Project Title: Analysis of dose response for circulatory disease in the Childhood Cancer Survivor Study Cohort with a focus on non-cardiac doses

Planned research population (eligibility criteria): Initially all survivors of Hodgkin's lymphoma who have completed a baseline questionnaire in the 1st CCSS cohort, but if that is successful then all survivors with a completed baseline questionnaire in the 1st cohort

Proposed specific aims: In order to test possible non-cardiac etiologically initiating tissues relevant to circulatory disease, we propose to assess all circulatory endpoints, in particular (i) ischemic heart disease (IHD), (ii) heart disease other than IHD, (iii) cerebrovascular disease, (iv) all other circulatory disease in relation to dose to a number of target tissues, in particular doses to the (a) heart, (b) brain, (c) carotid (or thyroid), (d) liver, (e) kidney, (f) aorta, (g) lung, (h) pancreas, (i) red bone marrow. In the first instance approximate surrogate tissues might be used for which radiation dosimetry already exists within the cohort. It would be essential to collect information on all relevant concomitant cardiotoxic therapies, in particular anthracyclines. Lifestyle information, in particular on the major risk factors (diabetes, cigarette smoking, high LDL cholesterol, low HDL cholesterol, high blood pressure) would also be highly desirable (both at baseline and subsequently) although this information may be indirect and based on self-reported medications on the baseline (and subsequent) questionnaires.

Will the project require non-CCSS funding to complete?: No
If yes, what would be the anticipated source(s) and timeline(s) for securing funding?:

Does this project require contact of CCSS study subjects for . . .
Additional self-reported information: No  
Biological Samples: No  
Medical record data: No  
If yes to any of the above, please briefly describe.:  

What CCSS Working Group(s) would likely be involved? (Check all that apply)  
Second Malignancy:  
Chronic Disease: Primary  
Psychology / Neuropsychology:  
Genetics:  
Cancer Control:  
Epidemiology / Biostatistics: Secondary  

To describe the anticipated scope of the study, please indicate the specific CCSS data to be included as outcome (primary or secondary) or correlative factors. (Check all that apply)  
Late mortality: Primary  
Second Malignancy:  

Health Behaviors  
Tobacco: Primary  
Alcohol: Primary  
Physical activity: Primary  
Medical screening:  
Other:  
If other, please specify:  

Psychosocial  
Insurance:  
Marriage: Primary  
Education:  
Employment:  
Other:  
If other, please specify:  

Medical conditions  
Hearing/Vision/Speech:  
Hormonal systems: Primary  
Heart and vascular: Primary  
Respiratory: Primary  
Digestive:  
Surgical procedures: Primary
Brain and nervous system:
Other:
If other, please specify:

Medications

Describe medications:

Pregnancy and offspring: Primary
Family History: Primary

Psychologic/Quality of Life

BSI-18:
SF-36:
CCSS-NCQ:
PTS:
PTG:
Other:
If other, please specify:

Chronic conditions (CTCAE v3):
Health status:

Demographic

Age: Primary
Race: Primary
Sex: Primary
Others:
If others, please specify:

Cancer treatment

Chemotherapy: Correlative Factors
Radiation therapy: Correlative Factors
Surgery: Correlative Factors

Anticipated sources of statistical support

CCSS Statistical Center:
Local institutional statistician: Yes
If local, please provide the name(s) and contact information of the statistician(s) to be involved.:
Dr Mark Little
Will this project utilize CCSS biologic samples?: No

If yes, which of the following?

Buccal cell DNA:
Peripheral blood:
Lymphoblastoid cell lines:
Second malignancy pathology samples:
Other requiring collection of samples:
If other, please explain:

Other general comments: