

CANCER SERVICES ANNUAL REPORT

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Message from Oncology Administration

Jayme Carrico, MBA Executive Director, Oncology Services Northeast Georgia Medical Center

Northeast Georgia Medical Center (NGMC) is pleased to present our 2018 Cancer Services Annual Report. This report contains information on program activities in 2018 and presents data abstracted by our registry in 2016.

As you explore the information provided here, you'll quickly discover that NGMC's Cancer Services program offers a level of technology and medical expertise that rivals any metropolitan cancer center. At NGMC, we offer research-based cancer care, as well as nationally approved treatment planning, allowing our patients the opportunity to stay local for their treatment and close to their family and support systems.

But what patients also experience here is a deep-rooted and personal level of commitment and compassion that we challenge any other hospital to match. I believe that's truly what sets us apart – advanced cancer care provided by specialists who are as skilled at treating the person as they are at treating the disease.

The American College of Surgeons (ACS) Commission on Cancer recently completed its survey after a detailed review of our program. I'm thrilled to announce NGMC's Cancer Services program has been awarded the highest level ranking possible through the ACS: **Three-Year Accreditation with Commendation – Gold Level**.

Additionally, our program was recognized by CareChex – an independent healthcare ratings organization – which **ranked NGMC within the top 6% of hospital cancer programs in the nation**. These rankings and accreditations are just further proof that our patients can trust NGMC for their cancer care.

It's been an exciting year for us, and we look forward to what the future brings for our patients, community and collaborating physicians.

Respectfully submitted,

me Carries

2018 Cancer Committee Members

Cancer Committee Chairman Cancer Liaison Physician **Diagnostic Radiologist** Medical Oncologist Pathologist /Cancer Registry Coordinator Radiation Oncologist Surgeon Cancer Conference Coordinator Cancer Program Administrator Case Manager Representative Certified Tumor Registrar **Clinical Research Coordinator** Clinical Research Representative Community Outreach Coordinator **Oncology Nurse Representation** Palliative Care Team Member Quality Improvement Coordinator **Outpatient Infusion Manager** Performance Improvement Representative **Psychosocial Services Coordinator** Hospice Nutritional Services Pastoral Care Pharmacy Rehabilitation Representative Regional Network Development **Community Health Improvement** Public Relations

Geoff Weidner, MD Craig Baden, MD Scott Stephen, MD; Julie Presley, MD (alternate) Charles Nash, MD; Andrew Johnson, MD (alternate) Ezra Ellis, MD; Sumi So, MD (alternate) Frank Lake, MD; Jack Griffeth, MD (alternate) Ken Dixon, MD; Brad Auffarth, MD (alternate) Saloni Tanna, MD Jayme Carrico, MBA Debra Costa, RN; Lynn Bales, RN (alternate) Dianne Kosmala, CTR; Cheryl Gantt, CTR (alternate) Andre Kallab, MD Trena Davis, BSN Andria Caton, BSN, Alicia Harrison, RN (alternate) Kim Tyner-Meeks, RN; Alison Evans, RN (alternate) Zameer Gill, MD; Ashley Deringer, NP (alternate) Christina Saurel, MD Kim Tyner-Meeks, RN Nancy Linto, RN; Bridget Schultz (alternate) Trisha Ziem, LcSW; Amanda Daniel (alternate) Pamela Allen, RN; Von Stephens (alternate) Debbie Walls, RD; Kelsey Higgins, RD (alternate) Jeff Thompson Melissa Frank; Jason VanLandingham (alternate) Heather Wilsey Kathy Williamson, RN Christy Moore Kristin Grace







Cancer Care in 2018

Charles Nash III, MD, FACP Longstreet Clinic – Department of Medical Oncology & Hematology Medical Director, NGMC's Cancer Services

Northeast Georgia Medical Center's (NGMC) Cancer Services continues to experience vibrant growth. In 2018, more than 2,000 new cancer patients chose NGMC's nationally recognized Cancer Services to receive treatment. Known for its compassionate and expert care, NGMC offers cancer patients experienced physicians, dedicated care teams, and state-of-the-art diagnostic and treatment technologies – all through the convenience of multiple access points across Northeast Georgia.

NGMC's cancer program is accredited with commendation at the Gold Level by the American College of Surgeons Commission on Cancer – the highest level possible. We are humbled by this recognition and will work to continue delivering care to match.

However, with an ever-growing patient population and the expansion of our Cancer Services across the region, we know there are challenges that remain to maintain this level of care. Our senior administration is actively engaged with physicians and staff to address these challenges both effectively and efficiently. We know that additional physician, nursing and patient support professionals will be needed in the future to match this continued level of growth.

Our Oncology Research department has also grown, as we brought on Dr. Holly Carpenter to serve as our director of Clinical Research. Under her leadership, our program continues to excel – and actively participates as a member of the National Cooperative Oncology Research Program and the National Cancer Institute – while also working directly with international pharmaceutical firms to bring the latest technologies and cutting-edge treatments to our patients' bedside.

Our future is bright, and we remain committed to our core principles to guide us through the upcoming year. We are optimistic that we will meet the challenges ahead with great enthusiasm.





Clinical Research at Northeast Georgia Medical Center

Holly Carpenter, Ph.D. Director, Department of Research Administration

Following creation of its Department of Research Administration in 2018, Northeast Georgia Medical Center (NGMC) has continued to grow and support its clinical research program throughout the year. NGMC participates in approximately 40 national and international clinical research trials per year to provide patients in our local community access to cutting-edge cancer treatment options using state-of-the-art technology and resources.

Physicians within our cancer program work with the Department of Research Administration to offer patients leading clinical trials involving new pharmaceutical agents and treatment methods in chemotherapy, radiation therapy and surgery. NGMC provides trials for virtually all tumor sites, including breast, lung and prostate cancers — three of the cancer types most often diagnosed. In addition, the Department of Research Administration provides infrastructure to support research operations and allow for growth of the institutional research program, while also supporting research and scholarly activities within the new Graduate Medical Education program.

NGMC continues to serve as a crucial contributor in the realm of clinical research. In 2018, NGMC was recognized as a Top 5 Accruing Site for the number of patients enrolled in clinical trials by the Southwest Cancer Chemotherapy Study Group. Additionally, NGMC earned Gold Status accreditation and received

commendation in the area of Clinical Research as a Comprehensive Community Cancer Program (American College of Surgeons Commission on Cancer, 2018). Furthermore, the majority of NGMC's research studies are supported by funding from the National Cancer Institute (NCI).

NGMC is proud to be designated a Research Network Member of Georgia's NCI Community Oncology Research Program (GA NCORP). As one of only 34 NCI national, community-based research programs, the GA NCORP research network provides Georgians in urban and rural areas access to state-of-the-art cancer prevention, screening, control, treatment and post-treatment trials.





Educating Nurses to Improve Quality Care in Geriatric Oncology

Andria Caton, BSN, RN, OCN, CHPN Oncology Services Administration

The Institute of Medicine predicts a shortage of experienced geriatric nurses and healthcare providers. Currently, less than 1% of nurses, pharmacists and physician assistants specialize in the care of geriatric patients (adults age 65 and older). With the anticipated healthcare provider shortages, as well as the increases in the geriatric population in the U.S., many groups are advocating to increase the geriatric competencies of the healthcare workforce.

In 2018, an oncology nursing team from Northeast Georgia Medical Center (Kim Meeks, RN, OCN; Janet Blanchard, BSN, RN, OCN; and Andria Caton, BSN, RN, OCN, CHPN) was selected to attend a geriatric oncology educational program offered by the City of Hope. The program is an NCI-funded project designed to help nurses find meaningful ways to integrate geriatric principles and practices into patient care.

Our oncology nursing team plans to collaborate with national experts and work to implement the following goals in 2019 to improve the care of geriatric cancer patients:

- 1. Pilot a distress scale algorithm to assist nurse navigators with the assessment and tracking of the psychosocial needs of head/neck cancer patients over the age of 70.
- 2. Develop and present a continuing education program for oncology nurse navigators, radiation therapy nurses, inpatient oncology nurses and outpatient infusion nurses. Topics to be included:
 - a. Psychosocial assessment of the geriatric oncology patients
 - b. Myths of aging
 - c. Rehabilitation and nutritional resources for geriatric patients
- 3. Implement a process to improve the assessment/tracking of the psychosocial needs of head/neck cancer patients over the age of 70. Ideal state is to perform an assessment at the time of first contact and follow throughout the treatment plan.





Screening and Management of Breast Cancer Patients with Bone Loss

Christina Saurel, MD Northeast Georgia Diagnostic Clinic Department of Hematology & Oncology

Women with breast cancer are being diagnosed and treated earlier in the disease process than ever before, resulting in improved clinical outcomes. But along with improved clinical outcomes is the responsibility to recognize and decrease the many side effects associated with the therapies we use, especially in the post-menopausal breast cancer population.

Aromatase inhibitor (AI) therapy has shown to lower breast cancer recurrence rates in postmenopausal women when compared to Tamoxifen. Because of this, it has become the therapy of choice for this patient population. However, AI therapy is not without side effects. Long-term AI use can lead to depletion of estrogen, which is essential for maintaining bone strength in women. In fact, research indicates that women undergoing AI therapy are twice as likely to experience reduced estrogen and bone loss when compared to healthy, postmenopausal women of the same age. While bone loss in these patients can range from mild to severe, both lead to an increased risk of bone fractures, which are associated with increased risk of debility, total health care costs and mortality.

To address these issues, members of Northeast Georgia Medical Center's (NGMC) Cancer Committee worked together to establish a standard protocol for the screening and management of bone loss in breast cancer patients receiving or planning to receive AI therapy. Upon review of internal patient data from October to December 2017, we concluded that 25% of postmenopausal breast cancer patients did not receive adequate baseline screening and monitoring for bone loss.

Our new standard protocol dictates that all breast cancer patients starting treatment with Al therapy should have a baseline bone density scan to help measure and track bone loss. Thereafter, it is recommended that a bone density scan be repeated every two years for the duration of Al therapy. We have also established additional guidelines for patients identified with bone loss. At-risk patients are counseled to make healthy lifestyle modifications, including limiting alcohol and caffeine intake, discontinuing cigarette use, exercising regularly and getting approximately 30 minutes of sunlight daily, five days a week – all of which have shown to improve bone strength. Based on the severity of bone loss, some patients may also require medicinal intervention such as calcium or vitamin D oral supplementation, as well as starting antiresorptive agents such as intravenous zoledronic acid or subcutaneous denosumab.

As women with postmenopausal breast cancer are now living longer, we have recognized the increasing importance of having standard protocols in place to recognize, prevent and treat side effects such as bone loss. It is our hope that, with better screening and management of such side effects, we can help eliminate any unnecessary negative impacts to our patients' quality of life.



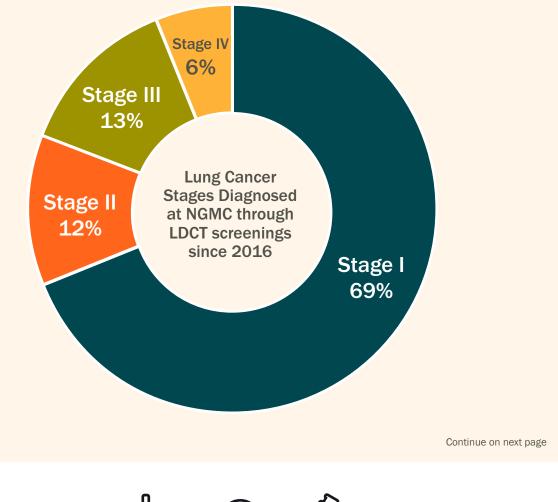


NGMC's Lung Cancer Screening Program Continues Successful Start

Rami Arfoosh, MD Pulmonology and Sleep Specialists of Northeast Georgia, PC

Northeast Georgia Medical Center's (NGMC) Lung Cancer Screening Program has continued its steady growth since its inception in 2016. Utilizing low-dose computed tomography (LDCT), NGMC has successfully screened more than 1,000 patients across its three hospital campuses – Gainesville, Braselton and Barrow.

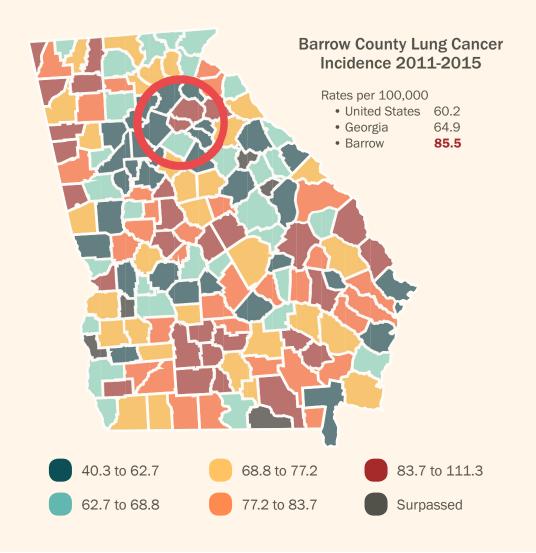
During this time, more than 26 lung cancers were detected, as well as an additional eight other incidental cancers. Of the 26 lung cancers, 69% were identified as Stage I; 12% as Stage II; 13% as Stage III; and 6% as Stage IV. Additionally, the majority of the cancers continue to be non-small cell lung cancers – a trend that is seen throughout clinical research and literature.





Discovering lung cancers at an earlier stage remains a priority for our program. NGMC has established a Chest Tumor Board to continue monitoring and improving the program. The committee, which includes clinical providers such as pulmonologists and nurse navigators, meets monthly to help facilitate an interdisciplinary discussion about the management of LDCT screening results. This committee reviews all patients with LDCT results that are highly suspicious for lung cancer, provides recommendations to the ordering physician and then continues to monitor these high-risk cases.

Our program has identified Barrow County as an area of special interest for 2019. Statistics from the Surveillance, Epidemiology and End Results program show that residents of Barrow County have higher incidence and mortality rates for lung cancer when compared to other surrounding counties, as well as the State of Georgia. NGMC plans to focus efforts on increasing awareness and providing additional screening to these residents in hopes of improving these rates.







Tobacco-Free Education Program Introduced in Barrow Schools

Andria Caton, BSN, RN, OCN, CHPN Oncology Administration

One of the best ways to prevent smoking is by providing education to children at an early age – ideally before they are exposed to nicotine. In October 2018, Northeast Georgia Medical Center's (NGMC) Cancer Services did just that, with the help of its supportive community partners.



TAR WARS Poster Contest winners from Holsenbeck Elementary School

Through a collaborative effort with the Barrow County School Board; local elementary school principals, counselors and nurses; and community physicians, our outreach team introduced Barrow County fourth and fifth graders to "TAR WARS" – a tobacco-free education program created by the American Academy of Family Physicians. TAR WARS is an evidence-based program designed to give students a fun and interactive way to learn about staying healthy and tobacco-free. Through this program, we were able to reach more than 2,000 students in the Barrow County School System.

Through games, presentations and a poster drawing competition, the students learned about the negative effects of tobacco use – both physically and monetarily – as well as the power of peer pressure and tobacco advertising.

NGMC's Cancer Services has identified Barrow County as an area of focus for helping reduce the burden of tobacco-related cancers. While the TAR WARS program is just a part of this larger initiative, we look forward to continued collaboration with Barrow County Schools and its students to improve the health of the community for many years to come.



2018 Community Outreach and Education Activities

With the help of organizational volunteers and community partners, the Oncology Services team held many community outreach and educational events in 2018 to increase awareness, early detection, screening and prevention of cancer.

Date	Event	Targeted Audience	Number of participants
4.17.2018	Oncology Lecture at Lanier Technical College	Licensed Practical Nursing students	20
4.17.2018	American Cancer Society survivorship dinner	Community cancer survivors	150
5.11.2018	Relay for Life Hall County	Community	>100
6.4.2018	Cancer Survivor Day - Gainesville	Community	>100
6.5.2018	Cancer Survivor Day - Braselton	Community	>100
6.6.2018	Cancer Survivor Day - Barrow	Community	>50
6.19.2018	Lung cancer support group	Cancer survivors	5
6.20.2018	Prostate cancer educational seminar	Gainesville community	50
6.21.2018	Prostate cancer educational seminar	Braselton community	35
7.17.2018	Lung cancer support group	Cancer survivors	5
8.16.2018	Barrow County Health Expo	Community	>100
8.21.2018	Lung cancer support group	Cancer survivors	10
9.13.2018	Glory Hope and Life tailgate event	Community	>100
9.22.2018	Northeast Georgia Medical Center Barrow health fair	Community	>100
10.09.2018	University of North Georgia Black Student Association: breast cancer awareness	Minority college students	50
10.17.2018	Hall County Health Expo: thyroid screenings	Community	73
10.17.2018	Hall County Health Expo: colon cancer prevention education	Community	>100
10.22 - 10.26.2018	"TAR Wars" tobacco use prevention activities	Barrow County 4 th and 5 th grade students	>2000
10.26.2018	Harvest of Hope event	Community cancer survivors	>100
10.30.2018	Breast cancer awareness: breast self-exam education	Perdue Farms female employees	25



Oncology Services Navigation Program

Northeast Georgia Medical Center's Oncology Patient Navigation program has experienced tremendous growth within the last few years. With a team of four nurse navigators and one patient resource navigator, NGMC's Oncology Patient Navigation program has been able to help more than 1,800 cancer patients in 2018.

Our team of navigators help provide care to our patients in the Gainesville, Braselton, Barrow and Toccoa service areas. Together, they work to coordinate patient care, address psychosocial distress, provide clinical education and connect patients with appropriate financial resources. The team also actively participates in community education events, cancer prevention/screening activities and cancer survivorship events.



Alison Evans



Lisa Bridges



Alicia Harrison



Jennifer Roberts

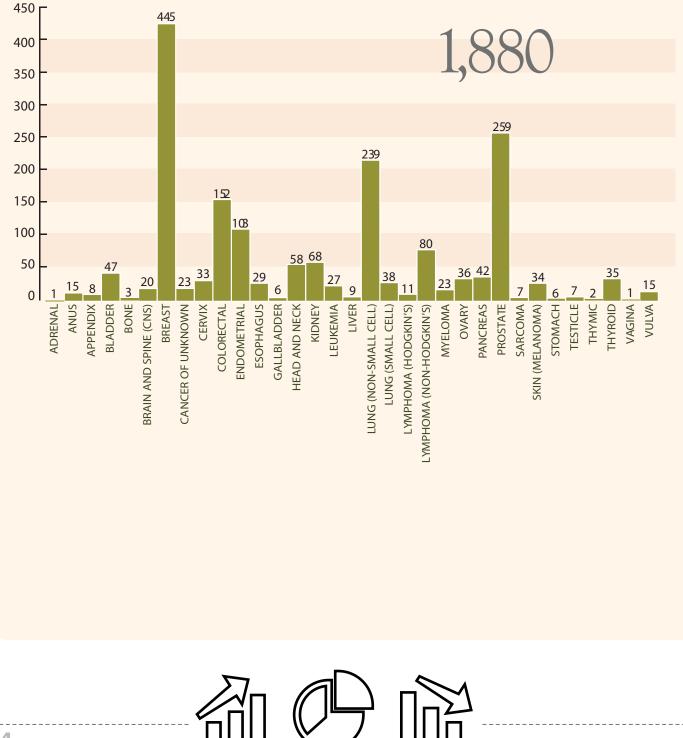


Sandi Clark





Cancers Seen by Oncology Navigation Team in 2018



2016 Cancer Registry Data

					AJCC Stage					
Site	Analytic	Non- Analytic	Male	Female	0	I	II		IV	Totals
ORAL CAVITY, PHARYNX	33	12	33	12	0	4	1	5	22	45
Tongue	10	8	12	6	0	1	0	1	8	18
Salivary Gland	6	0	1	5	0	3	0	1	2	6
Tonsil	9	1	10	0	0	0	1	1	7	10
Oropharynx	4	0	4	0	0	0	0	0	3	4
DIGESTIVE SYSTEM	312	83	222	173	15	61	65	59	64	395
Esophagus	15	9	18	6	0	3	2	1	3	24
Stomach	31	5	21	15	1	2	4	8	10	36
Small Intestine	11	3	8	6	0	0	2	5	0	14
Colon Excluding Rectum	124	27	78	73	6	38	27	26	19	151
Rectosigmoid Junction	9	0	5	4	0	3	3	3	0	9
Rectum	36	7	27	16	5	3	10	8	6	43
Anus, Anal Canal, Anorectum	13	2	2	13	3	4	1	3	2	15
Liver, Gallbladder, Intrahep Bile Duct	29	16	30	15	0	4	6	2	4	45
Liver	13	11	21	3	0	4	2	0	2	24
Gallbladder	5	1	2	4	0	0	2	2	1	6
Intrahepatic Bile Duct	4	3	4	3	0	0	0	0	0	7
Other Biliary	7	1	3	5	0	0	2	0	1	8
Pancreas	42	11	32	21	0	4	10	2	19	53
RESPIRATORY SYSTEM	341	71	229	183	1	82	30	76	131	412
Larynx	17	8	22	3	0	4	2	5	4	25
Lung and Bronchus	322	62	205	179	1	78	28	71	126	384
SOFT TISSUE INCLUDING HEART	6	5	6	5	0	0	2	1	2	11
SKIN	47	32	49	30	6	20	6	4	2	79
Skin: Melanoma	46	28	45	29	6	20	6	3	2	74
BREAST	357	87	5	439	50	181	88	21	9	444
Female Breast	354	85	0	439	49	180	88	20	9	439
Male Breast	3	2	5	0	1	1	0	1	0	5
FEMALE GENITAL SYSTEM	201	44	0	245	0	118	12	42	17	245
Cervix Uteri	26	5	0	31	0	13	4	6	2	31
Corpus, Uterus: NOS	120	5	0	125	0	90	2	17	8	125
Ovary	41	11	0	52	0	7	3	19	6	52
Vulva	13	23	0	36	0	8	2	0	1	36

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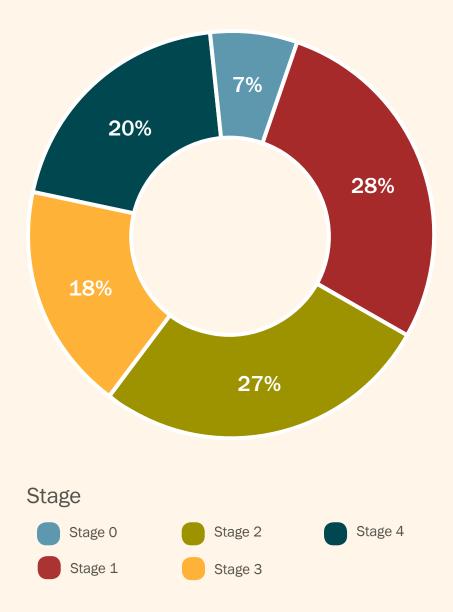


2016 Cancer Registry Data

MALE GENITAL SYSTEM	260	134	394	0	0	53	147	38	13	394
Prostate	245	130	375	0	0	46	145	35	13	375
Testis	13	3	16	0	0	6	2	3	0	16
URINARY SYSTEM	141	37	131	47	36	57	19	5	13	178
Urinary Bladder	77	27	81	23	34	20	12	0	5	104
Kidney	56	10	45	21	0	34	7	5	6	66
Renal Pelvis	4	0	2	2	2	1	0	0	1	4
Ureter	4	0	3	1	0	2	0	0	1	4
BRAIN, OTHER NERVOUS SYSTEM	90	23	52	61	0	0	0	0	0	113
Brain: Malignant	29	7	26	10	0	0	0	0	0	36
Brain-CNS: Benign, Borderline	60	15	24	51	0	0	0	0	0	75
ENDOCRINE SYSTEM	128	19	37	110	0	88	10	11	2	147
Thyroid	112	2	23	91	0	88	10	11	2	114
Endocrine: Benign, Borderline	15	17	13	19	0	0	0	0	0	32
LYMPHOMA	79	49	64	64	0	18	15	10	25	128
Hodgkin Lymphoma	7	1	3	5	0	1	4	0	2	8
Hodgkin - Nodal	7	1	3	5	0	1	4	0	2	8
Non-Hodgkin Lymphoma	72	48	61	59	0	17	11	10	23	120
NHL - Nodal	47	34	40	41	0	10	9	7	12	81
NHL - Extranodal	25	14	21	18	0	7	2	3	11	39
MYELOMA	25	26	29	22	0	0	0	0	0	51
LEUKEMIA	45	52	53	44	0	0	0	0	0	97
Lymphocytic Leukemia	15	28	22	21	0	0	0	0	0	43
Acute Lymphocytic Leukemia	6	1	4	3	0	0	0	0	0	7
Chronic Lymphocytic Leukemia	9	25	16	18	0	0	0	0	0	34
Non-Lymphocytic Leukemia	27	16	27	16	0	0	0	0	0	43
Acute Myeloid Leukemia	20	5	15	10	0	0	0	0	0	25
Chronic Myeloid Leukemia	7	11	12	6	0	0	0	0	0	18
Other Leukemia	3	8	4	7	0	0	0	0	0	11
MESOTHELIOMA	1	0	1	0	0	0	0	0	1	1
UNKNOWN PRIMARY	79	64	86	57	0	0	0	0	0	143
TOTALS	2145	739	1392	1492	108	682	395	272	301	2884



Stage at Diagnosis





NGMC 2016 Top Six Sites

