

Contact Information

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Project Requirements and Description

Requirements to submit AOI (all answers must be "yes" to proceed)

| | |
|--|-----|
| 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 Genomic Prediction of Cancer Treatment-Related Cardiotoxicity in Long-Term Survivors of Childhood Cancer

Planned research population (eligibility criteria)

Inclusion criteria:

1. Survivors with at least 5 years survival
2. CCSS Participants with Genotype Data

Exclusion criteria:

1. History of heart failure, atrial fibrillation, cardiomyopathy, or congenital heart disease prior to cancer treatment

Proposed specific aims

1. Evaluate the predictive performance of a clinical risk score for cardio-toxicity (CTCAE cardiac disorders) based on baseline risk factors (sex, age at cancer diagnosis, and anthracycline and chest radiotherapy doses).

2. Integrate polygenic scores for dilated cardiomyopathy and heart failure, developed using unpublished GWAS base data (DCM 15,000 cases; HF 150,000 cases), and evaluate the incremental AUC for events over the clinical risk score.

3. Validation of the integrated score, combining clinical risk predictors with polygenic scores, in a second patient cohort from the Genomics England Cancer study.

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? (Select all that apply)

| | |
|----------------------------|-----------|
| Second Malignancy | |
| Chronic Disease | Secondary |
| Psychology/Neuropsychology | |
| Genetics | Primary |
| Cancer Control | |
| Epidemiology/Biostatistics | Secondary |

Outcomes or Correlative Factors

| | |
|-------------------|--|
| Late Mortality | |
| Second Malignancy | |

Health Behaviors

| | |
|-------------------|---------------------|
| Tobacco | Correlative Factors |
| Alcohol | Correlative Factors |
| Physical Activity | Correlative Factors |
| Medical Screening | |
| Other | |

If other, please specify

Psychosocial

| | |
|------------|--|
| Insurance | |
| Marriage | |
| Education | |
| Employment | |
| Other | |

If other, please specify

Medical Conditions

| | |
|--------------------------|---------|
| Hearing/Vision/Speech | |
| Hormonal Systems | |
| Heart and Vascular | Primary |
| Respiratory | |
| Digestive | |
| Surgical Procedures | |
| Brain and Nervous System | |
| Other | Primary |

If other, please specify

Cancer Treatment-Related Cardiotoxicity

Medications

Describe medications

Psychologic/Quality of Life

| | |
|----------|--|
| BSI-18 | |
| SF-36 | |
| CCSS-NCQ | |
| PTS | |
| PTG | |
| Other | |

If other, please specify

Other

| | |
|-------------------------------|---------------------|
| Pregnancy and Offspring | |
| Family History | |
| Chronic Conditions (CTCAE v3) | Correlative Factors |
| Health Status | |

Demographic

| | |
|-------|---------------------|
| Age | Correlative Factors |
| Race | Correlative Factors |
| Sex | Correlative Factors |
| Other | |

If other, please specify

Cancer Treatment

| | |
|-------------------|---------------------|
| Chemotherapy | Correlative Factors |
| Radiation Therapy | Correlative Factors |
| Surgery | |

Anticipated Sources of Statistical Support

| | |
|----------------------------------|-----|
| CCSS Statistical Center | No |
| Local Institutional Statistician | Yes |

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

Other General Comments

Agree

I agree to share this information with St. Jude

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