advanced cancer

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Lung disease caused by a new drug for cancers—including metastatic or advanced breast cancer—can be effectively treated using approaches that focus on early detection and prompt management, according to a study published in *ESMO Open* on August 11, 2022.

Using data from nine clinical trials, this study provides one of the most comprehensive analyses of interstitial lung disease diagnosis and treatment in patients who received an antibody drug conjugate known as T-DXd, from a class of drugs designed as a targeted therapy for treating cancers.

The retrospective review examined 1,150 heavily pre-treated patients with breast, lung, gastric, colorectal or other cancers across nine studies treated with T-DXd, also known as ENHERTU.

"Interstitial lung disease (ILD) is a known risk factor in patients treated with antibody drug conjugates for cancer," said senior author Charles Powell, MD, MBA, Janice and Coleman Rabin Professor of Medicine and Chief of Pulmonary, Critical Care and Sleep Medicine at the Icahn School of Medicine at Mount Sinai. "Using learnings from the early clinical trials experience, physician education and patient management protocols were revised and disseminated by the study sponsors. More recent trial data in earlier lines of therapy has demonstrated lower rates of ILD events, suggesting close monitoring and proactive management of ILD/pneumonitis is warranted for all patients."

The researchers reviewed data from four phase 1 and five phase 2 studies of T-DXd, where patients received varying doses of the cancer therapy every three weeks. The research team also reviewed data from an independent clinical adjudication committee, chaired by Dr. Powell, which reviewed clinical information and chest CT imaging on all clinical trial patients with suspected drug-related interstitial lung disease, which can lead to lung fibrosis.

In patients who were previously heavily treated with other cancer therapies, the analysis found that 15.4 percent (grade 1 or 2, 77.4%; grade 5, 2.2%) experienced interstitial lung disease—with low-grade symptoms typically occurring within the first 12 months—after treatment with T-DXd.

Interstitial lung disease is a known risk of several cancer therapies, including T-DXd, which can be severe, life-threatening, or fatal. These study results suggest that close monitoring and proactive
management may reduce the risk of ILD, and patient awareness and ongoing education can aid in early detection.