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# Commentary: In search of answers regarding the benefits and harms of short term ADT for intermediate-risk prostate cancer

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Clinical decisions regarding the addition of short term androgen deprivation therapy (ADT) for intermediate-risk prostate cancer patients are complicated, with the need for physicians and patients to weigh the potential cancer control and overall survival benefits against the recognized harms of ADT. National guidelines currently recognize dose-escalated radiation therapy with or without short term ADT for intermediate-risk prostate cancer,<sup>1,2</sup> since the available evidence from prospective, randomized controlled trials does not provide clear guidance. Although several randomized, controlled trials have shown that short term ADT improves overall survival when added to RT, at least in the context of conventional-dose RT, this is not established for patients receiving dose-escalated RT—the standard contemporary dose for image-guided, intensity-modulated RT based upon prospective trials that showed improve biochemical control when compared to conventional-dose RT.<sup>2</sup> Current patterns of care data suggest that dose-escalated RT is widely adopted, but that short term ADT use varies, for intermediate-risk prostate cancer.<sup>3</sup>

The RTOG 08-15 trial, which completed accrual in March 2016, aims to answer the question of whether short term ADT improves outcomes when added to dose-escalated RT, but results are not expected for several years. In the meantime, clinicians must seek answers from the published literature. In this issue, Dong and colleagues provide useful evidence regarding the benefits of short term ADT for intermediate-risk prostate cancer by evaluating outcomes in a cohort of patients treated at their center.<sup>4</sup> After adjustment for adverse clinic-pathological risk factors and age, the addition of short term ADT was not associated with reduced risk of biochemical failure or mortality, suggesting that short-term ADT may not be necessary for most patients with intermediate risk prostate cancer.<sup>4</sup> The findings of Dong et al were

substantiated by the recent report from Falchook and colleagues, who evaluated a cohort of 18,598 patients with favorable intermediate-risk prostate cancer in the National Cancer Data Base and found that short term ADT was not associated with improved survival rates when added to contemporary dose-escalated RT.<sup>5</sup> On the other hand, investigators from Memorial Sloan-Kettering Cancer Center observed improved biochemical control, freedom from metastasis and cancer-specific survival with the addition of short term ADT to dose-escalated RT in their cohort of 710 patients with intermediate-risk cancer.<sup>6</sup>

A yes/no answer will not satisfy the question of short term ADT in this setting. Rather, the disparate findings of the above studies likely reflect both a proportional therapeutic benefit of short-term ADT that is dependent upon the aggressiveness of each patient's tumor as well as the magnitude of potential harm that is dependent upon patient comorbidities.

It is hoped that future research will better characterize which patients benefit from short term ADT, and in the meantime clinicians and their patients are left to carefully consider both clinic-pathological features and comorbidities when making decisions about adding ADT to dose-escalated RT. □

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## References

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