CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP110394

Project Title:
Identification of Novel Targets for Therapy of Pediatric Germ Cell Tumors

Award Mechanism:
Individual Investigator

Principal Investigator:
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Entity:
The University of Texas Southwestern Medical Center

Lay Summary:

Germ cell tumors occur in infants, children and young adults. These malignant cancers of the testis and ovary are treated with cisplatin chemotherapy. While very effective, cisplatin does not cure all patients. Even in patients who are cured of their disease, the therapy causes toxicity such as hearing loss, kidney damage and lifelong increased risk of secondary cancers. To identify better treatments that wold be more specific and less toxic, we propose to analyze germ cell tumor specimens collected from patients during their treatment. Specifically, we will test the tumor DNA to see whether certain genes are present in too many or too few copies in the tumor DNA. These over- and underrepresented genes are likely to cause development of the tumors. Having this information will allow us to design new treatments that specifically target the abnormalities in the tumor cels, while hopefully sparing the normal tissue and reducing the side effects that patients experience.