Among rectal-cancer patients, the risk of second primary colorectal cancers has been described (Raj, Taylor, Wray, et al. 2011), but little is known about the risks for cancers among organs in the field of therapeutic radiation for rectal cancer. We use de-identified data from the population-based California Cancer Registry 1988 - 2009 to estimate these risks by interval estimates of standardized incidence ratios (SIR: observed / expected), accounting for age, major race/ethnic group, sex, and time at risk, separately for those who did, vs did not, receive radiation therapy. The size of the study cohort is 13,418 individuals with loco-regional rectal cancer as the first or only cancer. The aggregate followup time exceeds 1.2 million months, and yields 1572 second, non-synchronous cancers of all types. Radiation therapy is associated with risk for cancers of the corpus/uterus, small bowel, and prostate. Findings suggest complex relationships associated with radiation treatment for rectal cancer and risk for subsequent cancers in the pelvic area.

Friends and Colleagues: This material will be presented as a poster at the upcoming ASCO meetings, so please respect the ASCO embargo. Thanks!