Name	Taumoha Ghosh
Institution	Primary Children's Hospital
Address	81 Mario Capecchi Dr, Salt Lake City, UT, 84113 United States
Email Address	taumoha.ghosh@hsc.utah.edu

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 Subsequent Lymphoma After Childhood Cancer

Planned research population (eligibility criteria)

The entire CCSS cohort, as well as siblings

Proposed specific aims

1. Calculate the cumulative incidence and risk of subsequent lymphomas (Hodgkin and Non-Hodgkin lymphoma) among survivors of childhood cancer.

2. Identify treatment and patient characteristics associated with subsequent lymphoma among survivors of childhood cancer. Specifically, assessing risk factors thought to be associated with long-term immune dysfunction including, but not limited to, treatment-related factors (history of infectious complications, splenectomy, solid organ and hematopoietic stem cell transplantation, and chronic use of immunosuppressive agents) and patient-related factors (genetic predisposition)

3. Measure survival following subsequent lymphomas.

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)

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

Outcomes or Correlative Factors

	Primary	Secondary	Correlative Factors
Late Mortality		✓	
Second Malignancy	✓		

Health Behaviors

	Primary	Secondary	Correlative Factors
Tobacco			✓
Alcohol			✓
Physical Activity			
Medical Screening			✓
Other			

If other, please specify

Psychosocial

	Primary	Secondary	Correlative Factors
Insurance			
Marriage			
Education			
Employment			
Other			

If other, please specify

Medical Conditions

	Primary	Secondary	Correlative Factors
Hearing/Vision/Speech			
Hormonal Systems			
Heart and Vascular			
Respiratory			
Digestive			
Surgical Procedures			
Brain and Nervous System			
Other			✓

If other, please specify

Immune/Infectious Disease Conditions

Medications

Describe medications

Psychologic/Quality of Life

	Primary	Secondary	Correlative Factors
BSI-18			
SF-36			
CCSS-NCQ			
PTS			
PTG			
Other			

If other, please specify

Other

	Primary	Secondary	Correlative Factors
Pregnancy and Offspring			
Family History			✓
Chronic Conditions (CTCAE v3)			✓
Health Status			

Demographic

	Primary	Secondary	Correlative Factors
Age			✓
Race			✓
Sex			✓
Other			

If other, please specify

Cancer Treatment

	Correlative Factors
Chemotherapy	✓
Radiation Therapy	✓
Surgery	✓

Anticipated Sources of Statistical Support

CCSS Statistical Center	Yes
Local Institutional Statistician	No

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

Risk for primary lymphoma diagnosis in children includes underlying immune dysfunction, but assessment of risk for subsequent lymphomas after childhood cancer treatment has not been described. Reports of subsequent lymphomas in the literature, not related to post-transplant lymphoproliferative disorder, are limited with reports of up to 11 such cases, and have not been updated in nearly 20 years. The CCSS cohort now has approximately 90 subsequent lymphoma cases described ahead of the most recent freeze, with additional cases possible. Understanding risk for and outcomes of subsequent lymphomas in childhood cancer survivors could be important as treatment strategies move towards therapies that may result in long-term underlying immune dysregulation. Examples of potential risks hypothesized at this time include prior history of hematologic malignancy (leukemia/lymphoma), splenectomy, infectious history (as a surrogate marker for long-term immune dysfunction), transplantation history (solid organ and hematopoietic), as well as genetic predisposition (comparing incidence of subsequent lymphomas in survivors of childhood cancer to incidence of primary lymphomas in sibling cohort).

Agree I agree to share this information with St. Jude

This Service is governed by and operated in accordance with US law. If you are located outside of the US, you use this Service voluntarily and at your own risk. If you choose to submit personal data like your name and email address, please note that your Information will be transferred to and processed in the United States. By checking this box while using this Service, you acknowledge that the data protection and other laws of other countries, such as the United States, may provide a less comprehensive or protective standard of protection than those in your country, and consent to your Information being collected, processed and

transferred as set forth in the Privacy Policy and US law.