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## RESEARCH CURES CHILDHOOD CANCER

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Cancer claims far too many young lives; it is the number one cause of death by disease in children. As a pediatric oncologist, it is cancer's smallest victims that are my biggest concern.

The power of childhood cancer collaboration and the success it enables is a paradigm with which all pediatric oncologists in this country are quite familiar. Childhood cancer is relatively rare, and we have long recognized that no single institution will ever see a sufficient number of patients to be able to answer the important treatment questions posed by controlled clinical trials.

Representing every major pediatric cancer program in the United States and Canada, and treating over 90% of children with cancer, the 200 member institutions and 5,000 experts within Children's Oncology Group design and conduct state-of-the-art treatment trials which enable the translation of laboratory discoveries to clinical investigation and, ultimately, to standard of care at a much faster pace than would otherwise be possible.

The vastly improved pediatric cancer survival and cure rate is one of modern medicine's greatest success stories. Childhood cancer cure rates have climbed from less than 10% in the 1950s to nearly 80% today.

Collaborative research has been responsible for this. This same commitment to adult cancer research will someday make it possible for every person with cancer to be cured.

Only two to three percent of adults with cancer are enrolled in clinical research trials, whereas the majority of children diagnosed are enrolled. During the last ten years, more than 32,000 children with cancer have been enrolled into 138 different completed clinical trials. We are grateful to these courageous children and their families who are our partners in research.

This record of collaborative success has led to an estimated 25,000 additional childhood cancer survivors. Since the average age of a child who is diagnosed with

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cancer is six, this will result in an estimated additional two million person-years of productive life. There are now more than 270,000 childhood cancer survivors in the United States, and this number is rapidly growing.

Historically, some of the most basic and essential treatment strategies now employed in the fight against cancer – such as multi-agent chemotherapy and combined modality therapy – were developed through pediatric cancer research. The genetic origins of human cancer manifested by the discovery of cancer causing oncogenes and mutated tumor suppressor genes were first discovered in uniquely pediatric cancers. Pediatric cancer research continues to add immense value to the science of oncology, unlocking the secrets of this terrible disease.

Many promising pediatric clinical trials and studies are now underway, including targeted molecular therapies, peripheral blood stem cell research and immuno-therapy research, and, at COG, the development of the Childhood Cancer Research Network, a nationwide investigative epidemiological strategy.

A new Long Term Follow-Up Center will permit researchers to follow the health of childhood cancer survivors into adulthood, further adding to the overall knowledge of the short and long term complications of cancer and its treatment. Such investigations ultimately come full circle and impact the development of new and improved therapies that will lead to fewer acute and long-term side effects. In this way, pediatric oncologists strive to not only “cure,” but to improve quality of life and quality of survivorship. Recent reports indicate that nearly two-thirds of childhood cancer survivors experience significant medical problems resulting from their original cancer and/or its treatment.

Stand Up To Cancer’s vision of a highly-focused, interdisciplinary, collaboration that quickly translates successful trials into bedside care, can and will work for all patients who suffer from cancer. By engaging corporate America and private citizens in this noble endeavor, and raising overall awareness of what is now possible, Stand Up To Cancer will bring us closer to the day when every patient, young and old, can be guaranteed a cure.

I applaud the work of Stand Up To Cancer. Who wouldn’t want to be part of history? Together, I know we can get there.

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**Dr. Gregory H. Reaman** is the Chair of the [Children’s Oncology Group](#) which includes 5,000 experts in childhood cancer research and treatment. He is a professor of pediatrics at [The George Washington University School of Medicine](#) and Health Sciences, and a member of the division of Oncology at the [Children’s National Medical Center](#) in Washington, DC.