

## Lack of Low-risk Pathologic Findings in SWOG 8794

G. P. Swanson<sup>1</sup>, B. H. Goldman<sup>2</sup>, C. Tangen<sup>2</sup>, I. M. Thompson<sup>1</sup>, J. Chin<sup>3</sup>, E. Messing<sup>4</sup>, E. Canby-Higano<sup>1</sup>, J. D. Foreman<sup>3</sup>, E. D. Crawford<sup>6</sup>

<sup>1</sup>University of Texas Health Science Center, San Antonio, TX, <sup>2</sup>SWOG Biostatistical Center, Seattle, WA, <sup>3</sup>University, Toronto, ON, Canada, <sup>4</sup>University of Rochester, Rochester, NY, <sup>5</sup>Wayne State University, Detroit, MI, <sup>6</sup>University of Colorado, Denver, CO

**Purpose/Objective(s):** The SWOG 8794 randomized 431 high-risk (seminal vesicle involvement (SV+) and/or capsular penetration (Cap+) and/or positive margins) postprostatectomy patients to radiation (RT) vs. observation (Obs), showing improved outcomes on the RT arm. We previously found SV+ patients to have worse outcomes. Others have suggested that patients with capsular penetration alone (Cap only) or a positive margin only at the apex or bladder neck (Apex+) may have a lower risk of recurrence than those with more advanced findings. This analysis evaluates these issues in SWOG 8794.

**Materials/Methods:** Subgroup analysis among the 227 patients who were SV- and were either Cap+ or Apex+ as the only findings was undertaken. Source pathology reports were reviewed for every patient. Outcome data were modeled using proportional hazards regression with adjustment for treatment arm.

**Results:** Of 227 patients who were Cap+ and SV-, 47 (21%) had Cap only disease, 26 (11%) were Apex+, and 154 (68%) had other margin positive disease (Mar+). Outcomes did not differ significantly between patients with Cap only, Apex+, or Mar+ disease. Overall survival rates at 5 and 10 years were as follows: Cap only, 91% and 74%; Apex+, 96% and 85%; and Mar+, 92% and 70%. Biochemical failure-free survival rates at 5 and 10 years were as follows: Cap only, 55% and 31%; Apex+, 53% and 46%; and Mar+, 54% and 29%. Metastasis-free survival rates at 5 and 10 years were as follows: Cap only, 89% and 68%; Apex+, 88% and 81%; and Mar+, 90% and 67%. With respect to metastasis-free survival, the hazard ratios (95% CI) comparing Obs vs. RT did not differ significantly (chi-square;  $p = 0.83$ ) by whether patients were Cap only (1.57 [0.68, 3.67]), Apex+ (1.18 [0.24, 5.92]), or Mar+ (1.80 [1.15, 2.79]). Findings were similar for biochemical failure-free and overall survival.

**Conclusions:** Among patients who were Cap+ and SV-, neither outcomes nor the benefit to adjuvant radiation were found to differ between those with capsular penetration only or those whose only positive margins were apical or bladder neck vs. those with other margin positive disease.

**Author Disclosure:** G.P. Swanson, None; B.H. Goldman, None; C. Tangen, None; I.M. Thompson, None; J. Chin, None; E. Messing, None; E. Canby-Higano, None; J.D. Foreman, None; E.D. Crawford, None.