Using data from the Surveillance, Epidemiology and End Results database, Gandaglia et al. validated in a large cohort of 7616 prostate cancer patients treated with radical prostatectomy (RP) for pT3/4 N0/N1 disease a risk score to select the most optimal candidates for adjuvant radiotherapy (ART) previously elaborated in a single tertiary referral center cohort of 1049 patients. As previously observed by Abdollah et al. in patients with ≥2 pathological features (Gleason score 8–10, pT3b/4 disease and/or lymph node invasion [LNI]), RT administered within 6 months after RP significantly improves prostate cancer-specific survival rates; whereas in patients with a lower-risk score, the addition of RT does not decrease the risk of cancer-related mortality.

Despite some inherent limitations mentioned by Gandaglia et al., such as the retrospective nature and the absence of postoperative prostate-specific antigen to judge whether the RT was delivered in an adjuvant or salvage setting, this observational cohort study contributes further evidence for the role of ART in the postoperative setting for patients with high-risk disease. The major interest of this study stems from two interesting points of additional value for the clinical community regarding the evidence-based knowledge provided by randomized phase III clinical trials (RCT) of ART versus observation alone.

First, compared with RCT of ART for node-negative patients only, this study shows that ART alone or in combination with androgen deprivation can improve the survival of patients with pN1 disease, previously considered as harboring systemic disease. Second, using survival end-points and bypassing some biases derived from broad inclusion criteria and heterogeneous characteristics of patients included in RCT, this study provides evidence of the survival benefit of ART for patients presenting with two or more of the following adverse pathological features: LNI, pT3b/4 and Gleason score ≥8.

However, although this type of study is encouraged to provide additional answers for open clinical questions and to establish a new basis for further prospective trials, because of the lack of level I evidence on the value of early salvage RT, knowledge provided by published RCT should remain the decisional milestone for ART.

In the context of an individualized multidisciplinary discussion, all patients at high risk of recurrence (positive surgical margins, seminal vesicle invasion, extracapsular extension, but also LNI and Gleason score ≥8) should be offered ART, weighting the potential benefits and risks of adjuvant therapies. Nomograms or scoring systems integrating all clinical and pathological prognostic factors for disease recurrence based on the evidence provided by RCT as well as derived from the study of Gandaglia et al., are therefore welcomed to better discriminate optimal candidates for ART. Incorporating in one single scoring system all these risk features, the post-surgical Cancer Prostate Risk Assessment Score might offer an alternative prognostic tool to better stratify patients at risk of biochemical relapse and mortality after RP. Even if its role for selecting the best candidates for adjuvant therapies has still to be tested, future comparison and calibration of the scoring system elaborated by Abdollah et al. with the Cancer Prostate Risk Assessment Score would be of interest for the clinical community.

The results from three RCT currently recruiting patients (RADICALS-RT, RAVES and GETUG-17) and the prematurely closed EORTC 22043–30041 trial addressing the issue of adjuvant versus early salvage RT are eagerly awaited. Important open questions on the best postoperative management of these patients will be hopefully answered in the coming years.

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Conflict of interest
None declared.

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