

CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Good morning. I am Kristen Doyle, Deputy Executive Officer and General Counsel for the Cancer Prevention and Research Institute of Texas. Thank you for the opportunity to talk with the committee today about the work that CPRIT does in its fight against cancer in Texas. I will note that with me today are CPRIT's Chief Scientific Officer, Dr. Michelle Le Beau, our Chief Prevention Officer Ramona Magid, and Chief Executive Officer Wayne Roberts. All have registered as resource witnesses and are available should technical questions arise.

The Texas Legislature created CPRIT in 2007. A statewide vote overwhelmingly ratified the decision and amended the Texas Constitution to allow up to \$3 billion toward CPRIT's mission. A second statewide vote in 2019 approved an additional \$3 billion. To date, Texas has committed \$6 billion to this unprecedented statewide effort. As a result, CPRIT is the second largest public funder of cancer research in the U.S., following only the National Cancer Institute.

CPRIT is dedicated to improving lives and making a lasting difference in the fight against this disease. Our mission includes investing in the research provess of Texas institutions, creating and expanding Texas life science infrastructure, and fast-tracking innovation in the prevention and treatment of cancer.

Cancer takes a toll on Texans physically, emotionally, and financially. It remains the leading cause of death for Texans under the age of 85 and kills more Texas children and adolescents than any other disease. Nearly 150,000 Texans will receive a cancer diagnosis this year, and more than 44,000 will die.

Not only is this devastating for cancer patients and their families, but cancer costs the Texas economy enormously. As required by our enabling statute, CPRIT issues a report every year estimating how much cancer has cost the state. We include this economic assessment as part of CPRIT's annual report, which is available on our website. According to the Perryman Group's report, the direct cost of cancer in Texas was almost \$56.3 billion in 2023, with total economic losses including multiplier effects amounting to \$148 billion in lost output and 1.3 million jobs. I have included some of the cost of cancer report highlights on page 4.

The need to accelerate cancer cures and treatments and evidence-based cancer prevention efforts throughout the state is clear. CPRIT advances our mission by awarding up to \$280 million each year in merit-based, independently peer reviewed grants to 138 Texas-based entities and institutions for cancer-related research, product development, and the delivery of cancer prevention programs.

To date, CPRIT has awarded nearly 2000 grants totaling \$3.54 billion. CPRIT's investments position Texas as a world-class leader in cancer research and prevention and connect universities, researchers, physicians, companies, hospitals, and clinics throughout Texas to form a critical ecosystem of distinguished cancer-fighting talent. In your packet, I have included information about CPRIT's two research programs – academic research and product development research at pages 6 - 11. These two research programs comprise 90% of CPRIT's award portfolio and focus

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on discovering and developing innovative cancer treatments as well as new methods to prevent and detect cancer early.

In accordance with the Senate's interim charge, I will focus my testimony on CPRIT's efforts to prevent cancer and, when possible, to detect it at an earlier stage when the chances for survival are higher and treatment costs are lower.

Up to half of all cancers are preventable. Prevention measures such as vaccinations, screenings, survivorship resources, and tools for quitting tobacco and alcohol remain the most cost-effective means for controlling cancer. CPRIT's Prevention Program funds projects that deliver evidence-based prevention services throughout Texas with a focus on medically underserved communities. Offering prevention services to Texas' most vulnerable populations reduces direct and indirect causes of cancer cases and cancer deaths across the state.

By law, we may award up to 10% of the funds allocated to CPRIT each year for prevention projects. Since 2010, we have awarded the maximum amount allowed. As a result, CPRIT's prevention program has invested \$381 million in 303 prevention projects throughout the state. On page 12, I outline the prevention program's purpose and highlight some of the milestones we use to measure our impact.

Nearly 60 providers - from academic institutions to community organizations – have received CPRIT grants to provide a wide variety of prevention services that touch every county in Texas. This is a crucial point because a significant challenge to providing cost effective prevention services in Texas' rural, medically underserved areas is the lack of existing infrastructure and personnel. Many Texans are unaware of the importance of regular screenings. Compounding the problem, they must travel 100+ miles to access cancer screenings and barriers such as lack of transportation, childcare, and time off from work make the option impossible.

On pages 13 and 14, I have included a statewide map that shows the number of CPRIT prevention projects providing services to residents in every county. The map on page 13 is cumulative, while the map on page 14 shows active CPRIT projects.

To date, CPRIT has provided more than 9.6 million prevention services. For our discussion, I have divided the services provided into two broad categories listed on page 13.

Cancer prevention education services encompass activities aimed at reducing cancer risk. CPRIT projects have offered nearly six million services to inform and encourage individuals to adopt behaviors that minimize their likelihood of developing cancer. Examples of education services provided by CPRIT projects include smoking cessation information, nutritional and physical activity education, screening awareness campaigns, and vaccination drives. They also include training for local healthcare providers to help advocate and implement regular screening programs, which are vital for early detection and improving cancer outcomes. Some projects also train community physicians to offer essential services directly, reducing the need for patients to travel long distances for care.

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CPRIT prevention projects have also provided nearly four million clinical services, including screenings for breast, cervical, colorectal, lung, and hepatitis C, genetic testing and counseling, HPV and Hepatitis B vaccinations, and survivor care.

Again, given the interim charge's focus on screenings and diagnostics, I have provided more information on the prevention projects supporting these services. Over the past 14 years, CPRIT funded projects have provided 1.8 million evidence-based cancer screenings for breast, colorectal, lung, and cervical cancer, as well as screenings for hepatitis B. Since chronic hepatitis B infection is a significant risk factor for liver cancer, screening for hepatitis B helps in identifying individuals who may be at increased risk of developing liver cancer. By identifying hepatitis B infection early, healthcare providers can monitor and manage patients appropriately, preventing the development of liver cancer or detecting it at an earlier, more treatable stage.

If the clinician detects an abnormality through a cancer screening provided by a CPRIT-funded prevention project, the project provider will work with the patient to schedule and perform a diagnostic test to confirm or rule out cancer. This can be an imaging test – like a CT scan, MRI, or PET scan, as well as a biopsy, endoscopy, or blood test for tumor markers. To date, CPRIT projects have performed 200,000 diagnostic tests and detected more than 43,000 cancers and cancer precursors.

It is important to note that CPRIT does not fund cancer treatment for patients diagnosed with cancer. However, all prevention screening projects funded by CPRIT must have an established path to navigate participants to treatment if the screening or diagnostic detects a cancer or cancer precursor.

Beginning at page 16, I have included five examples of prevention screening projects funded by CPRIT. These examples correlate with each of the five evidence-based cancer screenings we support – cervical cancer, breast, liver, colorectal, and lung. A common thread that runs through each of these projects is a strong education component that is culturally and community-based to promote regular screening tests. You will also see training for community healthcare providers and vaccinations included as appropriate for the project. Some of these examples, such as the Cervical Screening project on page 16, are expansions of an initial successful CPRIT prevention project. Many of the projects in CPRIT's portfolio build on the 15 years of experience to grow the geographic area covered by a successful prevention project.

In the appendices, I have included maps for each of the Senate districts represented on this committee. The maps show the number of projects that serve residents in your district as well as a list of all prevention projects in your district.

Although I have focused my testimony on the evidence-based prevention services CPRIT supports, I want to end by highlighting the clinical and population-based research projects that CPRIT is funding. Scientists design these research projects to develop effective prevention and early detection interventions to reduce cancer risk, cancer incidence, and cancer death. To date, CPRIT has awarded \$124 million to more than 80 prevention research projects at academic

institutions and early-stage companies in Texas. I highlighted some project examples on page 23 and included a full list of the research projects by category in the appendices.

Again, I appreciate the opportunity to give you a high-level overview of CPRIT and the work that projects we fund throughout Texas are doing to reduce the burden of cancer. I will end on an optimistic note. According to the most recent available data, cancer death rates in Texas declined by 14% between 2010 - 2018. This translates to 25,580 deaths averted through CPRIT's work and the efforts of the dedicated professionals on this panel and in this hearing room. There is more work to do, including dissemination of successful CPRIT prevention projects to all regions of the state and supporting the development of new evidence-based prevention strategies. We look forward to working with the committee on this vital mission.