

In the current era of molecular profiling–based targeted therapy and immunotherapy, it has never been more important to build multidisciplinary teams (MDTs) for cancer prevention, diagnosis, treatment, and follow-up.

Even for an “early-stage” cancer, diagnosed as such by modern diagnostic imaging techniques such as computed tomography (CT), positron emission tomography (PET), magnetic resonance imaging (MRI) or others, subclinical microscopic disease or circulating tumor cells may well be present; thus the treatment approach for such cancers may include systemic therapy (e.g., chemotherapy, targeted therapy or immunotherapy), to be given before or after definitive local therapy (e.g., surgery or radiotherapy). For a “locally advanced” cancer, use of combined-modality therapies (e.g., surgery, radiotherapy, and systemic therapy) is key for a potential cure. For metastatic (stage IV) disease, historically the treatment approach has been systemic therapy, with local therapy used only for palliation. However, recent developments in targeted therapy and immunotherapy have significantly improved long-term outcomes even for patients with metastatic disease; in addition, local ablative therapies (e.g., surgery, radiotherapy, or both) can also extend disease-free survival and overall survival for some patients with oligometastatic disease (i.e., having a few isolated metastatic lesions) in certain types of cancer, including cancer of the lung. Thus combined-modality therapy has the potential to “cure” some highly selected stage IV cancers.

In daily practice, the MDT approach is—or should be—part of the entire spectrum of cancer care. Modern oncology relies on professional experts working together to overcome the challenges of cancer. No one type of therapy is always “better” than any other; they all have advantages and limitations. Simply offering an “effective” treatment is not enough; use of the combined MTD approach, to maximize efficacy and minimize side effects, is not an option—it is required.

Building on our strong MDT standard of care, we have also begun exploring combinations of novel therapies with more conventional therapies in clinical trials and translational studies. These efforts will certainly change the future standard of care.

In this unique book, members of MDTs describe a variety of clinical challenges and controversial clinical scenarios and discuss options for management and the rationales behind those options. This book is a great resource for clinicians to learn about and understand the basis of MDT medicine. It will also be a helpful starting point for generating additional research questions and developing research projects to further improve clinical outcomes in the future.



**Joe Y. Chang, MD, PhD, FASTRO**  
Professor of Radiation Oncology,  
The University of Texas MD Anderson Cancer Center,  
Houston, TX, USA