**Section: Contact Information**

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**Section: Project Requirements and Description**

**Group: Requirements to submit AOI**

A comprehensive review of previously published data has been completed. : Yes
The specific aims are clear and focused. : Yes
The investigator has appropriate experience and expertise to develop the concept proposal; if not, has identified a mentor or senior co-investigator. : Yes
The investigator agrees to develop an initial draft of the concept proposal within 6 weeks of approval of the AOI and to finalize the concept proposal within 6 months. : Yes

Project Title: The Impact of ACEi and Beta Blocker Use on Cardiovascular Disease in Childhood Cancer Survivors

Planned research population (eligibility criteria): All CCSS survivor participants who have completed the Expansion Baseline Survey and one follow up survey.

Proposed specific aims:

Background: Evidence for the use of standard heart failure therapies in childhood cancer survivors (CCS) is limited. The use of angiotensin converting enzyme inhibitors (ACEi) and beta blockers is primarily extrapolated from studies in adult populations with underlying cardiovascular pathophysiology that is dissimilar to that of CCS. We therefore aim to study the role of commonly used heart failure medications in this specific population.

**Hypothesis and Specific Aims**

Aim 1: Investigate the incidence of congestive heart failure in CCS using ACEi or beta blocker therapy compared to CCS not using these agents. We will utilize existing data in the CCSS to categorize CCS without an initial diagnosis of congestive heart failure into two groups (those using ACEi or beta blocker therapy versus those not using these medications). We hypothesize that, after adjusting for comorbidities, the subsequent incidence of congestive heart failure will be lower in CCS using ACEi or beta blocker therapy when compared to CCS not using these agents.

Aim 2: Investigate the incidence of myocardial infarction in CCS using ACEi or beta blocker therapy compared to CCS not using these agents. We will utilize the CCSS to investigate the incidence of myocardial infarction in CCS using ACEi or beta blocker therapy compared to CCS not using these medications. We hypothesize that, after
adjusting for comorbidities, the incidence of myocardial infarction will be lower in CCS using ACEi or beta blocker therapy compared to CCS not using these agents.

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?:

Group: 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:

Group: 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

Section: Outcomes or Correlative Factors

- Late mortality:
- Second Malignancy:

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

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

Group: Medical Conditions
- Hearing/Vision/Speech:
- Hormonal systems:
- Heart and vascular: Primary
- Respiratory:
- Digestive:
- Surgical procedures:
- Brain and nervous system:
**Other**: **Correlative Factors**
If other, please specify: Risk factors for cardiovascular disease including diabetes, hyperlipidemia, hypertension, and obesity

**Group: Medications**
Describe medications:
Heart failure medications including angiotensin converting enzyme inhibitors and beta blockers

**Group: Psychologic/Quality of Life**
BSI-18:
SF-36:
CCSS-NCQ:
PTS:
PTG:
Other:
If other, please specify:

**Group: Other**
Pregnancy and offspring:
Family history:
Chronic conditions (CTCAE v3): Primary,Correlative Factors
Health status:

**Group: Demographic**
Age:
Race:
Sex:
Other:
If other, please specify:

**Group: Cancer treatment**
Chemotherapy: **Correlative Factors**
Radiation therapy: **Correlative Factors**
Surgery:

**Section: Anticipated Sources of Statistical Support**
CCSS Statistical Center: Yes
Local institutional statistician:
If local, please provide the name(s) and contact information of the statistician(s) to be involved.
Will this project utilize CCSS biologic samples?: No
If yes, which of the following?:
If other, please explain:

**Section: Other General Comments**
Other General Comments:
I agree to share this information with St. Jude: Yes