



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

CPRIT Childhood Cancer Invited Testimony on SB 2014 & SB 2015 (Senator Pat Fallon)

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Senate Committee on Transportation

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Good morning, my name is Jim Willson, I serve as the Chief Scientific Officer for CPRIT.

Thank you for the invitation to discuss the importance of public funding of pediatric cancer research and to comment on the impact that CPRIT is having on childhood cancer in Texas.

Progress in the treatment of childhood cancer is one of medicine's great success stories where major treatment advances have resulted in long-term survivorship for 80% of children with a cancer diagnosis.

Despite this success, the numbers of childhood cancers are increasing, and several including childhood brain tumors and bone cancers are devastating illnesses for both child and family.

A unique challenge for pediatric cancer research is that childhood cancers are not common, this means in order to make progress, collaborations are needed, and I want to recognize Senator Kolkhorst for her foresight in recognizing the importance of collaborations and her advocacy for establishing an Advisory Committee on Childhood and Adolescent Cancer, representing researchers, providers and patient advocates that has guided CPRIT's investment in CPRIT support that has helped to grow Centers of Excellence in pediatric cancer across Texas and to discover more effective and safer treatments for childhood cancer.

For example, last week at the annual international cancer research meeting, physicians from Baylor College of Medicine reported on a major break-through in the treatment of pediatric bone cancer using the patient's own blood cells that have been genetically modified to attack their cancer.

Perhaps you saw the report on CBS evening news of a college freshman whose bone cancer that had spread to her lungs and grown resistant to surgery, chemotherapy and radiation treatment, was now cancer free for over 3 years following treatment on the Baylor trial.

These results are the first demonstration of effective immune therapy for childhood bone cancer and first time an advanced bone cancer had disappeared after treatment.

The technical name for the genetically modified blood cells used in the Baylor trial is CART cells. The development of this therapy for pediatric bone cancer was supported by a CPRIT grant in 2010.

The next step is to evaluate this treatment in additional children with bone cancer and that's where CPRIT's product development investments come in with Bellicum Pharmaceuticals a CPRIT supported cellular immunotherapy company located in Houston now taking the lead to develop this therapy.

I mentioned earlier the remarkable success in treating childhood cancers, however most childhood cancer survivors will have a significant health-related issue by the time they are 45 years of age related to long-term side effects of the cancer and treatment with chemotherapy and/or radiation therapy.

Here again CPRIT is supporting a broad range of projects to discover safer treatment for childhood cancers. One such project called, Passport for Care, was designed by pediatric doctors at Texas Children's Hospital to guide life-long post treatment monitoring and early intervention to reduce impact of the long-term treatment complications in childhood cancer survivors.

The program was initially evaluated as a CPRIT grant involving 12 pediatric cancer treatment centers across Texas and having been shown to have an impact in Texas, the Passport for Care is now being extended with federal support to 68 sites and more than 5,000 childhood cancer survivors nationwide.

Texas is making major progress against pediatric cancer and with continued support Texas is poised to be the world leader in childhood cancer research.