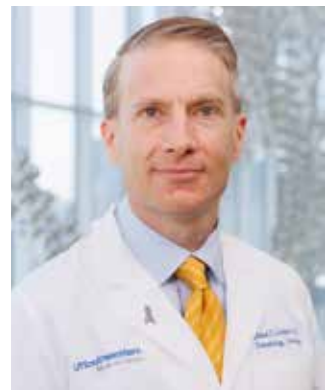


Only recently has oligometastatic lung cancer—a scenario characterized by limited disease sites and limited potential for diffuse dissemination—even had clinical relevance. For an oligometastatic state to matter to researchers, clinicians, and patients, we need to have confidence in both its detection and treatment. Radiographic abnormalities are exceedingly common and frequently non-specific. For instance, in the 50,000-plus patient National Lung Screening Trial leading to widespread endorsement of computed tomography (CT)-based lung cancer screening, over time about 40% of participants undergoing annual CT had a “positive” scan (defined as a ≥ 4 mm non-calcified nodule). However, fewer than 5% of positive scans were ever deemed to represent cancer. Perhaps even more humbling is the consideration of intracranial disease, an anatomic site rarely subject to confirmatory biopsy. In major clinical trials of radiation and surgical resection of brain metastases, at time of craniotomy over 10% of patients were found not to have brain metastases. Instead, they had other focal pathology such as abscesses, inflammatory processes, or primary brain tumors.

Advancing imaging technology such as positron emission tomography (PET)-CT has certainly improved our ability to detect sites of cancer, but specificity remains an ongoing concern. Accordingly, complementary developments such as navigation bronchoscopy—which provides access to large swaths of the intrathoracic space with lower morbidity and swifter recovery than surgical options—may be needed to interpret these findings. At the same time, focal therapy options have expanded substantially, with minimally invasive surgery, interventional vascular approaches such as cyro- or radiofrequency ablation, and stereotactic radiation therapy offering effective and generally safe treatment of multi-site disease. Underlying the potential applicability of these options is the ongoing and dramatic improvement in efficacy of systemic therapy for lung cancer. Whether molecularly targeted therapy for the growing segment of lung cancer cases with an actionable genomic alteration or immune checkpoint-inhibitor based regimens for others, it is our ability to control micrometastatic disease that supports any consideration of localized therapy.

In the context of these numerous ongoing questions and developments, *Oligometastatic Lung Cancer* provides a comprehensive overview of the field. In sections covering state-of-the art research, epidemiology, and treatment, experts review diverse topics such as molecular and genetic profiling, tumor microenvironment, diagnostic and prognostic biomarkers, surgical approaches, local ablative therapy, consolidative radiotherapy, the incorporation of immunotherapy regimens, and central nervous system disease.

Do unanswered questions remain? Absolutely. Despite a growing body of evidence, I suspect that oligometastatic case discussions will continue to dominate thoracic oncology tumor boards around the globe. This may be for good reason. Perhaps more than any other scenario in lung cancer, the approach to oligometastatic disease requires detailed and multidisciplinary examination of physiologic, anatomic, pathologic, radiographic, and molecular data. But this should not be cause for despair. Even if we lack some of the most important answers, the fact that we are asking the questions is sign of tremendous progress.



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