

ASSESSMENT AND VALIDATION OF SECOND NEOPLASMS IN THE CHILDHOOD CANCER SURVIVOR STUDY (CCSS)

S. Hammond, S. Qualman, J. Neglia, A. Meadows, L. Robison. Children's Hospital, Columbus, OH; University of Minnesota, Minneapolis, MN; Children's Hospital of Philadelphia, Philadelphia, PA.

The CCSS is a multi-center study of childhood cancer and its sequelae. A cohort of approximately 23,000 5-year survivors diagnosed after 1970 have been identified by 26 institutions in the U.S. and Canada. The study has six major aims, one of which is to define, study, and analyze second malignant neoplasms (SMN) in survivors of childhood cancer. Participants completed a detailed health status questionnaire. We have begun systematically verifying SMN as reported by questionnaire; preliminary data follow.

To date, 315 records have been reviewed. 162 individuals have been confirmed as having at least one SMN. Their original diagnoses were: Hodgkin's (46), leukemia (37), neuroblastoma (11), RMS (11), medulloblastoma (10), astrocytoma (10), osteosarcoma (8), lymphoma (8), Wilms' (7), Ewing's (7), and other (7). Subsequent malignant diagnoses were cancer of the breast (29), thyroid (21), CNS (17), other carcinomas (17), melanoma (9), lymphoma/leukemia (13), osteosarcoma (7), and other sarcomas (14). Seven people had 3 or 4 separate primaries. In addition, there were 19 meningiomas, 18 basal cell carcinomas, 10 pre-malignant lesions, 12 non-malignant thyroid lesions, and 5 osteochondromas. We excluded 153 individuals who self-reported a SMN: 62 disease recurrence, 23 were not confirmed, and 68 had benign conditions.

This cohort study represents a unique opportunity to gain further understanding of the phenomenon of SMN and to define underlying genetic mechanism.