

Identifying patients that may benefit from the addition of bicalutamide to salvage radiation therapy in the setting of biochemical failure after radical prostatectomy: A post-hoc analysis of the RTOG 9601 trial

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Introduction and Methods

Introduction

- Nearly 1/3 of patients who undergo radical prostatectomy develop disease relapse
- It is generally agreed that sRT improves outcomes in patients
- 50% of patients treated with sRT alone will have disease progression in 5 yrs

Objective: To determine which patients benefit from a combination of bicalutamide and sRT

Methods

- Patients stratified into 2 groups:
 1. sRT alone
 2. sRT + bicalutamide
- The interaction between 10-yr predicted mortality probability and AAT/no AAT was plotted

Results and Conclusions

Results

- 760 total patients: 49.5% of patients received sRT alone, 50.5% received sRT and bicalutamide
- Patients with 10-yr predicted overall mortality risk of 10% or greater benefited from the addition of bicalutamide
- Cox-regression analysis demonstrated that patients undergoing combination bicalutamide and sRT (HR=1.34, 95% CI 1.18-1.52) had **16% lower** hazard of mortality as compared to patients undergoing sRT alone (HR= 1.51, 95% CI 1.36-1.67) for every 10% increment in predicted mortality risk ($p<0.001$)

Conclusions

- In patients with biochemical failure after RP, only patients with mortality risk of **10% or greater** benefit from addition of AAT to sRT.
- Combining bicalutamide and sRT shows a 16% added survival benefit for every 10% incremental increase in 10-yr mortality risk.

