## SIOP 2023 – ABSTRACT

<u>Title:</u> Fear of Cancer Recurrence in Adult Survivors of Childhood Cancer: A Report from the Childhood Cancer Survivor Study

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**Background and aims:** Fear of cancer recurrence (FCR) is among the most distressing problems experienced by survivors of adult-onset cancer and is associated with anxiety and depression. However, little is known about the prevalence and associated risk factors of FCR among adult survivors of childhood cancer.

**Methods:** A representative sample of adult survivors of childhood cancer (N=229, median age=40 years, range=22-64, 50.6% female, years since diagnosis=32.8) enrolled in the Childhood Cancer Survivorship Study completed the FCR Inventory Short Form, a validated and comprehensive measure of FCR over the past month as well as measures of anxiety (Generalized Anxiety Disorder 7-Item), depression (Patient Health Questionnaire 8-Item), chronic pain (assessing pain lasting  $\geq$ 3 months), and perceived poor health status (1-item yes/no). Validated cut-off scores of  $\geq$ 22,  $\geq$ 10, and  $\geq$ 10 were used to define clinically significant levels of FCR, anxiety, and depression, respectively. Poisson regression models estimated prevalence ratios (PR) with 95% confidence intervals (CI) adjusted for age, sex, and race to examine the effects of demographic, disease, treatment factors, and psychosocial variables on FCR.

**Results:** 16.6% (95% CI:11.6-21.6) of survivors reported clinically significant FCR. Increased risk of clinically significant FCR was associated with female sex (PR[CI]; 2.0[1.0-3.7]), unemployment (2.1[1.1-4.2]), living in a nonmetropolitan area (2.2[1.2-4.3]), neurological conditions (3.4[1.8-6.3]), pelvic radiation (3.0[1.5-6.1]), and amputation or limb sparing surgery (2.1[1.03-4.2]). Higher risk of clinically significant FCR was also associated with clinically significant anxiety (4.8[2.7-8.4]) and depression (4.1[2.3-7.3]), chronic pain (2.8[1.4-5.6]), and poor health status (5.5[3.1-9.7]). No associations were observed between FCR and prior primary cancer recurrence or subsequent malignant neoplasms.

**Conclusions:** Decades following treatment, a notable proportion of childhood cancer survivors reported clinically significant FCR. Treatment exposures, chronic conditions, anxiety, and depression were associated with clinical levels of FCR. Future longitudinal research is needed to investigate the direction of the relationship between FCR and depression as well as anxiety.