2011 Annual Report

The Cancer Program and LaNasa Greco Center for Cancer and Blood Disorders

Our Team of Medical Professionals

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CHILDREN'S HOSPITAL

From the Chairperson

Lolie C. Yu, MD,
Professor Pediatrics,
Cancer Committee Chairman,
Pediatric Hematology/Oncology

2011 was very busy for our Pediatric Hematology-Oncology and Hematopoietic Stem Cell Transplant (HSCT) program, but it was also very rewarding. We were recognized by the American Society of Clinical Oncology (ASCO) & American College of Surgeons, Commission of Cancer (ACoS, CoC) for providing quality care to cancer patients.

We received the 2011 Outstanding Achievement Award (OAA) from the American College of Surgeons, CoC, for having demonstrated a commendation level of compliance with seven standards that represent six areas of cancer program activity: cancer committee leadership, cancer data management, clinical management, research, community outreach and quality improvement. Only 17 percent of cancer programs in the country were given this award.

We also received the 2011 Clinical Trial Program Award (CTPA) by ASCO for having a high quality clinical cancer research program. Awardees are selected based on patient accrual rates, accrual of minority and underrepresented populations, and innovative techniques in overcoming barriers to participation in clinical trials. Notably, we were one of only 6 programs in the country who received the award.

As the survival rate for pediatric cancer patients increased which is now in the range of 80 percent, we are acutely aware that these survivors will require continued monitoring especially for late effects, either from their treatments or from their disease. To that end, we recruited Dr. Pinki Prasad.

She joined our group in April 2011 and she's one of a few pediatric experts in the country who have been

Cancer Program: A Year of Events

Dr. Lolie Yu receiving the CTPA award from Dr. George Sledge (R), President of ASCO and Dr. Robert Comis of the Coalition of Cancer Cooperative Group. Picture was taken by Todd Buchanan during the ASCO 2011 meeting in Chicago.

The second annual CureSearch Walk was held in April 2011 and deemed a total success.

trained to provide a comprehensive care for pediatric cancer survivors. Through her efforts, we received a $100,000 Hyundai Hope grant for the development of our survivorship clinic. This clinic will provide services to patients who have survived their cancer and the focus would be to determine if they have developed any late effects. These late effects could be in the form of cardiac, endocrine, psychosocial or neurocognitive changes. Dr. Prasad together with other disciplines, will be part of this program.

Last April, we had our second Curesearch Walk and as before, it was a total success. Mayor Mitch Landrieu and his lovely wife, Cheryl, were again our honorary guests and we are very grateful that they continued to support this endeavor. We were able to raise close to $90,000. All of these monies will be used for research of childhood cancer.

I have mentioned only a couple of significant events that have taken place but as you read this report, it will feature all the activities and events that have occurred in late 2010 to August 2011 with our Pediatric Hematology-Oncology & HSCT program and with our patients.

In addition, we have included an article on the advances & significant improvements with the care of High Risk Neuroblastoma patients over the last 10 years at Children's Hospital.

We will continue our commitment to provide the best care for our patients through participation in high quality clinical trials through the Children's Oncology Group and other NCI-sponsored studies. It must be noted that for most if not all patients, clinical trials provide the best means for accessing a new cancer therapy.

Children's Hospital Cancer Committee members shown with the Outstanding Achievement Award (OAA) presented by the American College of Surgeons, Commission on Cancer a cancer program that provides quality care to patients.

The Cancer Committee

The mission of the Cancer Committee is to monitor the care given to children with cancer and implement those ideas that will lead to improvement in that care. Since 1989, the Cancer Committee has acted under the aegis of the American College of Surgeons, Commission on Cancer (ACoS, CoC), using guidelines established by them for pediatric cancer centers in the United States. We remain an approved pediatric cancer referral center. We formally became the Center for Cancer and Blood Disorders in 2002 and have offered, in that capacity, up-to-date treatment protocols and clinical trials which provide patients with the opportunity to take advantage of the most advanced and current therapies. It also affords them the opportunity to learn of new advances as soon as they emerge.

The Cancer Committee is comprised of professionals who render care to children with cancer. Together, they embody the multidisciplinary concept of cancer treatment, i.e., taking a unified but comprehensive approach to care or "treating mind, body and soul." As pediatric hematologists/oncologists, pediatric neurosurgeons, urologic and orthopaedic surgeons, radiation oncologists, pediatric radiologists and pathologists, these professionals combine their specific outlooks to view the patient as a whole and offer suggestions and plans to improve care. Child psychiatrists, psychologists, social workers, play therapists, non-denominational pastoral workers and rehabilitation specialists also bring to the table their unique outlooks on the support of these children.

This past year, we also worked closely with organizations such as the American Cancer Society and Leukemia/Lymphoma Society. Such connections have helped us to better reach out to the community at large and initiate programs for cancer prevention and education. They have also helped us better assist families in resettling into the post-Katrina environment with its attendant stresses and exigencies. Examples of joint efforts by the Hematology/Oncology Division and these organizations have included lodging of our patients at the American Cancer Society's Hope Lodge, the provision of a grant that provides transportation vouchers for needy parents and the Smile Program. The Smile Program is an endeavor which remains dear to our hearts; it was developed by the American Cancer Society, and is designed to enable the establishment of Big Brother/Sister-like relationships between our patients, especially those with cancer, and medical students at the Louisiana State University Health Sciences Center (LSUHSC). Such relationships have lasted, at times, beyond the tenure of the students at the medical schools; life-long bonds have been forged which sustain our children for years afterwards.

We also have been able to variably call upon the services of anesthesiology, pharmacy, cardiology, ophthalmology, nursing and laboratory services to ensure greater quality control. Nursing staff has provided special insight into the problems that sometimes develop on the unit. They have been instrumental in carrying out some key projects on patient satisfaction, infection control and analgesic administration that have allowed us to come up with creative solutions to problems seen in patient care.

The Cancer Committee also oversees clinical research activities, both those associated with our hospital and those carried out through our affiliation with the Children's Oncology Group (COG), of which we have been a member institution since 1987. COG is a national, collaborative pediatric cancer research organization, sponsored by the National Cancer Institute at the National Institutes of Health (NCI, NIH). Over 90 percent of children who are diagnosed with cancer in the United States, Canada and other countries throughout the world are enrolled in protocols for therapeutic, cancer control, epidemiology or biology trials through COG. It is our stance that a high percentage of our patients should participate in such trials in order to advance our knowledge of childhood cancer and to provide the patients with the latest advances in treatment and knowledge about the process of their diseases. It is acknowledged that clinical trial participation has been associated with improved survival overall after diagnosis of cancer.

We regularly have residents, fellows and other allied health specialists in attendance at our meetings. This provides an opportunity to educate them regarding the interactions and intricacies involved in the care of children with cancer and other blood disorders. Children's Hospital is closely affiliated with LSUHSC and is one of its major teaching hospitals, providing high-quality education to all these individuals. The environment provided by Children's Hospital has likely influenced the career choices of the LSUHSC medical students who, in high proportion, elect to pursue a pediatric or med/peds residency. Education, in general, remains an essential goal at Children's Hospital, with the Cancer Committee recently incorporating programs on cancer prevention trials such as the FreshStart program, a comprehensive approach to the cessation of smoking during pregnancy and after delivery. We are involved in providing information to the families of children in Louisiana through our Web site, addressing their concerns about long term environmental and toxic hazards that might be encountered upon their return to New Orleans and its environs.

We hope that this annual report of the Children's Hospital Cancer Committee will provide you with information about the oncology and hematology services available at Children's Hospital. Further information can be obtained by calling the Division of Hematology/Oncology at (504) 896-9740.

Cancer Committee Members

Lolie C. Yu, MD, Professor of Pediatrics, Cancer Committee Chairman, Pediatric Hematology/Oncology
Evans Valerie, MD, Physician Liason, Pediatric Surgery

Simone Bienvenu, RN, Quality Assessment & Improvement
Rachel Bufkin, CTR, Cancer Registrar
Kay Casey, MSW, Social Services Department
Randall D. Craver, MD, Pathology/Laboratory Department
Ofelia Crombet, MD, Pediatric Hematology/Oncology Fellow
Matthew Fletcher, MD, Pediatric Hematology/Oncology Fellow
Cheryl Fourcade, American Cancer Society
Renee V. Gardner, MD, Professor of Pediatrics, Hematology/Oncology
Cherie Hadley, RN, Pediatric Nurse Coordinator
Marie-Louise Haymon, MD, Radiology
Cheric Hadle, RN, Pediatric Hematology/Oncology Nurse Coordinator
Wendy Huval, RHIA, Director of Medical Records
Amy Lee, Child Life Specialist
Jaime Morales, MD, Assistant Professor of Pediatrics, Hematology/Oncology
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Murial Roberts, Clinical Trials
Jay Schwab, Pharmacy
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Roxanne Stegall, Social Services Department
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Peggy Williams, LSCW, Social Services Department
Lynn Winfield, RN, Nurse Manager
Ellen L. Zakris, MD, Radiation Oncology

Advances in the Treatment of High-Risk Neuroblastoma: a 10-year Review

Jennifer Mullinax, MD[a]; Cruz Velasco, PhD[b]; Lolie Yu, MD[a]
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Louisiana State University School of Public Health, New Orleans[b]

NEUROBLASTOMA

Neuroblastoma is the most common extracranial tumor in childhood and is the third most common malignancy in childhood overall. It is a cancer of the sympathetic nervous system, and tumors most frequently originate from the adrenal glands, but can arise from nerve tissue anywhere along the sympathetic chain. Neuroblastoma can exhibit varying degrees of differentiation. Undifferentiated neuroblastoma is composed almost entirely of neuroblasts which histologically appear as sheets of small, round, blue cells sometimes forming Homer-Wright pseudorosettes (see Figure 1). It has the potential to mestastisize to the lymph nodes, bone, bone marrow, and skin. There are approximately 650 new cases of neuroblastoma diagnosed each year in the United States, and most children present prior to 5 years of age.

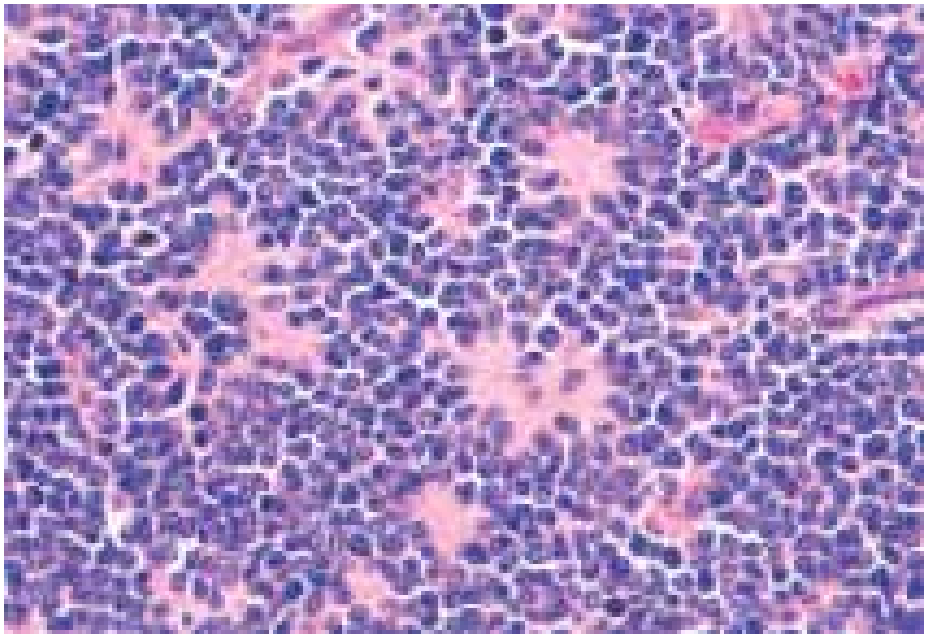


Figure 1. Neuroblasts with Homer-Wright pseudorosettes (1).

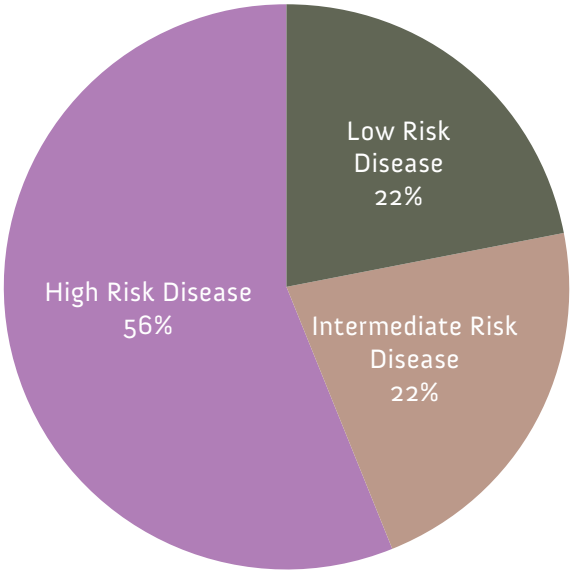
Outcomes of neuroblastoma are variable and dependent on the extent of the disease. Neuroblastoma is categorized as low, intermediate, and high risk disease based on several factors including the stage of disease, age of the patient, MYCN amplification, histology, and DNA ploidy. Both the stage of the disease and risk category are used to guide therapy. In general, low risk disease includes patients with stage I and II disease without any unfavorable biologic features (MYCN amplication, unfavorable histology, DNA index=1); intermediate risk disease includes patients with stage III disease with favorable histology and infants less than 18 months with stage IV disease; and high risk disease includes patients either Stage III or IV and with any of the unfavorable biologic features. Children with low risk disease do very well. Most of these children are cured by surgery alone. Some cases only require observation with the tumor undergoing spontaneous regression or maturation. Children with low risk disease have a 98-99% 4-year overall survival (2). Children with intermediate risk disease also do very well. They are treated with a combination of surgery and chemotherapy and achieve a 3-year overall survival rate of 96% (3). Children with high risk disease, however, continue to have poor outcomes in spite of intense multimodality therapies. Until recently, the overall survival rate was approximately 30-40%; however, the use of immunotherapy has increased the 2-year disease-free survival to about 65% and 2-year overall survival to 85% (4).

MATERIALS AND METHODS

A 10-year retrospective analysis of medical records from 2001 to 2011 was performed for children diag-

DISTRIBUTION OF NEUROBLASTOMA

Patients from 2001-2011



nosed with neuroblastoma at Children's Hospital of New Orleans. Both clinic charts and electronic medical records were reviewed.

RESULTS

From October 18, 2001 to October 18, 2011, 35 patients were identified as receiving treatment for neuroblastoma at Children's Hospital of New Orleans. Of these 35 patients, 32 medical records were available for review. Of the 32 patients whose medical records were available, 7 were identified as having low risk disease (22%), 7 with intermediate risk disease (22%), and 18 with high risk disease (56%).

All seven patients with low risk disease underwent surgical resection only followed by observation. One patient relapsed 6 months after diagnosis; this patient subsequently underwent a second resection and is now currently receiving salvage therapy with chemotherapy. The other six patients are alive without evidence of disease recurrence at last follow-up.

Of the seven patients with intermediate risk disease, five underwent surgical resection and two underwent biopsy only. All seven patients received chemotherapy with one patient also receiving isotretinoin for prolonged clearance of disease. While one patient is currently undergoing treatment with chemotherapy, no relapses have occurred in this group.

Of the eighteen patients with high risk disease, fourteen patients underwent transplant and four patients did not. Of the four patients who did not receive a transplant, one had progressive disease and three relapsed during induction. Of the fourteen patients who received a transplant, none experienced relapse or progression of disease prior to transplant. Of these fourteen patients, six relapsed after transplant and eight did not. Those patients who did not relapse are alive and remain without evidence of disease recurrence. Seven of these eight patients received optimal duration of therapy with isotretinoin and/or other immunotherapy; the eighth patient began treatment with isotretinoin, but had to stop one week into therapy due to side effects. Of the six patients who relapsed, only two tolerated immunotherapy at optimal dosing, one tolerated six cycles of isotretinoin but at a reduced dose (secondary to side effects), one began isotretinoin but had to stop after one week (secondary to side effects), one relapsed a few weeks after beginning immunotherapy, and one relapsed at 4 months on immunotherapy. The only patient who remains alive in this group was one of the two patients who tolerated immunotherapy at adequate dosing with optimal duration; however, this patient recently relapsed again and continues to battle her disease.

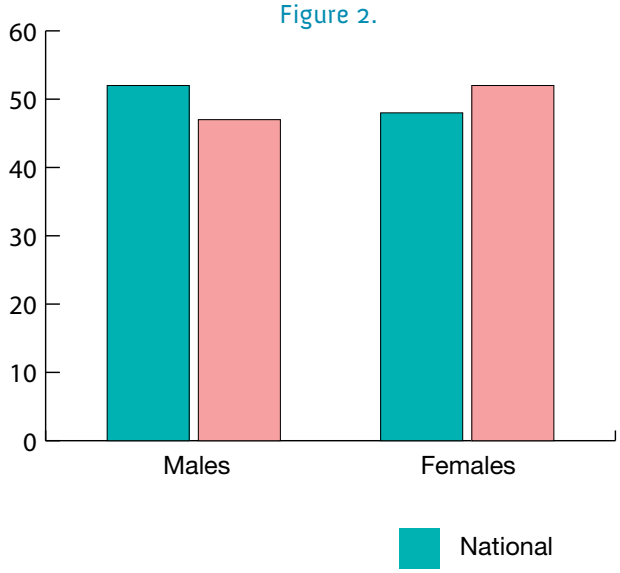
DISCUSSION

Our patient population had a slight female predominance (females 53%, males 47%) and a slightly higher median age at diagnosis (28.4 months versus 19 months) compared to the national data (5) (see Figures 2 and 3 below). On the other hand, the age distribution of our patient population is representative of the national data with 25% of patients presenting prior to one year of age; 84% presenting prior to five years of age; and 100% of patients presenting prior to ten years of age. Over half of our patients presented with high risk disease, with about 50% of those experiencing relapse.

Our patients with low risk and intermediate risk disease had very good outcomes. Only one patient of seven with low risk disease experienced relapse, while none of the patients with intermediate disease re-

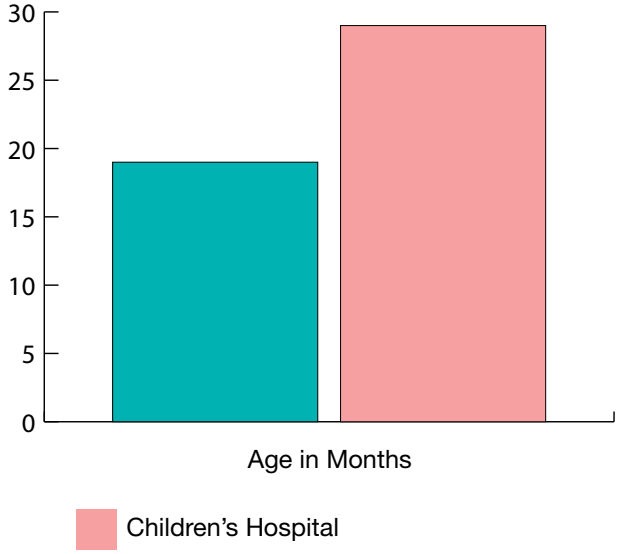
COMPARISON OF AFFECTED MALES AND FEMALES

Figure 2.



MEDIAN AGE AT DIAGNOSIS

Figure 2.



lapsed. Our results are similar to the national data that surgery alone (partial or full resection) for low risk disease is sufficient given the overall excellent outcomes of these patients, while reserving chemotherapy and other salvage treatment only for those who experience progression or recurrence of disease (2).

Given the excellent outcomes of patients with intermediate disease, recent studies have evaluated the outcomes of patients with intermediate disease when treated with reduced chemotherapy. These studies have shown a 3-year overall survival rate of 96% in spite of the reduction of chemotherapy (3). Our patients also had excellent outcomes without progression or recurrence of disease. Studies by the Children's Oncology Group are currently underway to evaluate further reduction of cytotoxic therapy in this group of patients.

Patients with high risk disease have a worst outcome when compared to those with low or intermediate risk disease. Therefore, a multimodality approach to treating patients with high risk disease is warranted and includes chemotherapy, surgery, autologous stem cell transplant, radiation, isotretinoin, and immunotherapy. Patients first undergo induction therapy with intensive chemotherapy using a combination of agents including platinum agents, cyclophosphamide, doxorubicin, and etoposide. Surgical resection is also part of induction therapy and can be done either at diagnosis when feasible or after neoadjuvant chemotherapy.

In 1999, Dr. Katherine Matthay, et al published results of a study comparing myeloablative therapy with autologous stem cell transplant versus chemotherapy alone as consolidation therapy. Results showed that patients who undergo stem cell transplant have improved outcomes attaining a 3-year event free survival of 34% compared to a 3-year event free survival of 22% for patients who received chemotherapy alone (6). Therefore, myeloablative therapy with autologous stem cell transplant has since become the standard of care.

Neuroblastoma is a radiosensitive tumor. Children treated with a combination of chemotherapy and radiation had improved outcomes when compared to treatment with chemotherapy alone (5). Given the long-term side effects as TBI, radiation is now administered only to primary and refractory metastases; and since patients with low and intermediate risk disease have superior outcomes without radiation, radiation is currently reserved only for the treatment of high risk disease and for recurrent or refractory disease.

The majority of children with high risk neuroblastoma relapse in spite of achieving complete clinical

remission after transplant. This suggests that chemotherapy-refractory minimal residual disease plays an important role in recurrence and has led to research in the use of isotretinoin and immunotherapy after transplant as maintenance therapy. Isotretinoin (13-cis-retinoic acid) is a derivative of vitamin A which decreases proliferation and induces differentiation in neuroblastoma cells (see Figure 4). Patients who receive isotretinoin after transplant achieve a 3-year event free survival of 46% compared to only 29% for those who receive no further therapy (6). Immunotherapy includes ch14.18, granulocyte-macrophage colony-stimulating factor (GM-CSF), and interleukin-2 (IL-2) which can be used in combination with isotretonoin. Ch14.18 is a monoclonal antibody directed against disialoganglioside GD2 which is uniformly expressed in neuroblastoma cells and has limited expression in normal tissues. GM-CSF and IL-2 augment antibody-dependent cell-mediated cytotoxicity when used in combination with ch14.18 (4). Studies evaluating isotretinoin used in combination with ch14.18, GM-CSF, and IL-2 show improved outcomes for patients with high risk disease when treated with immunotherapy achieving a 2-year EFS of 66% (versus 46% without immunotherapy) and a 2-year OS of 86% (versus 75% without immunotherapy) (4).

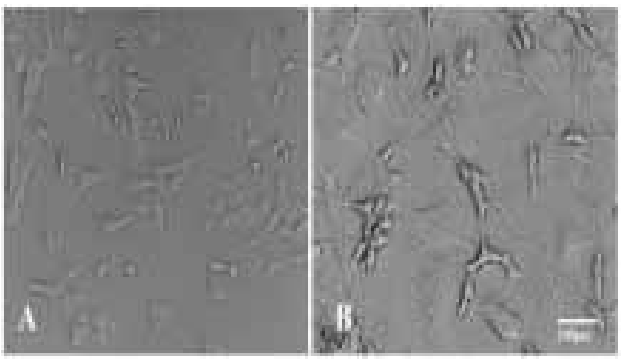


Figure 4. Human neuroblastoma cells (A) untreated and (B) showing differentiation after treatment with retinoic acid with the differentiated cells showing typical neuron morphology, such as dendrites and neuronal processes (7).

There are other forms of immunotherapy and investigational drugs currently under study. One form of immunotherapy under study is 3F8 which is similar to ch14.18 and targets disialoganglioside GD2. ABT-751 is an investigational drug which binds microtubules and prevents cell division; it also disrupts tumor neovascularization and thus leads to cell death. Zactima, or vandetinib, is another investigational drug; it is a tyrosine kinase inhibitor which works by preventing tumor growth, and it also is an inhibitor of vascular endothelial growth factor and so prevents the formation of new blood vessels to the tumor thereby leading to cell death.

The overall inferior outcome for children with high risk neuroblastoma was reflected in our patient population as well. Four patients did not undergo transplant due to progressive disease or disease recurrence. Of the fourteen patients who did undergo transplant, six patients relapsed with five of those patients ultimately succumbing to their disease, while the eight patients who did not relapse remain alive without evidence of disease. This is representative of the current national trend which shows that those who suffer relapse have even worse outcomes often resulting in death. Studies show improved outcomes when isotretinoin is used as part of the treatment regimen for high risk disease after autologous transplant and even better outcomes when immunotherapy is used in combination with isotretinoin (6, 4). Of the fourteen patients who underwent transplant, nine patients tolerated and completed immunotherapy at optimal dosing and optimal duration; of these, only one patient died. Of the five patients who did not tolerate immunotherapy at optimal dosing or duration or who relapsed while on immunotherapy, four died. This is also representative of the national data that patients who complete immunotherapy have improved outcomes, while those who do not tolerate immunotherapy or relapse while on immunotherapy tend to have a poor prognosis often resulting in death.

Studies are also ongoing to determine which immunotherapy, used alone or in combination, provides the best outcome. Earlier studies showed improved outcomes when isotretinoin was used as maintenance therapy after transplant, while more recent studies are showing even better outcomes when the combination of isotretinoin and ch14.18, GM-CSF, and IL-2 is used as maintenance therapy after transplant (6, 4). In our high risk patient population, all fourteen patients who underwent transplant received immunotherapy as maintenance therapy after transplant, although not all were able to complete sufficient courses. Of the fourteen patients, six received isotretinoin only, two received 3F8 only, one received isotretinoin in com-

Table 1. Characteristics of High-Risk Neuroblastoma Patients at Children's Hospital

Patient	Type of Immunotherapy	Adequate Immunotherapy	Relapse	Outcome
1	RA (reduced dose)	No	Yes	Died
2	RA (discontinued after 1 week)	No	Yes	Died
3	RA	Yes	Yes	Died
4	3F8	Yes	Yes	Alive
5	RA (~6 weeks)	No	Yes	Died
6	RA (4 cycles)	No	Yes	Died
7	RA (discontinued after 1 week)	No	No	Alive
8	RA, ch14.18, GM-CSF, IL-2	Yes	No	Alive
9	3F8	Yes	No	Alive
10	3F8 and RA	Yes	No	Alive
11	RA, ch14.18, GM-CSF, IL-2	Yes	No	Alive
12	RA, ch14.18, GM-CSF, IL-2	Yes	No	Alive
13	RA, ch14.18, GM-CSF, IL-2	Yes	No	Alive
14	RA, ch14.18, GM-CSF, IL-2	Yes	No	Alive

Figure 5. Event Survival (months)

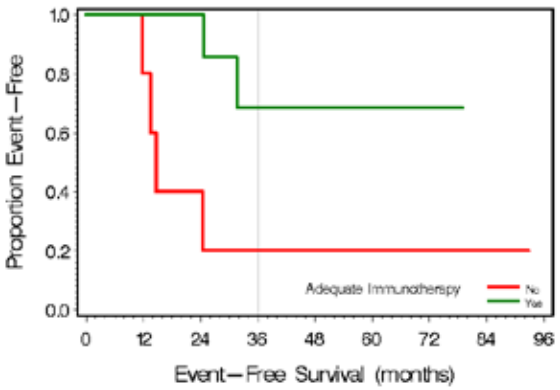
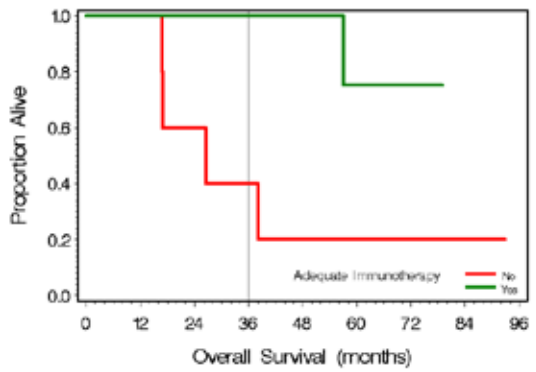


Figure 6. Overall Survival (months)



patient, however, relapsed approximately 18 months after immunotherapy and ultimately succumbed to his disease. The remaining eight patients remain alive, one with relapsed disease (received 3F8) and seven without evidence of disease (one received 3F8, one 3F8 with isotretinoin, and five received the combination isotretinoin, ch14.18, GM-CSF, and IL-2). It is noteworthy that of the five who received the combination of isotretinoin, ch14.18, GM-CSF, and IL-2, all are alive without evidence of disease.

In comparing the outcomes of our high risk patient population to the national data, the nine patients who completed an optimal course of immunotherapy, only two patients experienced relapse of disease, one of which resulted in death. The 3-year event-free survival of our high risk patient population treated with adequate immunotherapy is 68 +/- 19% with a median follow-up of 53.4 months after diagnosis (range 16.1 months to 79 months) versus a 2-3 year event-free survival of 46-66% reported in the national data; the 3-year overall survival for this group of patients is 100% (note that the relapse resulting in death in our patient occurred after 3 years) compared to a 2-3 year overall survival of 56-86% reported in the national data (6, 4). All five of our patients treated with the combination of isotretinoin with ch14.18, GM-CSF, and IL-2 remain alive without evidence of disease recurrence with a median follow-up of 27.3 months after diagnosis (range 16.1 months to 79 months) compared to the na-

tionally reported data of a 2-year event-free survival of 66+/-5% and a 2-year overall survival of 86+/-4% in this patient population (4).

In our experience at Children's Hospital, the outcomes of patients treated for neuroblastoma, therefore, are comparable to the national trend. We do, however, recognize the limitations of this report; our patient population is small and three patients are not yet two years out from completion of therapy.

Overall, patients with low and intermediate risk disease continue do well. Research remains ongoing to reduce cytotoxic therapy for patients with intermediate risk disease to minimize morbidity in this group of patients. Although outcomes are improving for patients with high risk disease when treated with multimodality therapy, research needs to continue in the area of immunotherapy and other novel agents to reduce minimal residual disease with the goal of reaching outcomes similar to the intermediate risk patients with neuroblastoma.

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Our Support Services

SOCIAL SERVICES

Pediatric cancer is a devastating diagnosis that affects the entire family. Social workers help patients and families identify their concerns, consider effective solutions, and better cope with the child's illness. They assist families dealing with cancer by providing emotional support; guiding them to the most appropriate sources of monetary assistance for the child's medical care; directing them to transportation services that might be used and helping find temporary housing in New Orleans during treatment, when this is suitable.

PSYCHIATRY/PSYCHOLOGY

The Child Psychiatry and Psychology departments provide comprehensive evaluation and management of emotional and behavioral disorders stemming from the diagnosis of cancer. They work closely with the hematology/oncology physicians and social workers pioneering multidisciplinary psychosocial conference to ensure the stability of mental health of these patients under stressful conditions. Counseling is provided for patients and families that enables them to freely discuss their concerns regarding the diagnosis, treatment, treatment aftermath, school and other social concerns.

CHILD LIFE

The Child Life Department is dedicated to improving the quality of life for children facing the many challenges of cancer treatment while they remain hospitalized. Using developmentally appropriate play, Music and recreation therapists promote opportunities for children to understand a new diagnosis, adjust to the hospital experience, learn coping skills, express themselves, and maintain normal growth and development. An attractive playroom, with a view of Audubon Zoo is located on the unit. Playroom activities include unstructured and structured activities during the evening hours, such as bingo night and movie night.

REHABILITATION MEDICINE

The Rehabilitation Medicine team provides a comprehensive approach to the treatment of patients who may have experienced a temporary or permanent loss or impairment of functional abilities as a result of their disorder or treatment. Rehabilitation Medicine integrates physical, occupational and speech therapy services, nursing, nutritional and other services to improve and strengthen the patient's functional capabilities.

OCCUPATIONAL THERAPY

Occupational Therapy's involvement may include assessment and treatment of the patient's upper extremity status (i.e., range of motion, strength, endurance), fine motor skills, visual perception, visual motor skills, and activities of daily living, such as eating, dressing, bathing, toileting and grooming. Occupational Therapy actively promotes independence, feeling that by doing

FINDING COMFORT IN OUR SUPPORT SERVICES

- Social Services
- Psychiatry/Psychology
- Child Life
- Rehabilitation Medicine
- Occupational Therapy
- Physical Therapy
- Dietary/Nutritional Services
- Pharmacy
- Pastoral Care
- Volunteer Services
- Starbright World
- Camp Challenge
- American Cancer Society's Patrick F. Taylor Hope Lodge
- Ronald McDonald House
- Candelighters
- A Child's Wish
- Make-A-Wish
- Operation Smile
- Caps For Kids

so, social and emotional needs, as well as the physical, can be effectively met.

PHYSICAL THERAPY

The Physical Therapy Department specializes in the assessment and treatment of gross motor function in the child with cancer. Physical Therapy is consulted on both an inpatient and outpatient basis for children who will undergo stem cell transplant, as well as for those children who might have motor deficits resulting from either primary disease or treatment effect.

DIETARY/NUTRITIONAL SERVICES

Children undergoing chemotherapy or bone marrow transplantation may suffer lack of appetite, so the Dietary and Nutritional Services Department provides a complete nutritional assessment and crafts an individualized nutritional care plan to meet each patient's specific needs. Parents are thoroughly counseled on diets meeting their child's needs. Safe food handling is emphasized for the immune compromised patient and the nutritionist meets with the family as much as necessary

PHARMACY

The pharmacists work closely with the physicians, nurses and other healthcare team members to provide the best possible treatment for our patients. Not only do they prepare the therapeutic drug and advise on its administration and dosing, but they monitor patients who are on, at times, complex chemotherapeutic protocols, in order to prevent errors.

PASTORAL CARE

When a child is diagnosed with cancer, the child and his/her family can experience intense and often overwhelming feelings of anxiety, helplessness, anger, guilt, fear, depression, shock and denial. Questions may be raised, such as: Why is this happening to me? Is God punishing me by causing my child to become ill? How can a loving God allow an innocent child to become so seriously ill? How am I going to get through this? Who is going to help us now?

Pastoral care services are provided to assist the child and family members as they ask these and other questions and express their feelings. A chaplain is on call at all times, in case of emergencies. Religious materials such as Bibles, daily meditation and Sunday services are available. The chaplain participates in weekly meetings with the staff and also participates in family conferences when asked to do so.

VOLUNTEER SERVICES

Volunteers assist Child Life staff with activities on the Hematology/Oncology unit, providing special services to the patients and their families. Volunteers usually request to work on this unit due to personal involvement with either a family member or friend who has gone through treatment at Children's Hospital or another institution. These volunteers bring with them insight, understanding and compassion which comes from their first-hand experience. They also spend time in the patient's room, playing games, reading, talking or just listening to the patient. They may also relieve the parents for a short time, providing respite for them.

STARBRIGHT WORLD

Starbright World (SBW) is an online social network/community where teens can connect with other teens who also have cancer. Through videos, moderated chat rooms, games and bulletin boards they help each other confront the challenges they face every day. SBW is a safe environment where teens can express fears and frustrations, share experiences and laugh. Teens are able to hang out with peers who understand the realities of living with a serious or chronic illness. The Child Life Department has laptops with webcams available for checkout to patients who are interested in SBW.

CAMP CHALLENGE

Camp Challenge is a unique, week-long camping experience geared to children with cancer and other blood disorders and their siblings. The camp is held annually in Louisiana. It provides recreation and the camaraderie of associating with other children who have undergone similar experiences with cancer and chronic or serious illnesses. The children look forward to the opportunity to swim, ride horseback, engage in competitive sports, and generally have a ball while forgetting the all-too-present concerns of sickness and hospital.

AMERICAN CANCER SOCIETY'S PATRICK F. TAYLOR HOPE LODGE

The Hope Lodge houses our patients and caregivers who need to travel a long distance to New Orleans for cancer treatment. It offers temporary lodging in a warm, caring, supportive environment so they can focus on fighting the disease.

RONALD MCDONALD HOUSE

The Ronald McDonald House provides temporary residence for the families of children receiving treatment in New Orleans area hospitals. Non-resident families are given the opportunity to stay at the house, located in Mid City, New Orleans. It is a place where families can get away from the hospital, yet remain in touch with the support of hospital and medical staff within a moment's notice.

CANDLELIGHTERS

Candlelighters is a national nonprofit organization that provides hope, support, education, counseling and encouragement to those children and families touched by cancer. Candlelighters organizes activities and programs for families, provides psychosocial support, offers financial relief to patients' families, and works to raise awareness of childhood cancer and related issues. The organization also produces a quarterly newspaper available at no charge for parents of children with cancer.

A CHILD'S WISH

A Child's Wish is a Louisiana-based nonprofit organization that fulfills the dreams of children who are terminally ill or have life-threatening illnesses. Staffed by volunteers, this organization uses donations to enable children to achieve their wishes. Many of our patient's fondest dreams have come true due to the dedicated work of these special wish granters.

MAKE-A-WISH

Through its wish-granting work, the Make-A-Wish Foundation of the Texas Gulf Coast and Louisiana has enriched the lives of countless children who have life-threatening illnesses. It provides children throughout Louisiana with an opportunity to participate in activities that they might never otherwise have been able to enjoy such as a trip to Walt Disney World, a shopping spree or a remodeling of their room.

OPERATION SMILE

Children's Hospital participates in this program with the American Cancer Society. First- and second-year medical students are partnered with cancer patients and their siblings. The purpose of the program is to allow children to have their own "buddy" who will provide emotional and psychological support, as well as friendship, and to participate with them in non-medical activities.

CAPS FOR KIDS

Caps for Kids is an international non-profit organization dedicated to providing headwear autographed by athletes, entertainers and other notable personalities to children, adolescents and young adults with cancer who lose their hair as a result of their treatment. Caps for Kids was founded in 1993 by Dr. Stephen Heinrich, a pediatric orthopaedic surgeon at Children's Hospital. The program now exists at more than 70 hospitals in the United States, four in Canada, and one in Frankfurt, Germany.

CLINICAL TRIALS CENTER

The Clinical Trials Center at Children's Hospital was established in 1999 to improve health care for children and adolescents through the development of new medications and treatments. Our efforts help to create a culture in which safer and more effective drugs are available for a wide range of health problems. The Clinical Trials Center organizes community and hospital-based physicians into a multi specialty research network. Our goal is to set the standard for excellence in clinical trials by providing effective administrative expertise and a staff experienced in the conduct of clinical trials.

SUPPORT SERVICES HIGHLIGHT: CAPS FOR KIDS

Caps For Kids, a nonprofit organization dedicated to giving hats autographed by athletes, celebrities and other notables to children, adolescents and young adults who have lost their hair due to cancer treatments, was founded in 1993 by Dr. Stephen Heinrich, a pediatric orthopedic surgeon at Children's Hospital in New Orleans and a clinical professor at the Louisiana State University Health Sciences Center. Dr. Heinrich was treating a young man with cancer, who was also an avid Auburn University fan. He gave his patient a hat autographed by Auburn University football coach Terry Bowden and his father, Florida State University football coach, Bobby Bowden. When Dr. Heinrich realized how happy a simple hat could make someone suffering from a life-threatening disease, he organized Caps For Kids to improve the spirits of young cancer patients nationwide.

Dr. Heinrich began to garner autographed hats and scarves from notable personalities to be given to the children with cancer that he treated. Publicity opened new avenues for acquiring hats and soliciting signatures. Dr. Heinrich was soon able to expand the program so that all children receiving chemotherapy for cancer at Children's Hospital in New Orleans could participate.

Today, Caps For Kids exists at more than 100 hospitals in the United States and Canada. The organization is run by a full-time staff based in New Orleans, with a volunteer Board of Directors from across the nation. The Board of Directors and an Advisory Board help to drive the organization's growth.

Did you know about these programs and services?

SMILE PROGRAM

For over a decade now, Children's Hospital has had the only successful SMILE Program in the city. The SMILE Program is a collaboration between Children's Hospital, LSU, and the American Cancer Society. The goal is to pair first and second year medical students as "buddies" with children with cancer. The buddies then maintain a relationship with the children that are non-medical but emotionally supportive through difficult hospitalizations and treatment. Additionally, each month there is a SMILE party in the outpatient clinic that all children are invited to attend. This has proven to be a very rewarding program for both patients and medical students alike.

SPERM BANKING SERVICES

Since January 2011, we have actively been looking at our Sperm Banking Services and whether families have taken advantage of the services. Eleven males were possible candidates. Three young men choose to pursue this option. Cost did not appear to be a prohibitive factor in making the decision.

Cancer Conference

At Children's Hospital, the Cancer Conference remains the major educational element of the cancer program. These conferences are held weekly to improve the quality of care of pediatric cancer patients through educational discussions. Children's Hospital recognizes the importance of these multidisciplinary conferences and has been sponsoring them since 1980.

All aspects of pediatric cancer management are embraced at these conferences. Each presentation includes an outline of the medical history, physical findings, appropriate staging, clinical and surgical course, radiological studies and pathological interpretations of each one of the cases to be discussed. An open discussion and review of pertinent medical literature follow each case presentation offering a comprehensive and multidisciplinary approach but, at the same time, tailored to the patient's individual needs.

In 2010, a total of 48 conferences were held. On average, approximately 22 physicians, residents, students and other cancer-related supporting staff personnel attended the weekly conferences. A total of 131 cases were presented in 2010. These cases consisted of prospective, retrospective and follow-up cases. It should be noted that 98% of the cases presented were prospective and were representative of the major sites of cancer at Children's Hospital.

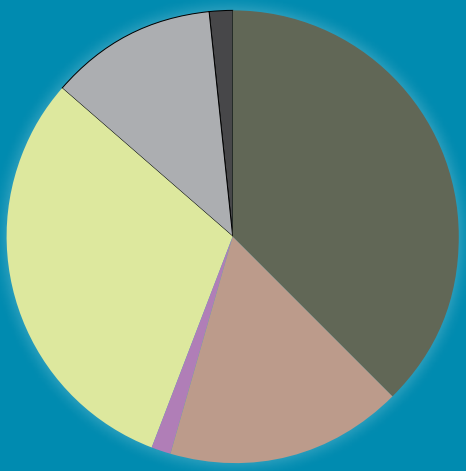
All members of the medical staff are encouraged to attend and present their oncology cases at these conferences. Physicians can schedule case presentations by contacting the Hematology/Oncology office at (504) 896-9740.

Children's Hospital receives a $100,000 Hyundai Hope on Wheels grant

Cancer Statistics

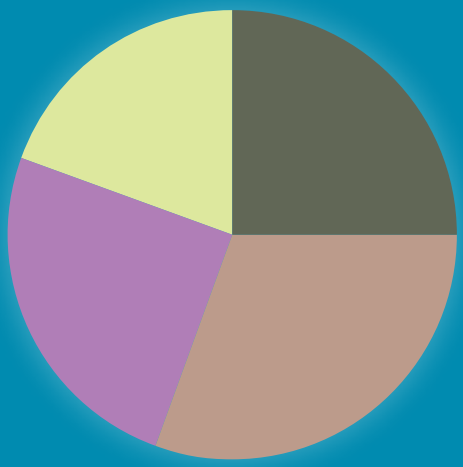
DISTRIBUTION BY SEX AND RACE

(ANALYTIC CASES ONLY)



2008-2009

White male 25.0%
Black male..... 30.8%
Other male..... 1.4%
White female 25.0%
Black female 19.2%
Other female 1.4%

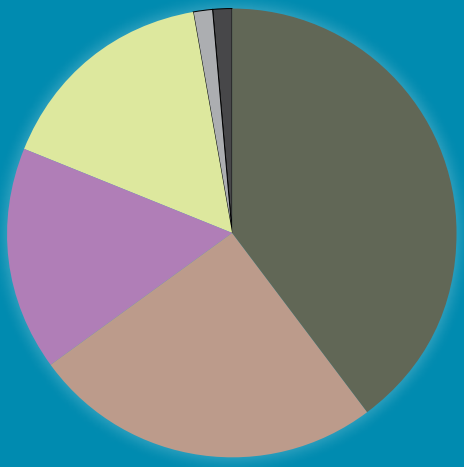


2010

White male 25%
Black male..... 30.8%
White female 25%
Black female 19.2%

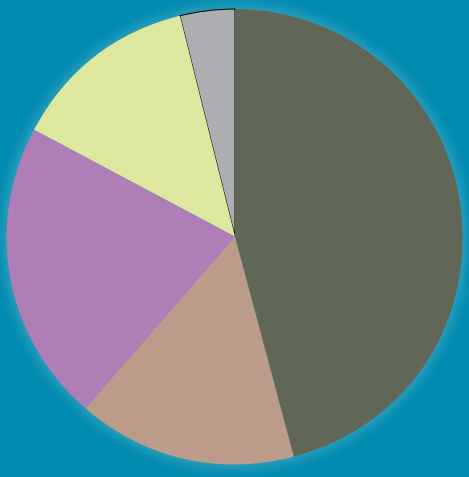
AGE AT DIAGNOSIS

(ANALYTIC CASES ONLY)



2008-2009

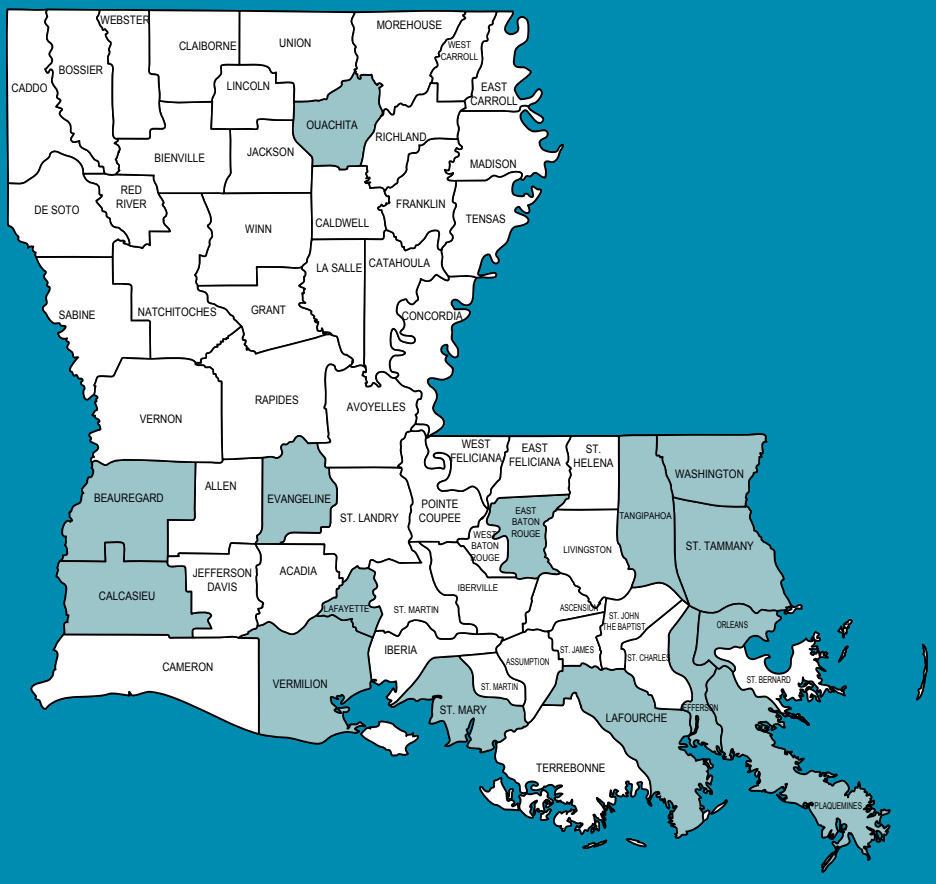
0-4 years..... 40.4%
5-9 years..... 25.6%
10-14 years..... 16.3%
15-19 years..... 16.3%
Over 19 years 1.4%



2010

0-4 years..... 46.1%
5-9 years..... 15.3%
10-14 years..... 21.5%
15-19 years..... 13.4%
Over 19 years 3.7%

Analytic Cases



DISTRIBUTION OF ANALYTIC CASES BY PARISH

PARISH	2008	2009	2010
Acadia	1	0	0
Allen	2	0	0
Ascension	1	0	0
Assumption	0	1	0
Beauregard	0	0	1
Calcasieu	4	2	4
Concordia	1	1	0
East Baton Rouge	0	2	2
Evangeline	0	0	1
Iberia	2	1	0
Iberville	0	1	0
Jackson	1	0	0
Jefferson	18	14	8
Lafayette	3	0	1
Lafourche	2	1	1
Livingston	0	1	0
Orleans	11	6	10
Ouachita	1	0	1

PARISH	2008	2009	2010
Plaquemines	0	1	1
Rapides	1	1	0
St. Bernard	1	3	0
St. Charles	1	1	0
St. James	1	1	0
St. John th Baptisit	1	0	0
St. Landry	0	0	0
St. Martin	0	0	0
St. Mary	1	1	3
St. Tammany	8	10	2
Tangipahoa	1	5	5
Terrebone	4	8	0
Vermilion	1	0	2
Vernon	1	1	0
Washington	3	2	2
Out-of-State	6	4	8
Out-of-Country	1	0	0
Total	**78**	**68**	**52**

Cancer Registry

An essential component of the Children's Hospital cancer program is the database maintained by the cancer registry. The cancer registry database, also known as the cancer data management system, is supported by IMPAC Medical Systems software program, called METRIQ. It is a system designed for the collection, management and analysis of the data on cancer patients. The information that is provided by the cancer registry is utilized in research, education, and patient care evaluation. It has also proven to be of financial importance in administrative planning of allocation of hospital resources.

January 1, 1986 was established as our reference date, and as of December 31, 2010, the cancer registry has accessioned 1798 cases. A comparison of Children's Hospital data from 2008, 2009, and 2010 is presented in the Cancer Statistics section of this report. The following discussion will focus primarily on Children's Hospital analytic case data from 2010. In 2010, a total of 78 cases were accessioned:

- 67% (n=52) being analytic and 33% (n=26) being non-analytic.
- 56% (n=29) were male and 44% (n=23) were female.
- 27% (n=14) of our patients resided in Jefferson parish.
- The median age at diagnosis of our patients was 5.
- 41% (n=16) were black males with the highest incidence of cancer.
- 21% (n=11) were ALL patients which was our most common histology in 2008.

In order to evaluate cancer care outcomes, the cancer registry maintains long-term follow-up on eligible patients included in the registry. To successfully achieve survival rates the American College of Surgeons (ACoS) requires an 80% follow-up rate on eligible patients, and a 90% follow-up rate for eligible patients diagnosed within the last 5 years. The cancer registry has been able to successfully maintain the required follow-up rate.

Data is submitted to the National Cancer Data Base (NCDB) and the Louisiana Tumor Registry (LTR). In return, the NCDB provides local, state and national statistics to cancer programs that enables them to benchmark patient care and quality improvement efforts. The LTR also provides local and state statistics as a benchmarking tool for cancer programs.

Knowledgeable personnel, including at least one CTR (Certified Tumor Registrar) staff the cancer registry. The cancer registry is located in the Medical Records Department. All inquiries may be directed to Rachel Bufkin, CTR at 504-894-7387.

TOP FIVE SITES OF CANCER

SITE	NUMBER OF CASES	PERCENTAGE OF CASES
Bone Marrow	19	36.5%
Brain & CNS	12	23.0%
Endocrine Glands	5	9.6%
Connective/Soft tissue	5	9.6%
Lymph Nodes	3	5.8%

Histology

	2008		2009		2010	
	#	%	#	%	#	%
Adenocarcinoma	0	0.0%	0	0.0%	2	3.8%
Astrocytoma	8	10.3%	5	7.4%	5	9.7%
Atypical Teratoid Rhabdoid Tumor	2	2.6%	1	1.5%	0	0.0%
Basal Cell Carcinoma	1	1.3%	0	0.0%	0	0.0%
Carcinoma, NOS	1	1.3%	2	2.9%	1	1.9%
Chondrosarcoma	0	0.0%	0	0.0%	1	1.9%
Choroid Plexus Carcinoma	1	1.3%	1	1.5%	0	0.0%
Craniopharyngioma	0	0.0%	2	2.9%	0	0.0%
Dermoid Cyst	1	1.3%	1	1.5%	0	0.0%
Ependymoma	0	0.0%	2	2.9%	0	0.0%
Ewing's Sarcoma	1	1.3%	2	2.9%	0	0.0%
Ganglioglioma, NOS	2	2.6%	3	4.4%	0	0.0%
Ganglioneuroblastoma	1	1.3%	0	0.0%	0	0.0%
Germ Cell Tumor	1	1.3%	3	4.4%	3	5.9%
Glioma, NOS	3	3.8%	6	8.8%	3	5.9%
Glioneuronal Tumor	0	0.0%	0	0.0%	1	1.9%
Hepatoblastoma	0	0.0%	0	0.0%	2	3.8%
Hepatocellular Carcinoma	1	1.3%	1	1.5%	2	3.8%
ALL(Acute Lymphocytic Leukemia)	17	21.8%	8	11.7%	11	21.1%
AML (Acute myelocytic Leukemia)	5	6.4%	5	7.4%	4	7.8%
CML (Chronic Myelogenours Leukemia)	0	0.0%	0	0.0%	2	3.8%
Hodgkin Lymphoma	4	5.0%	6	8.8%	1	1.9%
Non-Hodgkin Lymphoma	4	5.0%	5	7.4%	2	3.8%
Langerhans Cell Histiocytois	3	3.8%	2	2.9%	2	3.8%
Liposarcoma	0	0.0%	0	0.0%	1	1.9%
Medulloblastoma	3	3.8%	0	0.0%	1	1.9%
Melanoma	0	0.0%	2	2.9%	0	0.0%
Meningioma	0	0.0%	1	1.5%	0	0.0%
Myelodysplastic Syndrome	1	1.3%	1	1.5%	0	0.0%
Neuroblastoma	1	1.3%	4	5.9%	3	5.9%
Olfactory Neuroblastoma	1	1.3%	0	0.0%	0	0.0%
Osteosarcoma, NOS	1	1.3%	2	2.9%	0	0.0%
Peripheral nerve sheath tumor, Malignant	1	1.3%	1	1.5%	0	0.0%
Primitive Neuroectodermal Tumor	0	0.0%	0	0.0%	1	1.9%
Refractory Anemia	2	2.6%	0	0.0%	1	1.9%
Renal Cell Carcinoma	1	1.3%	0	0.0%	0	0.0%
Rhabdomyosarcoma	3	3.8%	1	1.5%	2	3.8%
Sarcoma	1	1.3%	1	1.5%	1	1.9%
Schwannoma, NOS	0	0.0%	0	0.0%	1	1.9%
Teratoma	1	1.3%	0	0.0%	0	0.0%
Wilms Tumor	6	7.7%	0	0.0%	1	1.9%
Total	**78**	**100.0%**	**68**	**100.0%**	**52**	**100.0%**

Community Outreach Program

Among the goals for our Community Outreach Program are the continuing efforts to educate and inform the public and health care community on the signs and symptoms as well as the incidence of cancer in children. We promote cancer prevention through presentations and discussions, encouraging adequate nutrition, sun exposure reduction (skin cancer prevention), human papillomavirus (HPV) vaccine and smoking cessation (tobacco use and cancer).

Informational sessions on cancer prevention are offered to school-aged children during their visit to Children's Hospital. Lectures are held in the local community for schools and businesses to address the significance of cancer prevention and encourage routine medical examination for early cancer detection including breast self-exam for females and genitourinary exam for males. Brochures are available for distribution at schools, health fairs and employee fairs through the Hematology/Oncology Department. These brochures are located throughout the hospital and in satellite clinics. Information about cancer prevention and interesting links can be found on the Children's Hospital website at www.chnola.org.

Hematology/Oncology Program

The Pediatric Hematology/Oncology section of LSUHSC Department of Pediatrics was formally accredited by the Accreditation Council for Graduate Medical Education (ACGME) in 1989. It remains the only accredited fellowship program between Florida and Texas. We are proud to report that, this year, despite the upheavals of the post-Katrina milieu, we again received approval from the ACGME for the fellowship. The program now directed by Dr. Maria Velez and comprised of faculty members Drs. Gardner, Morales, Morrision and Yu, continues to draw individuals from around the country and throughout the world. Graduates of the program have gone on to distinguish themselves in many fields, assuming – at times – roles of leadership wherever they have gone. The program utilizes the clinical resources and faculty expertise available at the Medical Center of Louisiana.

The program maintains an active partnership with the LSUHSC Stanley S. Scott Cancer Center. Teaching and patient care take place at Children's Hospital. Research activities are conducted through the establishment of partnerships with experienced and capable investigators such as Drs. Augusto Ochoa, Arnold Zea, James Hempe, Yan Lui and Lily Leiva. Electives for the fellowship are offered in blood banking, hemophilia care, radiation oncology and hematopathology. Fellows play an integral role in the planning and organization of conferences and lectures.

Teaching activities include the Cancer Conference, journal club, protocol reviews, psychosocial conferences, core lectures and professors' rounds. Invited speakers from many excellent institutions involved in cancer care, both local and national, help round out the fellowship's educational opportunities.

Bone Marrow/Hematopoietic Stem Cell Transplant Program

Children's Hospital/LSUHSC Pediatric HSCT program is the only approved Children's Oncology Group (COG) transplant program in the state of Louisiana. It offers patients access to all COG transplant protocols without the need to travel far to get this life saving treatment.

The transplant patient is treated in the state-of –the- art 18-bed unit with a specialized HEPA air –filtration system. This special environment provides the severely immunocompromised transplant patients the best protection from opportunistic infections.

Our Hematopoietic stem cell transplantation (HSCT) program applies a multidisciplinary approach to the care of the transplant patient. The HSCT team consists of a highly skilled team of board certified Pediatric Hematologists/Oncologists, Bone Marrow Transplant (BMT) trained nurses, dieticians, child life therapist, child psychologists, pharmacists, social workers, clinical research associates, physical therapists and transplant nurse coordinator.

Our HSCT program offers innovative treatment for children with cancer such as leukemia, lymphoma, neuroblastoma, brain tumors and other recurrent cancers as well as for children with non-malignant conditions including immunodeficiencies disorders, bone marrow failure syndromes and blood disorders such as transfusion-dependent sickle cell disease and thalassemia major.

Under the leadership of Lolie Yu, M.D., director of the HSCT program, we performed the first human placenta-derived stem cell transplant (HPDSC) in the world in 2008. These HPDSC cells will be used for malignant and non-malignant conditions which can be cured with transplantation. The study is in collaboration with the cellular therapy section of Celgene.

Our HSCT is certified by the Foundation for the Accreditation of Cellular Therapy (FACT) for its high quality of patient care and HPC collection/processing laboratory performance. We are one of only 20 Pediatric facilities in the U.S. to be FACT- accredited.

Transplants by Disease

DISEASE TYPE	TOTAL
Acute leukemia	
AML	48
ALL	47
Other	14
Solid tumors	
Lymphoma	18
Neuroblastomas	45
Brain tumor	16
Wilms'	3
Histiocytosis	4
Sarcoma	10
Germ cell tumor	2
Non-malignant conditions	
BMF	42
Metabolic disorders	5
Immunodeficiency	19
Hemoglobinopathy	0
Sickle cell	9
Thalassemia	2
TOTAL	**284**

About the LaNasa Greco Center for Cancer and Blood Disorders

The LaNasa Greco Center for Cancer and Blood Disorders at Children's Hospital offers comprehensive treatment of all types of malignancies and blood disorders including leukemia, anemia and hemophilia, among many others.

Children's Hospital is approved as a Pediatric Hospital Cancer Program by the American College of Surgeons. Children's Hospital is also a member of the Children's Oncology Group (COG), a national study group of premier research institutes in the United States and Canada. Our hospital has the only approved COG bone marrow transplant program in Louisiana. Though patient care is our primary focus, Children's Hospital is an active participant in clinical and basic research of childhood cancers and blood disorders.

The Center for Cancer and Blood Disorders is also a teaching facility for medical students, nursing students and those completing graduate and postgraduate training. The hospital plays a major role in the training of pediatric hematology/oncology fellows. Our program is part of the LSU Health Sciences Center Department of Pediatrics and the Stanley S. Scott Cancer Center of LSUHSC.

OUR STAFF

The LaNasa Greco Center for Cancer and Blood Disorders at Children's Hospital comprises the largest group of hematology and oncology physicians and nurses in the Gulf South dedicated exclusively to pediatrics. They are specially trained to care for the unique needs of children and work side by side with a medical staff of more than 250 pediatric specialists, including pathologists, radiologists, oncology surgeons and neurosurgeons.

Our pediatric experts realize that caring for children with malignancies and blood disorders commands a delicate balance of medical care and emotional support. Support for patients and their families is provided by child psychiatrists, psychologists and social workers. Other members of the multidisciplinary team include bone marrow transplant coordinators, pharmacists, dieticians, laboratory technologists, and physical, occupational, speech and hearing, music and recreation and child life therapists, who provide compassionate "total care" for the child and family.

ONCOLOGY SERVICES

Leukemia/Lymphomas

A full range of treatment options, including chemotherapy, stem cell transplantation and radiation therapy is available for children. Our medical staff develops a treatment plan adequate for each child based on the type of leukemia, its stage and certain prognostic factors. Children with Hodgkin's disease and non-Hodgkin's lymphoma (NHL) are evaluated and treated according to the specific subtype and stage of the disease.

Soft tissue and solid tumors

Children's Hospital treats a variety of tumors including neuroblastoma, tumors of the brain and spine, soft tissue and bone sarcoma, retinoblastoma and Wilms' tumor. The Center for Cancer and Blood Disorders is represented by the following medical and surgical disciplines: pediatric oncologic surgery, pediatric neurosurgery, pediatric neuro-oncology, genitourinary oncologic surgery, orthopaedic oncologic surgery, pediatric ocular surgery, radiation oncology and pediatric pathology.

Bone Marrow/Hematopoietic Stem Cell Transplant Program

Hematopoietic stem cell transplantation (HSCT) has become an alternative treatment of malignant diseases for many patients as the list of diseases for which hematopoietic stem cell transplantation has been considered grows continually. The sources of stem

cells are varied: bone marrow, peripheral blood stem cells mobilized by growth factors or chemotherapy, and cord blood.

Diseases such as leukemia are treated at Children's Hospital with the same protocols as those that the 240 COG institutions (i.e., St. Jude, MD Anderson, Johns Hopkins) have adopted throughout the nation. COG has recognized Children's Hospital as the only approved bone marrow transplant site in Louisiana for COG protocol studies.

A multidisciplinary team of physicians, nurses, social workers, nutritionists, pharmacists, physical therapists, psychologists and blood bank personnel is available, with experience and commitment to the clinical practice and basic science of hematopoietic stem cell transplantation.

Children's Hospital is accredited by the National Marrow Donor Program (NMDP) as a transplant center. Through the NMDP, Children's Hospital has access to the largest worldwide registry of hematopoietic stem cell donors. This affiliation provides patients with the best chance of finding a suitable donor for transplantation.

In December 2008, our clinical HSCT program, our cellular therapy collection and processing facility obtained accreditation from the Foundation for the Accreditation of Cellular Therapy (FACT). We are only one of 20 pediatric HSCT programs in the United States to receive FACT accreditation.

In keeping with our willingness to innovate in order to provide patients the benefit of advanced knowledge and technology, we were the first transplant center to implement the use of mesenchymal stem cells in transplantation. This procedure was performed to treat graft vs. host disease more effectively. We also were the first program in Louisiana to perform dual cord blood transplantation and have entered into a study with Celgene to perform transplants utilizing human placenta-derived stem cells in combination with cord blood stem cells.

For additional information regarding our hematopoietic stem cell transplant program, please contact Dr. Lolie Yu in the Hematology/Oncology Department at (504) 896-9740.

Children's Oncology Group (COG)

COG is a National Cancer Institute (NCI) sponsored cooperative group of individuals and institutions dedicated to treating cancer among children and adolescents. COG's purpose is to: 1. improve the diagnosis and management of children and adolescents with cancer, with the aim of curing every newly diagnosed patient; 2. investigate the etiology, pathology and pathophysiology of childhood cancer; 3. assure that every child with cancer achieves the highest quality of life during and following treatment; 4. expeditiously disseminate knowledge of these objectives in all appropriate media.

Children's Hospital and LSUHSC/Stanley S. Scott Cancer Center have been members of COG for more than 20 years. This allows the Children's Hospital/LSUHSC Minority Community Clinical Oncology Program (MCCOP) to offer innovative and up-to-date clinical trials as part of the NCI-sponsored COG.

HEMATOLOGY SERVICES

The hematology/oncology service treats a wide variety of hematologic disorders including sickle cell disease and other anemias, neutropenias, platelet and bleeding disorders. More children with blood disorders come to Children's Hospital for treatment than to any other hospital in the state. They receive the highest level of care from a medical staff experienced in the latest treatments for a full spectrum of disorders.

Hemophilia and other blood disorders

Patients with hemophilia, von Willebrand's disease, and other bleeding disorders are evaluated and treated with the most current therapies. Appropriate support for patients and parents is offered as

Team Members

Lolie C. Yu, MD
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needed. Nurse coordinators educate and coordinate the patient's care in clinic as well as at home. We have partnered with manufacturers of Factor to secure for our patients mobile devices that permit electronic data and therapeutic management. This has allowed parents of patients with bleeding disorders to record bleeding episodes and infusion details that enable the physician to better manage the acute and chronic complications of the disorder. We also were participants in the Hemophilia and Thrombosis Research Society Registry. The registry provided insight into the differing management strategies employed by hemophiliacs, into the natural history of patients with inhibitors, and assessment of alternative therapies for acute bleeding episodes (NovoNordisk).

Outpatient clinic

Treatments that once required that a child be admitted to the hospital are now often given on an outpatient basis. Patients visiting the Hematology/Oncology outpatient clinic will find themselves in an environment where the comfort and care of the child and family come first. Located in the hospital's Ambulatory Care Center, a separate patient suite with private entrance and waiting area has been dedicated for patients with cancer or blood disorders. The location is convenient for families and provides the safest conditions for immunocompromised patients.

Patients visiting our outpatient clinic are closely monitored by their pediatric hematologist/oncologist and nurses trained in chemotherapy administration and receive a variety of treatments, including blood transfusions, platelet transfusions and gammaglobulin infusions.

In addition to nine private rooms, there is a large treatment room (which also includes a private treatment room where stem cell or red cell exchanges can take place or patients can recover from anesthesia). In this room, patients may watch TV, play video games, or relax while watching tropical fish in tanks set within

the walls of the room—all this to induce a much friendlier and non-threatening environment while the child receives transfusion and other therapies.

The clinic sees on average 40 patients per day and is open Monday through Friday, 8 a.m. to 4:30 p.m.

If the need arises during a clinic visit, patients can be promptly admitted to the hospital's acute care unit, designated specifically for hematology/oncology patients.

Sickle cell anemia

Comprehensive management of sickle cell disease is available at Children's Hospital. Currently, we care for between 250 and 300 patients with sickle cell disease. Satellite clinics are located in Baton Rouge and Lake Charles. From the time the patients are first identified as having a hemoglobinopathy, they are offered the most progressive treatment available for stroke prevention, oral chelation, retinopathy screening and monitoring for long-term complications of sickle cell disease. In addition to sickle cell disease, we also treat individuals who are diagnosed with other hemoglobinopathies, e.g., CC Disease or thalassemia. Our involvement in the National Marrow Donor Program and the National Cord Blood Registry permits us to offer this treatment modality to greater numbers of patients who might otherwise have had to forego this treatment option for want of an eligible donor. We are currently in an agreement with Viacord (Celgene) that will enable patients to bank cord blood—a service often beyond the financial means of many of our families.

RESEARCH

The members of the Hematology/Oncology section of the Department of Pediatrics (LSU and Children's) have maintained a lively interest in research, in the effort to improve care and expand knowledge regarding the various disease processes that are encountered by them. One main venue for research has been the Children's Oncology Group, in which all members of the division participate. Collaboration with other LSUHSC faculty and with research staff in The Clinical Trials Center has brought about exciting and fruitful results.

Our staff has been active as mentors for the summer cancer and/or genetics research programs offered at LSUHSC and, as such, have studied subjects such as problems had by children in school re-entry, knowledge of and acceptance of HPV vaccine, brain tumors and late effects and prevention of nosocomial infection, etc. Studies aimed at insuring quality control improvement in the hospital setting have been very important to us, with the overreaching goal of improving patient care. We have recently completed a study on the use of chlorhexidine wash to prevent nosocomial infection. The preliminary findings have been published on our 2010 cancer annual report. These results were so encouraging which prompted us to proceed with a follow-up study on using chlorhexidine wash for all prospective oncology patients admitted to the hospital. The current group of patients were compared to historical controls. Preliminary results suggest that the rate of nosocomial infection was higher among patient who did not get chlorhexidine wash. These results were presented to the 2011 SSPR meeting. Similarly, central line infections on the Hematology/Oncology unit now have a prevalence that is lower than the national average. Another study led to the introduction of sample labeling practices in the operating or recovery room during procedures that promise to reduce error rates. All of these studies have resulted in the institution of new intervention for the improvement of patient care.

LANASA GRECO CENTER FOR CANCER AND BLOOD DISORDERS INPATIENT UNIT

The LaNasa Greco Center for Cancer and Blood Disorders is on the fourth floor of Children's Hospital. The inpatient unit boasts 18 private rooms in a state-of-the-art and comfortable environment for patients and families. Each room, as well as the entire unit, is equipped with high efficiency particle air (HEPA) filtration. This system allows bone marrow transplants to be performed in any room and is essential to reducing the risk of infection. Located away from other inpatient areas and accessed through a positive pressure vestibule, the unit allows for the highest level of protection for patients.

The unit, overlooking Audubon Park, also includes a playroom stocked with games, toys, art supplies and computers, and an activity center, where music and recreation therapists can interact with small groups of

children for organized play. A parents' lounge is available for those needing peace or respite.

When admission is indicated, an individual treatment plan for each patient is devised by pediatric oncologists, oncology nurses and other members of the multidisciplinary team. Patients and their families develop a special bond with the staff on the fourth floor and the staff is committed to helping them cope both emotionally and physically with the side effects and complications associated with disease and treatment.

Treatment Protocols

COG STUDIES

9905, ALinC 17: Protocol for Patients with Newly Diagnosed Standard Risk Acute Lymphoblastic Leukemia (ALL): A Phase III Study

9904, AlinC17 Treatment of Patients with Newly diagnosed low risk acute lymphoblastic leukemia: A Phase III Study

P9407, Induction Intensification in Infant Acute Lymphoblastic Leukemia

AALL0232: High Risk B-precursor Acute Lymphoblastic Leukemia- A Phase III Group-Wide Study (closed to accrual 01/28/2011)

AALL0331: Standard Risk B-Precursor Acute Lymphoblastic Leukemia, Phase III Group-Wide Study

AALL03B1: Classification of Acute Lymphoblastic Leukemia (closed to accrual 9/6/11)

AAML0531, A Phase III Randomized Trial of Gemtuzumab Ozogamicin (Mylotarg) Combined with Conventional Chemotherapy for De Novo Acute Myeloid Leukemia (AML) in Children, Adolescents, and Young Adults

9404, Intensive Treatment for T-Cell Acute Lymphoblastic Leukemia and Advanced Stage Lymphoblastic Non-Hodgkin's Lymphoma (T-Cell #4)

A5971, Randomized Phase III Study for the Treatment of Newly Diagnosed Disseminated Lymphoblastic Lymphoma or Localized Lymphoblastic

AHOD0031, A Phase III Groupwide Study of Dose-Intensive Response-Based Chemotherapy and Radiation Therapy for Children and Adolescents with Newly Diagnosed Intermediate Risk Hodgkin Disease

AHOD0431: Phase III Study for the Treatment of Children and Adolescents with Newly Diagnosed Low-Risk Hodgkin Disease

A9952, Chemotherapy for Progressive Low Grade Astrocytoma in Children Less Than Ten Years Old

AGCT0521: Treatment of Recurrent or Resistant Pediatric Malignant Germ Cell Tumors with Paclitaxel, Ifosfamide and Carboplatin (closed to accrual 06/20/2011)

AEWS02B1, A Groupwide Biology and Banking Study for Ewing Sarcoma

P9645, Phase II Protocol for the Treatment of Children with Hepatoblastoma

A3973, A Randomized Study of Purged versus Unpurged Peripheral Blood Stem Cell Transplant Following Dose Intensive Induction Therapy Following Dose Intensive Induction Therapy for High Risk Neuroblastoma

ANBL0931: A Comprehensive Safety Trial of Chimeric Antibody 14.18 (ch14.18) with GM-CSF, IL-2 and Isotretinoin in High-Risk Neuroblastoma Patients Following Myeloablative Therapy: A Limited Institution Study (closed to accrual 05/10/2011)

AOST0331: A Randomized Trial of the European and American Osteosarcoma Study Group to Optimize Treatment for Resectable Osteosarcoma Based on Histological Response to Pre-Operative Chemotherapy (IND# 12697) (closed to accrual 06/30/2011)

9440, National Wilms Tumor Study - 5: Therapeutic Trial and Biology Study

ARST0331: Vincristine, Dactinomycin, and Lower Doses of Cyclophosphamide With or Without Radiation Therapy for Patients with Newly Diagnosed Low-Risk Embryonal/Botryoid/Spindle Cell Rhabdomyosarcoma (closed to accrual 9/23/2011)

ASCT0431: A Randomized Trial of Sirolimus-Based Graft Versus Host Disease Prophylaxis after Hematopoietic Stem Cell Transplantation in Selected Patients with CR1 and CR2 ALL (closed to accrual 05/10/2011)

ASCT0521: Soluble Tumor Necrosis Factor Receptor: Enbrel (Etanercept) for the Treatment of Acute Non-Infectious Pulmonary Dysfunction Idiopathic Pneumonia Syndrome) Following Allogeneic Stem Cell Transplantation (closed to accrual 9/19/2011)

HSCT OR NON-COG COMPASSIONATE USE STUDIES OPEN TO ACCRUAL IN 2011

Expanded Access of Prochymal® (Ex-vivo Cultured Adult Human Mesenchymal Stem Cells) Infusion for the Treatment of Pediatric Patients Who Have Failed to Respond to Steroid Treatment for Acute GVHD (Osiris Therapeutics Inc. Protocol No. 275, BB-IND No. 7939)

Erwinase Master Treatment Protocol (EMTP) (This is completed as of December 2011)

Defibrotide for Patients with Severe Hepatic Veno-Occlusive Disease (VOD): A Treatment IND Study (Under CFR 312.34) (Gentium S.p.A. Protocol Defibrotide 2006-05)

A Study of Hematopoietic Stem Cell Transplantation (HSCT) in Non-malignant Disease Using a Non-myeloablative Preparatory Regimen with Campath-1H, Fludara-


Report
Reports
Forms

bine and Melphalan (Washington University 01-0923)
National Marrow Donor Program (NMDP) and Center for International Blood and Marrow Transplant Research (CIBMTR) Research Database for Hematopoietic Stem Cell Transplantation and Marrow Toxic Injuries
National Marrow Donor Program Research Sample Repository
A Multicenter Access and Distribution Protocol for Unlicensed Cryopreserved Cord Blood Units (CBUs) for Transplantation in Pediatric and Adult Patients (NMDP 10-CBA)
Unrelated Donor Reduced Intensity Bone Marrow Transplant for Children with Severe Sickle Cell Disease (BMT CTN 0601) (activated December 2011)

PHARMA SPONSORED

EUSA Erwinase Master Protocol; PI: L. Yu, MD–
Celgene Protocol CCT- HPDSC-001: "A Single-arm Study to Assess the Safety of Transplantation with Umbilical Cord Blood Augmented With Human Placental-derived stem cells From Partially Matched Related Donors in Subjects with Certain Malignant Hematologic Diseases and Non-malignant Disorders; PI: L. Yu, MD–
Osiris A single patient use treatment protocol to evaluate the safety and treatment outcomes of Prochymal (ex- vivo cultured adult human mesenchymal stem cells) infusion for the salvage of a treatment-refractory ; PI: L. Yu, MD– Enrolling
Defibrotide for Hematopoietic Stem Cell Transplant (SCT) Patients with Severe Hepatic Veno-Occlusive Disease (VOD): A Treatment IND Study (Under CFR 312.34)" ("Treatment Protocol"); PI: L. Yu, MD–
Novartis Protocol No. CICL670AUS38 : "A 5-year, prospective, non-interventional, multi-center registry in Sickle Cell Disease patients" ; PI: R. Gardner, MD–
Chimerix, Inc., "A Randomized, Double-Blind, Placebo-Controlled Phase 2 Study Evaluating the Safety and Efficacy of Preemptive Treatment with CMX001 for the Prevention of Adenovirus Disease Following Hematopoietic Stem Cell Transplantation in Adults and Children (the ADV HALT Trial)"; PI: L. Yu, MD-
Emergency Use of Investigational Drug, CMX001, to treat adenovirus , PI: L.Yu– For 2 patients
8. Chimerix, Inc , CMX001-350, "A Multicenter, Open-label Study of CMX001 Treatment of Serious Diseases or Conditions Caused by dsDNA Viruses: PI: L. Yu

LIST OF COG STUDIES: LEUKEMIA

0501Multi-center, Open Label, Randomized trial Comparing Single vs. Double Umbilical Cord Blood (UCB) Transplantation in Pediatric Patients with High Risk Leukemia and Myelodysplasia
AALL08B1, Classification of Newly Diagnosed Acute Lymphoblastic Leukemia (ALL)
AALL0434; Intensified Methotrexate, Nelarabine (Compound 506U78; IND#52611) and Augmented BFM Therapy for Children and Young Adults with Newly Diagnosed T-cell Acute Lymphoblastic Leukemia (ALL)
AALL0622; Intensified Tyrosine Kinase Inhibitor Therapy (Dasatinib: IND# 73969, NSC# 732517) in Philadelphia Chromosome Positive Acute Lymphoblastic Leukemia (ALL)
AALL0631; A Phase III Study of Risk Directed Therapy for Infants with Acute Lymphoblastic Leukemia (ALL): Randomization of Highest Risk Infants to Intensive Chemotherapy +/- FLT3 Inhibition (CEP-701, Lestaurtinib; IND#76431, NSC#617807)
AALL0932; Treatment of Patients with Newly Diagnosed Standard Risk B-Precursor Acute Lymphoblastic Leukemia (ALL)

LIST OF COG STUDIES: NEUROBLASTOMA

ANBL00B1; Neuroblastoma Biology Studies
ANBL0032; Phase III Randomized Study of Chimeric Antibody 14.18 (Ch14.18) in High Risk Neuroblastoma Following Myeloablative Therapy and Autologous Stem Cell Rescue
ANBL0532; NOTES III Randomized Trial of Single vs. Tandem Myeloablative as Consolidation Therapy for High-Risk Neuroblastoma

LIST OF COG STUDIES: **WILMS TUMOR/RENAL**

9442; National Wilms Tumor Late Effects Study
AREN0532; Treatment for Very Low and Standard Risk Favorable Histology Wilms Tumor
AREN03B2; Renal Tumors Classification, Biology, and Banking Study
AREN0321; Treatment of High Risk Renal Tumors
AREN0533; Treatment of Newly Diagnosed Higher

Risk Favorable Histology Wilms Tumors
AREN0534; Treatment for Patients with Bilateral, Multicentric, or Bilaterally-Predisposed Unilateral Wilms Tumor

LIST OF COG STUDIES: BRAIN TUMOR/ MEDULLOBASTOMA

ACNS02B3; A Children's Oncology Group Protocol for Collecting and Banking Pediatric Brain Tumor Research Specimens
ACNS0331; A Study Evaluating Limited Target Volume Boost Irradiation and Reduced Dose Craniospinal Radiotherapy 18.00 Gy and Chemotherapy In Children with Newly Diagnosed Standard Risk Medulloblastoma: A NOTES III Double Randomized Trial
ACNS0831; Phase III Randomized Trial of Post-Radiation Chemotherapy in Patients with Newly Diagnosed Ependymoma Ages 1 to 21 years

LIST OF COG STUDIES: RARE TUMOR

ABTR01B1; A Children's Oncology Group Protocol for Collecting and Banking Pediatric Research Specimens Including Rare Pediatric Tumors

LIST OF COG STUDIES: HEPATOBLASTOMA

AHEP0731; Treatment of Children with All Stages of Hepatoblastoma

LIST OF COG STUDIES: HODGKIN

AHOD0831; A Non-Randomized Phase III Study of Response Adapted Therapy for the Treatment of Children with Newly Diagnosed High Risk Hodgkin Lymphoma: A Groupwide Phase III Study

LIST OF COG STUDIES: EWING SARCOMA

AEWS0331; European Ewing Tumor Working Initiative of National Groups Ewing Tumor Studies 1999 (EURO-E.W.I.N.G. 99)
AEWS 1031; A Phase III Randomized Trial of Adding Vincristine-Topotecan-Cyclophosphamide to Standard Chemotherapy in Initial Treatment of Non-metastatic Ewing Sarcoma.

LIST OF COG STUDIES: SARCOMA

ARST0531; Randomized Study of Vincristine, Dactinomycin and Cyclophosphamide (VAC) versus VAC Alternating with Vincristine and Irinotecan (VI) for Patients with Intermediate-Risk Rhabdomyosarcoma (RMS)
ARST08P1; A Pilot Study to Evaluate Novel Agents (Temozolomide and Cixutumumab [IMC-A12, Anti-IGF-IR Monoclonal Antibody, IND #100947, NSC #742460]) in Combination with Intensive Multi-Agent Interval Compressed Therapy for Patients with High-Risk Rhabdomyosarcoma
D9902; A COG Soft Tissue Sarcoma Biology and Banking Protocol

LIST OF COG STUDIES: OTHER

ACCRN07; Protocol for the Enrollment on the Official COG Registry, The Childhood Cancer Research Network (CCRN)
ALTE03N1; Key Adverse Events after Childhood Cancer
ALTE07C1; Neuropsychological, Social, Emotional and Behavioral Outcomes in Children with Cancer
ACCL1031; A Randomized Double Blinded Trial of Topical Caphosol to Prevent Oral Mucositis in Children Undergoing Hematopoietic Stem Cell Transplantation
ACCL0934; A Randomized Trial of Levofloxacin to Prevent Bacteremia in Children Being Treated for Acute Leukemia (AL) or Undergoing Hematopoietic Stem Cell Transplantation (HSCT)

Publications & Selected Manuscripts

2011

Driscoll TA, Yu LC, Frangoul H, Krance R, Nemecek E, et al. Pharmacokinetics and Safety of Intravenous Voriconazole to Oral switch in Immunocompromised Children compared to Adults. Antimicrob Agents Chemother 2011; 55 (12): 5770-5779.

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Glossary

Accession: To list in order of acquisition. An accession number is assigned to each new patient who is eligible for inclusion in the Cancer Registry database.
Allogenic: Having cell types that are antigenically distinct. In transplantation biology, denoting individuals (or tissues) that are the same species but antigenically distinct.
American Joint Committee on Cancer (AJCC): A committee designated to coordinate efforts of sponsoring organizations to develop staging systems for various cancers within the TNM system in the United States.
American College of Surgeons (ACoS): A fellowship of surgeons, organized in 1913 "to elevate the standard of surgery, to establish the standard of competency and character for practitioners of surgery," and, in general, to assure that surgeons are properly qualified.
Analytic Cases: Cases that are first diagnosed and/or receive all or part of their first course of treatment at Children's Hospital. In accordance with the American College of Surgeons guidelines for approved cancer programs, these cases must be accessioned, included in the patient index file, abstracted and followed for the lifetime of the patient by the Cancer Registry.
Autologous: Autogenous, related to self; originating within an organism itself.
Class of Case: A classification of treatment status determined by a reporting hospital. This classification is determined at the patient's first admission. Whether a case is included in the hospital's treatment and/or survival statistics depends upon the patient's classification.
Initial Therapy: Initial definitive treatment, or series of treatments, that normally modifies, controls, removes or destroys proliferating tumor tissue. This is usually initiated within the first four months (two months for leukemia) of diagnosis. Types of initial therapy include the list below:

Surgery: The partial or total removal of the tumor, excluding biopsy.

Radiation: Cancer-related direct beam and non-beam therapy. Non-beam includes radium, cesium and radioactive isotopes.

Chemotherapy: Includes antimetabolites, alkylating agents, vinca alkaloids and antibiotics, among other agents.

Hormone: Includes administration of hormones/steroids, and in some cases, endocrine surgery.
Combination Therapy: Includes possible combinations of surgery, radiation, chemotherapy and hormone therapy.
Immunotherapy: Passive immunization of an individual by administration of pre-formed antibodies actively produced in an individual.
No Treatment: A treatment option that includes cases in which no information was available or no treatment was received.
Non-Analytic Cases: Cases that were not seen at Children's Hospital within the first four months following diagnosis (two months for leukemia) or who were first diagnosed at autopsy. This class of case is usually not included in a report of hospital's treatment and survival statistics. In accordance with the American College of Surgeons guidelines for approved cancer programs, these cases must be accessioned and a patient index record prepared. Although abstracting and lifetime follow-up are encouraged, these are matters of local decision by the hospital cancer committee.
Stage: The extent to which a primary tumor has spread from its original site. The extent of disease is determined at the time of diagnosis and/or initial therapy.
Surveillance, Epidemiology and End Results Program (SEER): A registry conducted by the National Cancer Institute for the collection and analysis of data on the incidence and treatment of cancer and survival of cancer patients in the United States. A staging system was developed in 1977 by SEER and is approved for use in cancer registries by the American College of Surgeons Commission of Cancer.
Survival: All survival statistics were calculated using the actuarial or life-table method for observed survival rate. This method takes into account both patients with observations for varying lengths and patients lost to follow-up.
TNM: A staging system developed by the American Joint Committee on Cancer, in which T stands for the size of the tumor, N for lymph node involvement and M for metastasis.

About Children's Hospital

CHILDREN'S HOSPITAL began as a dream in the minds of a group of very special community leaders about a decade before the hospital became a reality. In the years following World War II, a poliomyelitis epidemic attacked thousands of children, leaving many handicapped. Concerns about these children led the late Elizabeth Miller Robin, a polio victim herself, to establish a rehabilitation hospital for children. The facility opened in 1955.

What makes the hospital unique is the combination of the latest developments in medical treatment and an atmosphere of love and concern for the whole child. Throughout its history, Children's Hospital has served as a teaching facility where faculty from the Louisiana State University Health Sciences Center forms a strong pediatric teaching program. In 1976, Children's Hospital was expanded to become a full-service general pediatric hospital. It has since expanded continually to meet the growing healthcare needs of our community.

Children's Hospital is a 247-bed, not-for-profit regional medical center offering the most advanced pediatric care. The hospital cares for children from birth to 21 years in more than 40 specialties, including life-threatening illnesses, routine childhood sicknesses and preventive care.

OUR ACCREDITATION

American Academy of Pediatrics, American College of Surgeons (ACoS), Commission on Cancer Joint Commission on Accreditation of Healthcare Organizations National Marrow Donor Program

OUR MEMBERSHIPS

Child Health Corporation of America, Children's Oncology Group (COG), Louisiana Hospital Association, National Association of Children's Hospitals & Related Institutions, Inc., Metropolitan Hospital Council of New Orleans

Resources

Children's Hospital Main Number.....(504) 899-9511
Oncology Department ..... (504) 896-9740
Oncology Department Fax ..... (504) 896-9758
Oncology Unit – inpatient ..... (504) 896-9442
Oncology – outpatient clinic ..... (504) 896-9848
Neurosurgery Department..... (504) 896-9568
Social Services Department..... (504) 896-9367
Surgery Department ..... (504) 896-9478
Orthopaedics Department..... (504) 896-9569
Medical Records/Tumor Registry..... (504) 896-9585
Administration ..... (504) 896-9450
Diagnostic Radiology..... (504) 896-9565
Pathology Department..... (504) 896-9873
Bone Marrow Transplant Program ..... (504) 896-9740
Lolie C. Yu, MD
Cancer Committee Chairman..... (504) 896-9741
Cancer Program Liaison ..... (504) 896-3977
Evans Valerie, MD

CANCER INFORMATION/RESOURCES

American Cancer Society..... (800) ACS-2345
American Cancer Society,
New Orleans Chapter..... (504) 469-0021
National Cancer Institute 1-800-4CANCER

CANCER INFORMATION WEB SITES

American Cancer Society, ... www.cancer.org
National Cancer Institute ..... www.cancer.gov
Children's Hospital, New Orleans..... www.chnola.org
National Childhood
Cancer Foundation..... www.curesearch.org
Cancer Care..... www.cancercare.org
Cancer Surviors Project. www.cancersurvivorsproject.org
National Children's
Cancer Society..... www.children-cancer.com

FINANCIAL

Medicaid – Enroller ..... (504) 896-9152
Office of Family Security..... (504) 599-1700
Social Security ..... (800) 772-1213
Children's Hospital Assistance
Program (CHAP)..... (504) 894-5166
American Cancer Society ..... (504) 469-0021
Leukemia/Lymphoma Society ..... (504) 887-0945
Optimist Leukemia Foundation ..... (800) 685-9611
J.L Foundation ..... (225) 698-1010
National Children's Cancer Society ..... (314) 241-1600
Cancer Recovery Fund ..... (717) 564-4100
First Hand Foundation ..... (816) 201-1569
Cancer Association of Greater New Orleans .... (504) 733-5539
Total Community Action ..... (504) 304-6676
Kids Kicking Cancer ..... (504) 455-7754

HOUSING

Ronald McDonald House ..... (504) 468-6668
American Cancer Society Patrick F.
Taylor Hope Lodge..... (504) 219-2202
Hotels – medical rates list available
in Social Services Department

WISHES

A Child's Wish ..... (504) 367-9474
Make-A-Wish ..... (504) 846-9474
A Special Wish ..... (614) 575-9474

SUPPORT

Candlelighters..... (800) 366-2223
Sperm Bank Reproductive Services ..... (504) 454-7973
Camp Challenge ..... (504) 347-2267
Sunshine Kids ..... (713) 524-1264
Caps for Kids ..... (504) 891-4277

MENTAL HEALTH

Rehabilitation Program/RTC..... (504) 483-0415
Via Link (24 hour counseling)..... (800) 749-2673
Angel's Place (Respite Care) ..... (504) 455-2620
COPELINE - Suicide Prevention..... (800) 273-8255
Children's Hospital Behavioral Health Unit,
Calhoun Campus ..... (504) 896-7200
Family Service of GNO ..... (504) 822-0800

DEATH

Compassionate Friends..... (504) 454-5078
Seasons – The Center for Caring ..... (504) 834-1453
St. Joseph Hospice..... (504) 734-0320
Serenity Hospice..... (504) 366-3996

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