The Adolescent and Childhood Cancer Epidemiology and Susceptibility Service for Texas (ACCESS-Texas)

Michael Scheurer, PhD, MPH
Director, ACCESS-Texas Core
• Median age at cancer diagnosis for adults is 67 years compared with 6 years for children.

• Children frequently have a more advanced stage when diagnosed.

• Most adult cancers result from lifestyle factors, yet the causes of most childhood cancers are unknown.


Incidence
AAPC=0.6%

Mortality
AAPC=-1.4%

Pediatric Cancer is a global problem

Geographic Variation Largely Unexplained

Why have this core facility in Texas?

• Texas represents 10% of the US population.

• Texas has a representative sample of the US.
  • Large populations across all racial/ethnic groups
  • Draws from Urban-Suburban-Rural settings

• Texas has several of the largest childhood cancer treatment and research centers in the US.
  • Dedicated Childhood Cancer Epidemiology Program at Texas Children’s
1. Enrollment of childhood and adolescent cancer cases and biological parents

2. Collection and banking of biospecimens for
   • family-based studies of genetic risk factors
   • studies of environmental risk factors
   • gene-environment interaction studies
   • studies of treatment-related toxicities and late effects
3. Systematic collection of harmonized risk-factor data
   - Demographics
   - Environmental exposures
   - Infant and early childhood development
   - Medical and family histories

4. Systematic prospective collection of clinical and outcomes data
   - detailed pathology and staging, including molecular characterization of tumors when available
   - detailed treatment summaries
   - treatment-related toxicities
   - long-term survival and late-effects of treatment
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TTUHSC
Covenant Hospital Lubbock

Juan Carlos Bernini, MD
Rodrigo Erana, MD, MPH
Vannie E. Cook, Jr. Children’s Cancer Clinic
<table>
<thead>
<tr>
<th>Activity</th>
<th>Enrollment¹</th>
<th>Diagnosis²</th>
<th>Pre-treatment²</th>
<th>During Treatment</th>
<th>End of Therapy</th>
<th>Entry to LTS clinic</th>
<th>Annually at LTS visit</th>
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<tbody>
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¹Enrollment can occur at any timepoint
²Diagnosis and pre-treatment samples can be the same timepoint
³Only if the patient is enrolled within 6 months of their diagnosis date
⁴Only for patients receiving a lumbar puncture as standard of care
⁵D29 of therapy and at relapse (if applicable)
## ACCESS-Texas Events Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>Enrollment¹</th>
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<th>Pre-treatment²</th>
<th>During Treatment</th>
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<th>Annually at LTS visit</th>
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¹Enrollment can occur at any timepoint
²Diagnosis and pre-treatment samples can be the same timepoint
³Some treatment data will need to be entered at enrollment to establish the exact timepoints for sample collection
Additional resources available for collaboration

- Cancer cases recruited from TCH since 2006
  - Newly diagnosed
  - During therapy
  - Long-term survivors

- Healthy controls recruited from TCH since 2008
How can I access these data/specimens?

Research Project approval process

Contact ACCESS for information → Develop Concept Proposal → Review/Approval ACCESS RAC → Develop Research Proposal → Review/Approval ACCESS RAC

Release of data/specimens → Apply for funding, if needed

Return of results, if appropriate
Acknowledgements

Funding
• CPRIT: RP160771
• Texas Children’s Cancer Center

Additional Key Investigators
• Dr. Uma Ramamurthy
  Director, Research Informatics, BCM

Partners
• UTSW/Children’s Dallas
• Children’s Hospital of San Antonio
• Cook Children’s Medical Center
• TTUHSC
• TTUHSC-El Paso/El Paso Children’s
• Vannie Cook Cancer Clinic
• Texas Children’s Hospital