Two words that never should go together are “childhood” and “cancer.” Although childhood cancer is rare, 43 children in the United States are diagnosed with cancer every day. Moreover, one of every eight children diagnosed with cancer will not survive, making it the leading cause of death by disease among children in the nation.

The Pediatric Hematology, Oncology and Bone Marrow Transplant team at the University of Wisconsin’s American Family Children’s Hospital is absolutely committed not only to providing the very best treatment for children today, but discovering more effective and humane treatments for the children of tomorrow.

Several pediatric specialties at our world-class hospital— including childhood cancer—have consistently been ranked among the top 50 by U.S. News & World Report. Moreover, our program is part of the UW Carbone Cancer Center, the only National Cancer Institute-designated comprehensive cancer center in Wisconsin and one of only 27 members of the National Comprehensive Cancer Network®.

Great progress has been made over the past 40 years to improve the cure rates of childhood cancer and reduce the toxicity of treatment. UW’s team is proud of its prominent role in this fight, but cannot rest on its laurels. Some of the most exciting advances in pediatric cancer research relate to immunotherapy—both as a curative and less toxic treatment modality. At the heart of this important work is our Pediatric Hematology, Oncology and Bone Marrow Transplant team.

In 2013, for example, we were named as one of only seven institutions worldwide to comprise the “Pediatric Cancer Dream Team” by the American Association of Cancer Research, along with Stand Up To Cancer and the St. Baldrick’s Foundation. These seven research centers are working together to better understand the genes that control cancer, in order to develop even more effective immunotherapies to treat the most deadly cancers in children.

As a leading pediatric cancer research site, the UW and American Family Children’s Hospital can offer innovative therapies to children that are available only at our center or at a very limited number of institutions nationwide. In this regard, we are redoubling our efforts to become a premier referral center for children with neuroblastoma and other pediatric cancers resistant to conventional therapies. Some examples of our most novel open clinical trials include:

- CD19 CAR Trial for Relapsed B Cell Acute Lymphoblastic Leukemia (ALL): This therapy uses the child’s own T cells and genetically modifies them to recognize and destroy the leukemia. This approach has been designated a “breakthrough” by the FDA for the treatment of ALL—continued.
Pediatric Hematology, Oncology, and Bone Marrow Transplant Team

The University of Wisconsin’s Pediatric Hematology, Oncology & Bone Marrow Transplant team at American Family Children’s Hospital are at the forefront of developing and implementing new cancer protocols designed to provide the most effective and easily tolerated treatments available for children from neonates to young adults. Our team includes nine faculty members, certified pediatric nurse-practitioners, pediatric oncologists, health psychologists and Child Life specialists.

PRIMARYPE PRACTICE LOCATION
American Family Children’s Hospital
1057 Highland Avenue
Madison, WI 53705

ACADEMIC OFFICE
University of Wisconsin
School of Medicine and Public Health
WIMB 1111 Highland Ave, Room 410
Madison, WI 53705
Phone: (608) 263-6200

The most common type of childhood cancer (also affects young adults). We are one of 9 pediatric oncology centers in the country participating in this one multi-center clinical trial. Our patients are focused on the most difficult to treat childhood cancers (particularly high risk and relapsed childhood malignancies). Here as well, our focus is on developing new ways that the important anticancer immune system. Patients will receive infusions of natural killer (NK) cells, together with an antibody that guides the NK cell directly to the tumor. The NK cell will be obtained from the patient and activated in the laboratory prior to being infused into patients. The antibody is attached to a drug that helps maintain the NK cell in an activated state after administration. This novel approach to treating leukemia will only be available at UW’s American Family Children’s Hospital.

A Phase 1 Study of T-cell depletion and haploidentical transplants to children with very high risk or relapsed ALL. This is an international trial with UW’s American Family Children’s Hospital serving as the only U.S. site. It is investigating the use of Allo-SCT in children with relapsed leukemia following treatment with a ch14.18 Chimeric antigen receptor (CAR) T cell therapy that inhibit), that prevent cancer cells from escaping immune-mediated destruction. Investigators at UW have existing pre-clinical data that support this first-in-human clinical application approach to treat cancer.

The University of Wisconsin’s Pediatric Hematology, Oncology & Bone Marrow Transplant team at American Family Children’s Hospital are at the forefront of developing and implementing new cancer protocols designed to provide the most effective and easily tolerated treatments available for children from neonates to young adults.

A Phase 1, Open-Label, Dose Escalation Study of MGA221 in Pediatric Patients with B-ALL: Expressing Releasable or Releasable Solid Tumors. This will be the first clinical trial offered by the Pediatric Oncology-Ovarian Cancer Consortium, with UW serving as the lead institution for the study. The trial will evaluate the safety and tolerability of the activity of MGA221, which is a monoclonal antibody directed against B-ALL (an antigen expressed in the variety of pediatric malignancies that has been genetically engineered to augment its antitumor activity. The study is being conducted in collaboration with the National Cancer Institute and is supported by the National Cancer Institute.

Some examples of novel clinical trials soon to be open for pediatric patients include:

- Ex-Vivo Expanded NK cells + hu14.18-IL2 for the Treatment of Relapsed/Refractory Neuroblastoma: This novel approach will offer a new therapy for children with relapsed or refractory neuroblastoma, the most common type of childhood cancer occurring outside the central nervous system. Patients will receive infusions of mature killer (NK) cells, together with an antibody that guides the NK cell directly to the tumor. The NK cell will be obtained from the patient and activated in the laboratory prior to being infused into patients. The antibody is attached to a drug that helps maintain the NK cell in an activated state after administration. This novel approach to treating leukemias will only be available at UW’s American Family Children’s Hospital.

- A Promising Future

Beyond these current and next generation clinical trials, our research laboratories are investigating important new leads in pediatric cancer biology and the immune response to childhood cancers. These studies are focused on developing new tools to treat childhood cancers such as hematopoietic stem cell transplantation (haploidentical malignancies). Here as well, we focus on developing new ways that the important anticancer immune tumor microenvironment. Patients will receive infusions of mature killer (NK) cells, together with an antibody that guides the NK cell directly to the tumor. The NK cell will be obtained from the patient and activated in the laboratory prior to being infused into patients. The antibody is attached to a drug that helps maintain the NK cell in an activated state after administration. This novel approach to treating leukemias will only be available at UW’s American Family Children’s Hospital.

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October 2016

Dear Colleague,

For those of us who care for children, few conversations are as difficult as those involving a suspected diagnosis of cancer. Yes, there is comfort in telling most families that the chances for cure are usually good. Of course, much work still needs to be done to make our cancer treatments more humane and to save the lives of children whose disease is more resistant to cure.

Should the thought of “cancer” cross your mind with any child in your practice, we want to assure you that the University of Wisconsin’s Pediatric Hematology, Oncology & Bone Marrow Transplant Team at American Family Children’s Hospital in Madison is always ready to help immediately.

Over the past five years, our team of pediatric hematologist/oncologists has virtually doubled, thanks to some very impressive new faculty physicians who are not only highly regarded clinicians, but also on the leading edge of the latest research. After years of persistent work in the laboratory and in the clinic, we are beginning to see enormous promise for immunotherapy as a treatment modality for children whose disease has been especially resistant to cure.

Historically, our UW team in Madison has played a significant role in developing more effective, less toxic treatments for kids with cancer, and our experience with the breakthrough of immunotherapy is no exception. In 2013, for example, UW was named as one of only seven institutions worldwide to comprise the “Pediatric Cancer Dream Team” – a research consortium led by the American Association of Cancer Research, along with Stand Up To Cancer and the St. Baldrick’s Foundation.

The enclosed updated materials provide a comprehensive overview of our program, including a listing of some of our more novel open and upcoming cancer treatment trials not widely available elsewhere.

We also invite you to take a look at uwhealthkids.org/cancer, for more information about our program.

Please let us know how we may be of service at any time.

Sincerely,

Paul Sondel, MD, PhD
Research Director
Pediatric Hematology, Oncology & Bone Marrow Transplant

Kenneth DeSantes, MD
Division Head
Pediatric Hematology, Oncology & Bone Marrow Transplant
The Pediatric Hematology, Oncology and Bone Marrow Transplant Program at the University of Wisconsin’s American Family Children’s Hospital in Madison is known nationally, regionally and locally as an innovative, comprehensive and compassionate treatment center for patients with any type of childhood cancer or blood disorder.

Our clinic is located on the 2nd floor of the American Family Children’s Hospital. We also see patients at our regional pediatric clinic located in Rockford, Ill.

For more information, please visit us on the web at: uwhealthkids.org/cancer
American Family Children’s Hospital

Our world-class children’s hospital has consistently been ranked among the top 50 children’s hospitals for pediatric cancer by *U.S. News and World Report*. Linked as we are to a world-class research university, we offer patients and families access to the very latest advances in childhood cancer treatment within a comforting, aesthetically soothing facility.

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