This collection of papers from Europe, North America and Asia highlight current developments and viewpoints in the field of stereotactic ablative radiotherapy (SABR) for early-stage lung cancer. SABR was first described by Swedish investigators in 1995 (1). This issue provides a contemporary global perspective of leading thoracic oncologists, and highlightd both consistently high local control rates observed following guideline-specified SABR, and a low incidence of high-grade toxicity. Mechanistic aspects of local effect though vascular damage and/or immune mechanisms, are reviewed. The controversies surrounding the use of SABR for centrally-located tumors are debated, with the obvious conclusion being that reliable dose constraints need to be identified.

A surgical viewpoint notes that the growing use of SABR for patients who are fit to undergo surgery, remains controversial. However, well-argued, critical commentaries from radiation oncologists indicates that they have not been disheartened by the failure of the first generation of trials comparing surgery and SABR to complete accrual. Much of the emerging evidence for use of SABR in fitter patients comes from comparative effectiveness research (CER) (2). CER has been defined as the "generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat and monitor a clinical condition" (3). CER complements findings derived from randomized clinical trials, and can address important questions that cannot, and will not be ever addressed in the context of a clinical trial (4). Although selection and referral biases that can confound traditional forms of observational research, this may be less of a problem with population-based observational studies, that include all patients within a given jurisdiction.

While a new generation of randomized clinical trials comparing SABR and surgery are in progress (5), developments in early-stage NSCLC will continue to be influenced by CER. The 'value' of cancer care provided has now assumed a high societal priority in both the European Union and the United States (6,7). Furthermore, there is growing awareness of the potential for financial toxicity in lung cancer treatments (8). Both CER and clinical trials are expected to provide important insights in the near future with regards to 'value' in the treatment of early-stage NSCLC in patients fit to undergo surgery.

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