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Good afternoon, and thank you for the honor of testifying today.

My name is Curt Civin. I am a Professor at the University of Maryland. Nowadays, I am focused on leading University of Maryland School of Medicine's Stem Cell Center, which includes my own lab's leukemia research discovery quests. Earlier, I spent decades taking care of young cancer patients, teaching young doctors and scientists, developing novel technologies and treatments in my lab, testing these lab research discoveries in clinical trials, and guiding research first at Johns Hopkins and then at the University of Maryland School of Medicine. I always view science and policy through the lens of a pediatric oncologist who has been privileged to participate in breakthrough research discoveries that translated to cures, as proved in my own patients.

I am here today to ask for your support for the proposed amendment to <u>Maryland's Pediatric</u> <u>Cancer Fund Act</u>. First, this amendment clarifies wording to restore the original intent to provide new support for pediatric cancer research, exclusively. Despite its impact on our national wellspring of innocent children, pediatric cancer research is greatly underfunded nationally, due to its infrequency relative to the more common adult cancers. We often intend that children should be first into the lifeboats, but ironically, research on childhood cancers is woefully underfunded nationally. In fact, in the last 30 years, the FDA has approved over 200 new cancer drugs to treat adult cancers, but only 6 new drugs have been approved to treat pediatric cancers, one of which has been discontinued. It is important to note that use of the monies from this Pediatric Cancer Fund Act to support current treatment of children with cancer and efforts to prevent pediatric cancers would quickly exhaust the requested monies, leaving nothing to address the gap this Act was originally created for – to support pediatric cancer *research*. Further, while pediatric cancer *research* is currently greatly underfunded, there are other active mechanisms that continue to pay for pediatric cancer treatment and prevention.

Second, this amendment to the Maryland's Pediatric Cancer Fund Act proposes to establish a Commission comprised of experts in pediatric cancer who would work with the Department of Health to review research grant applications and distribute the funds appropriated via this Act to conduct highly impactful pediatric cancer research in the State of Maryland. Although I'm proud to have contributed to the discoveries that now bring cures to 80% of US children with cancer, multiple childhood cancers, such as acute myeloid leukemias and brain tumors, are still rapidly fatal for children and devastating for their families. Again, Maryland's support for childhood cancer research is critical, because national support for childhood cancer research is so small.

My lab researches acute myeloid leukemias – or AML. Children with AML have not had substantial change in their treatment protocols over my 45 years as a pediatric oncologist, and sadly this AML continues to have a dismal survival rate. Those who do survive pediatric AML face a lifetime of chronic health conditions due to toxic cancer treatments that were developed more than 4 decades ago. Only now are we beginning to use in children the first new targeted agents, that kill cancer cells selectively, without the devastating toxicity to normal tissues that makes standard chemotherapy so miserable. For example, my own lab is working to repurpose artemisinins for treatment of childhood AML. Artemisinins are highly effective against malaria worldwide and have essentially no side effects. We have found chemical derivatives of the antimalarial artemisinins which are almost 100-fold more active against AMLs in the lab. As we work to bring these new low-toxicity artemisinin derivatives to clinical trials, we are also working to discover new molecules that drive AMLs. We will attack these new AML target molecules with novel compounds that will become new and better leukemia drugs.

It is imperative that the funds appropriated through Maryland's Pediatric Cancer Fund Act be allocated to impactful pediatric cancer research, including development of new targeted drugs for children with AML and other devastating cancers that kill our children. The amendments proposed will guide the optimal direction of State of Maryland support to address the funding gap for research on pediatric cancer. *This research is critical to saving our children's lives.*

To close, I want to thank this Committee and the State of Maryland for their support of pediatric cancer research, which has never been adequately funded nationally. I also ask that as members, you reach out to the Governor's office in support of reinstatement of the funding in line item: M00F03.04 - the 2025 budget's \$5 million appropriation to supplement fiscal 2024 year's fiscal budget for childhood cancer research. This critical funding has been eliminated from the upcoming budget. Retaining this Act's annual State funding for childhood cancer research will transform Maryland into a leader in childhood cancer research while providing *life-saving* new treatments for children battling cancer.