Abstract: BACKGROUND AND PURPOSE: The aim of this study was to evaluate if conformal radiation therapy for localized prostate cancer with doses of 70 Gy is well tolerated in patients aged 75 years or older, and if the side effects and the biochemical recurrence free (bNED) survival are comparable to younger patients.

PATIENTS AND METHODS: Eighty patients \( \geq 75 \) years received definitive conformal radiotherapy for prostate cancer. Acute and late side effects as well as bNED survival (ASTRO criteria) were compared to 221 patients younger than 75 years who were treated during the same period of time.

RESULTS: Median dose to the prostate was 70 Gy in both groups. There were no significant differences in acute or late side effects between age groups. The frequency of grade III late symptoms was low and ranged between 0 and 4\% for the evaluated symptoms irrespective of age group. Older patients had a better bNED survival than younger patients (bNED survival at 4 years: 76 vs. 61\%, \( P=0.042 \)).

CONCLUSIONS: High-dose conformal radiation therapy for prostate cancer is well tolerated in patients aged 75 years or older. In terms of bNED survival radiation treatment is at least as effective as it is for younger patients.