



2018 Annual Report

STATISTICAL DATA FROM 2017

Mercy Hospital Ada Cancer Program

Mercy Hospital Ada's Cancer Treatment Center has been assisting the patients in their battles with cancer for over 25 years.

Our Cancer Registry, the first of its kind in Oklahoma outside the state's two major metropolitan areas, aids in the research of causes, detection and treatment of tumors.

The Cancer Program which includes the Cancer Treatment Center is approved by the Commission on Cancer of the American College of Surgeons, a recognition shared by only 25% of the nation's general and surgical hospitals with cancer programs.

Mercy Hospital Ada Cancer Registry

The Cancer Registry accessions, abstracts and conducts follow up for all eligible cancer cases diagnosed and/ or treated at Mercy Hospital Ada, in accordance with current data collection standards and coding instructions as set forth by the Commission on Cancer. The Cancer Registry acts to support in coordination, monitoring and recording of the cancer program activity under the direction of the Cancer Committee. Mercy Hospital Ada's Cancer Registry added 251 cases in 2017. The 5 major sites at Mercy Hospital Ada are Prostate, Lung, Colorectal, Breast and Bladder. They account for 54% of all new cases.

		Female	Uterine	Colon &		Lung &			Urinary
		Breast	Cervix	Rectum	Leukemia	Bronchus	NHL	Prostate	Bladder
OKLAHOMA	18,710	14%	1%	9%	4%	16%	4%	9%	5%
MHA	251	16%	1%	9%	2%	14%	5%	7%	7%
USA	1,688,780	15%	1%	8%	4%	13%	4%	10%	5%

United States Numbers

3. Leading Sites of New Cancer Cases and Deaths – 2017 Estimates

Male				Female			
Prostate	161,360	19%		Breast	252,710	30%	
Lung & bronchus	116,990	14%		Lung & bronchus	105,510	12%	
Colon & rectum	71,420	9%		Colon & rectum	64,010	8%	
Urinary bladder	60,490	7%		Uterine corpus	61,380	7%	
Melanoma of the skin	52,170	6%		Thyroid	42,470	5%	
Kidney & renal pelvis	40,610	5%		Melanoma of the skin	34,940	4%	
Non-Hodgkin lymphoma	40,080	5%		Non-Hodgkin lymphoma	32,160	4%	
Leukemia	36,290	4%		Leukemia	25,840	3%	
Oral cavity & pharynx	35,720	4%		Pancreas	25,700	3%	
Liver & intrahepatic bile duct	29,200	3%		Kidney & renal pelvis	23,380	3%	
All sites	836,150	100%		All sites	852,630	100%	

*Taken from American Cancer Society Facts & Figures, 2017

Mercy Hospital Numbers

MALE				FEMALE			
Prostate	18	13.7%		Breast	40	33.3%	
Lung & Bronchus	36	27.5%		Lung & Bronchus	15	12.5%	
Colon & rectum	14	10.7%		Colon & rectum	10	8.3%	
Urinary Bladder	14	10.7%		Uterine Corpus	4	3.3%	
Melanoma of the skin	2	1.5%		Urinary Bladder	3	2.5%	
Kidney & renal pelvis	10	7.6%		Melanoma of the skin	1	0.8%	
Lymphoma	8	6.1%		Lymphoma	5	4.2%	
Leukemia	3	2.3%		Leukemia	3	2.5%	
Oral Cavity & pharynx	11	8.4%		Pancreas	4	3.3%	
Liver & intrahepatic bile ducts	3	2.3%		Kidney & renal pelvis	7	5.8%	
All sites	131	100%		All sites	120	100%	

		Sex		Class of		Status		Stage Distribution - Analytic					
Primary Site	Tot	M	F	Analy	NA	Alive	Ex	Stg	Stg	Stg	Stg	Stg	8
ORAL CAVITY & PHARYNX	11	8	3	11	0	10	1	0	2	2	3	2	1
Tongue	1	1	0	1	0	1	0	0	0	0	1	0	0
Salivary Glands	3	2	1	3	0	3	0	0	1	0	1	1	0
Tonsil	5	4	1	5	0	5	0	0	1	2	0	1	0
Hypopharynx	1	1	0	1	0	1	0	0	0	0	1	0	0
Other Oral Cavity & Pharynx	1	0	1	1	0	0	1	0	0	0	0	0	1
DIGESTIVE SYSTEM	44	25	19	43	1	28	16	0	11	3	11	12	0
Esophagus	5	3	2	5	0	1	4	0	1	0	0	4	0
Stomach	3	2	1	3	0	2	1	0	2	0	0	1	0
Colon Excluding Rectum	13	7	6	13	0	10	3	0	1	2	6	4	0
Cecum	2	1	1	2	0	1	1	0	0	0	1	1	0
Ascending Colon	3	2	1	3	0	2	1	0	0	1	2	0	0
Hepatic Flexure	2	1	1	2	0	2	0	0	1	0	1	0	0
Transverse Colon	2	0	2	2	0	1	1	0	0	1	0	1	0
Descending Colon	1	1	0	1	0	1	0	0	0	0	1	0	0
Sigmoid Colon	3	2	1	3	0	3	0	0	0	0	1	2	0
Rectum & Rectosigmoid	11	7	4	11	0	9	2	0	4	0	4	0	0
Liver & Intrahepatic Bile Duct	3	2	1	3	0	2	1	0	1	0	0	1	0
Gallbladder	1	1	0	1	0	1	0	0	0	0	0	0	0
Pancreas	7	3	4	6	1	3	4	0	2	1	0	2	0
Peritoneum, Omentum	1	0	1	1	0	0	1	0	0	0	1	0	0
RESPIRATORY SYSTEM	40	24	16	37	3	20	20	0	2	3	9	21	0
Larynx	3	2	1	3	0	1	2	0	1	1	1	0	0
Lung & Bronchus	36	21	15	33	3	19	17	0	1	2	8	21	0
Trachea, Mediastinum	1	1	0	1	0	0	1	0	0	0	0	0	0
SOFT TISSUE	2	0	2	2	0	1	1	0	1	0	0	1	0
MELANOMA - Skin	3	2	1	3	0	2	1	0	0	0	0	1	0
BREAST	40	0	40	36	4	34	6	9	9	11	2	4	0
FEMALE GENITAL SYSTEM	11	0	11	11	0	11	0	1	5	0	2	1	0
Cervix Uteri	2	0	2	2	0	2	0	0	2	0	0	0	0
Corpus & Uterus, NOS	4	0	4	4	0	4	0	0	2	0	0	0	0
Ovary	3	0	3	3	0	3	0	0	1	0	2	0	0
Vulva	2	0	2	2	0	2	0	1	0	0	0	1	0
MALE GENITAL SYSTEM	21	21	0	20	1	21	0	0	5	11	0	1	0
Prostate	18	18	0	17	1	18	0	0	4	10	0	1	0
Testis	2	2	0	2	0	2	0	0	1	0	0	0	0
Penis	1	1	0	1	0	1	0	0	0	1	0	0	0
URINARY SYSTEM	35	25	10	35	0	28	7	5	15	5	1	1	0
Urinary Bladder	17	14	3	17	0	14	3	5	5	3	0	0	0
Kidney & Renal Pelvis	17	10	7	17	0	14	3	0	9	2	1	1	0
Ureter	1	1	0	1	0	0	1	0	1	0	0	0	0
BRAIN & CRANIAL NERVES	5	4	1	5	0	3	2	0	0	0	0	0	5
Brain	2	2	0	2	0	0	2	0	0	0	0	0	2
Cranial Nerves	3	2	1	3	0	3	0	0	0	0	0	0	3
ENDOCRINE SYSTEM	3	0	3	3	0	3	0	0	1	0	1	0	1
LYMPHOMA	13	8	5	13	0	11	2	0	4	3	1	3	0
Hodgkin Lymphoma	1	0	1	1	0	1	0	0	0	1	0	0	0
Non-Hodgkin Lymphoma	12	8	4	12	0	10	2	0	4	2	1	3	0
NHL - Nodal	6	4	2	6	0	5	1	0	1	2	1	2	0
NHL - Extranodal	6	4	2	6	0	5	1	0	3	0	0	1	0
MYELOMA	4	3	1	4	0	4	0	0	0	0	0	0	4
LEUKEMIA	6	3	3	6	0	5	1	0	0	0	0	0	6
Lymphocytic Leukemia	3	2	1	3	0	3	0	0	0	0	0	0	3
Myeloid & Monocytic Leukemia	3	1	2	3	0	2	1	0	0	0	0	0	3
Acute Myeloid Leukemia	2	1	1	2	0	1	1	0	0	0	0	0	2
Chronic Myeloid Leukemia	1	0	1	1	0	1	0	0	0	0	0	0	1
MESOTHELIOMA	2	1	1	2	0	0	2	0	0	0	0	2	0
KAPOSI SARCOMA	1	1	0	1	0	1	0	0	0	0	0	0	1
MISCELLANEOUS	10	6	4	10	0	5	5	0	0	0	0	0	10
Total	251	131	120	242	9	187	64	15	55	38	30	49	28

New cases: An estimated 80,500 new cases of lymphoma will be diagnosed in the US in 2017. This cancer begins in certain immune system cells, and is broadly classified as either Hodgkin lymphoma (8,260 cases) or non-Hodgkin lymphoma (NHL, 72,240 cases). Hodgkin lymphoma and NHL are further classified into subtypes based on cell type, molecular characteristics, anatomic site, certain infections, and other features. The most common subtypes of NHL are diffuse large B-cell lymphoma and follicular lymphoma. (CLL is also classified as an NHL because of its similarity to small lymphocytic lymphoma, but in this document CLL is present within the leukemia section.)

Incidence trends: Overall, incidence rates for both Hodgkin lymphoma and NHL were stable from 2004 to 2013, although patterns varied by subtype.

Deaths: In 2017, there will be an estimated 1,070 deaths from Hodgkin lymphoma and 20,140 deaths from NHL.

Mortality trends: Due to improvements in treatment, the death rate has been declining since at least 1975 for Hodgkin lymphoma and since the mid-1990s for NHL. For NHL, reductions in incidence and improvements in survival for HIV-associated subtypes has also contributed to the decline. From 2005 to 2041, rates decreased by almost 4% per year for Hodgkin lymphoma and by about 2% per year for NHL.

Signs and symptoms: The most common symptoms of lymphoma are caused by swollen lymph nodes, and include lumps under the skin; chest pain; shortness of breath; and abdominal fullness and loss of appetite. Other symptoms can include itching, night sweats, fatigue, unexplained weight loss, and intermittent fever.

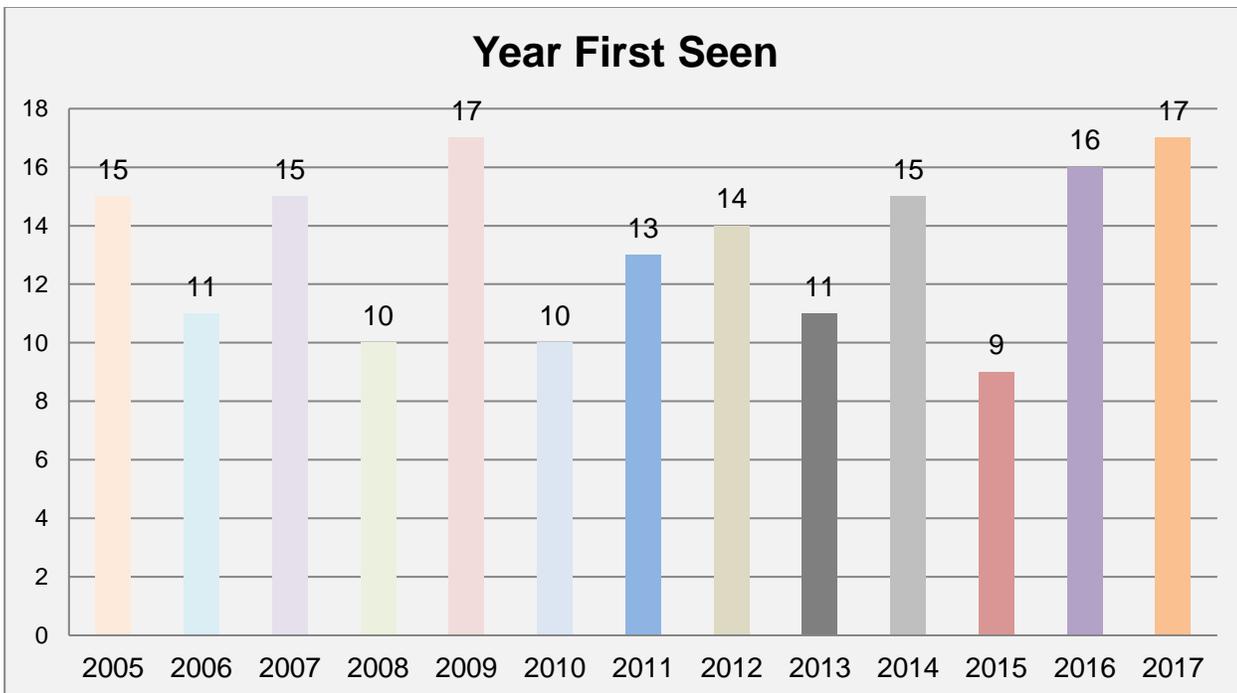
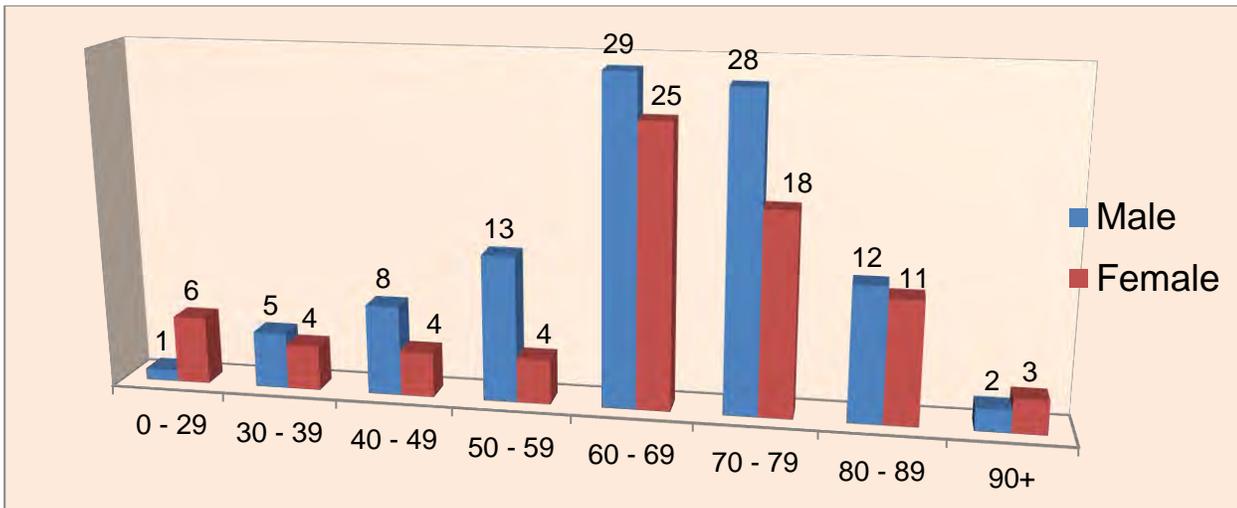
Risk factors: Like most cancers, the risk of NHL increases with age. In contrast, the risk of Hodgkin lymphoma increases during adolescence and early adulthood, decreases during middle age, and then increases again later in life. Most of the known risk factors for lymphoma are associated with severely altered immune function. For example, risk is elevated in people who receive immune suppressants to prevent organ transplant rejection. Certain infectious agents (e.g. Epstein-Barr virus) increase the risk of some lymphoma subtypes, as well as chronic infection with agents that cause immunosuppression (e.g. human immunodeficiency virus [HIV] or that cause the immune system to be continuously active (e.g. *Helicobacter pylori* and hepatitis C virus). Some autoimmune disorders (e.g. Sjogren syndrome, lupus, and rheumatoid arthritis) are also associated with increased risk of lymphoma. A family history of lymphoma confers increased risk of all Hodgkin lymphoma and NHL subtypes, and a growing number of confirmed common genetic variations are associated with modestly increased risk. Studies also suggest a role for some behavioral risk factors (e.g. body weight) and environmental exposures for some subtypes.

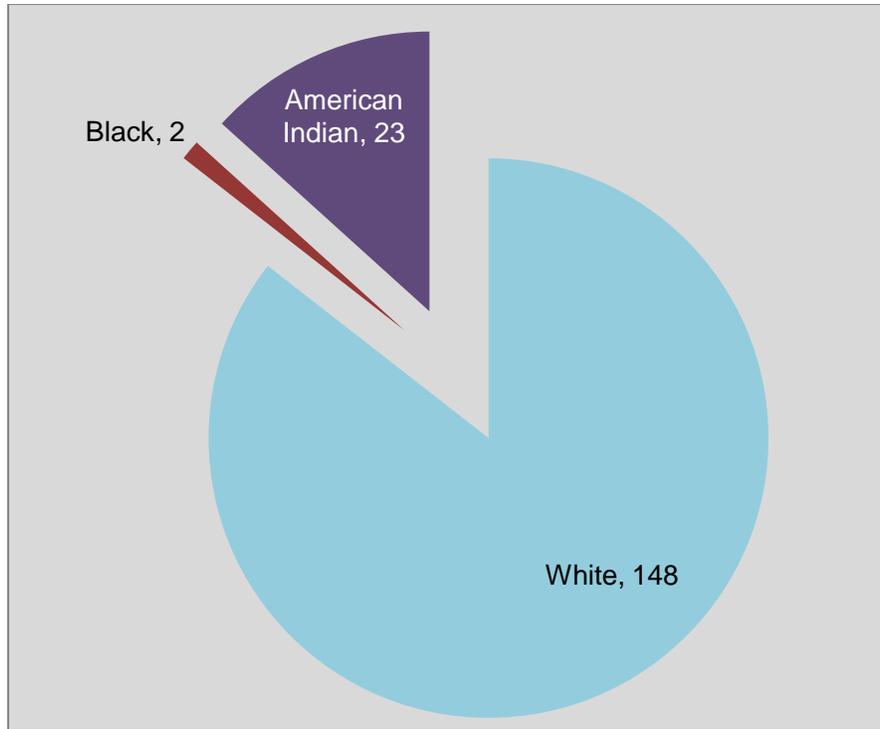
Treatment: NHL patients are usually treated with chemotherapy; radiation, alone or in combination with chemotherapy, is also sometimes used. Targeted or Immunotherapy drugs directed at lymphoma cells are used for some NHL subtypes, as are antibodies linked to a chemotherapy drug or a radioactive atom. If NHL persists or recurs after standard treatment, stem cell transplantation may be an option.

Hodgkin Lymphoma is usually treated with chemotherapy, radiation therapy, or a combination of the two, depending on disease stage and cell type. If these treatments are not effective, options may include stem cell transplantation and/or treatment with a monoclonal antibody linked to a chemotherapy drug or immunotherapy.

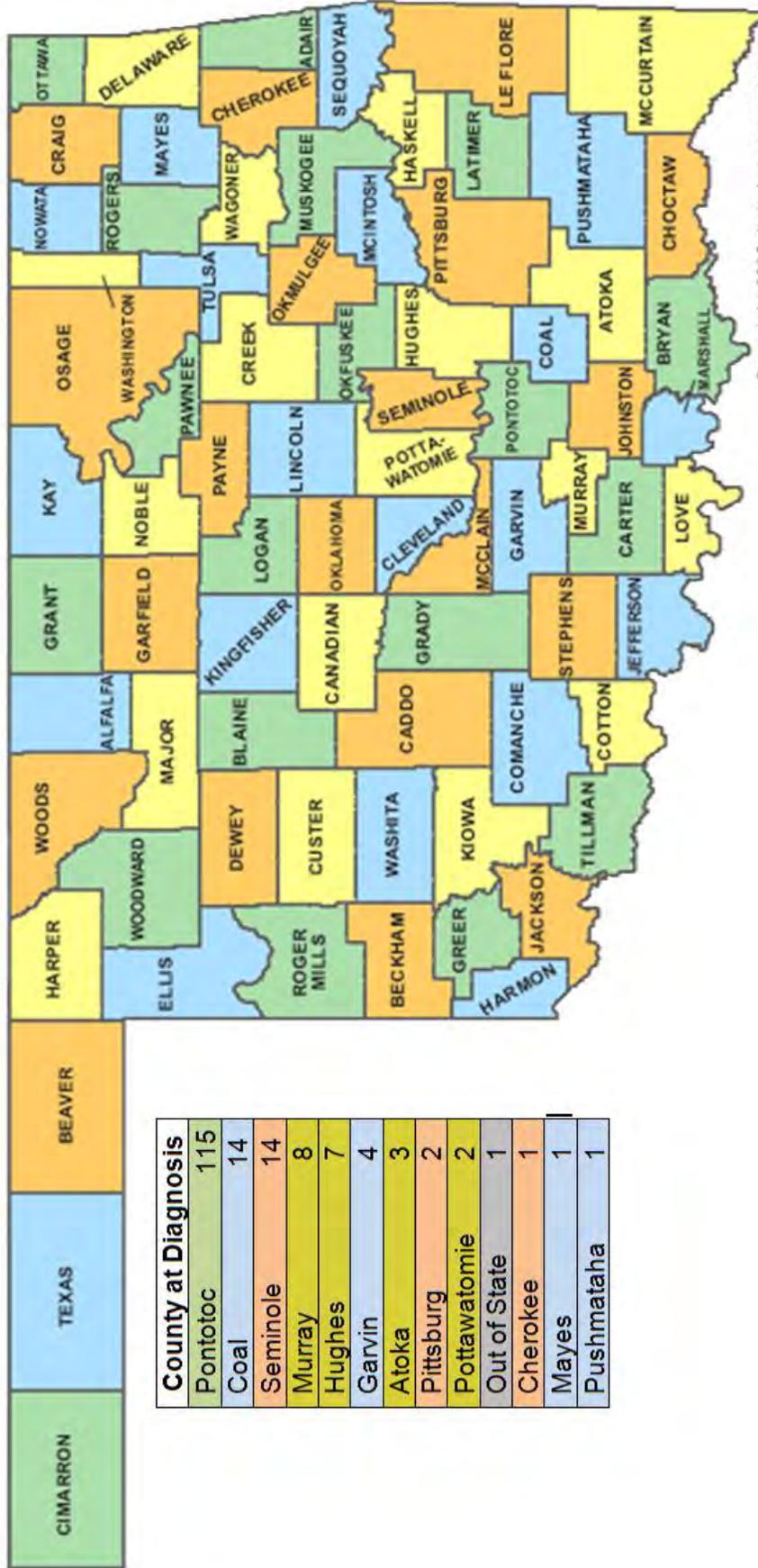
Survival: Survival varies widely by subtypes and stage of disease and is slightly better for females than for males. The overall 5-year relative survival rate for Hodgkin lymphoma is 85% for males and 87% for females, and for NHL is 69% and 72%, respectively.

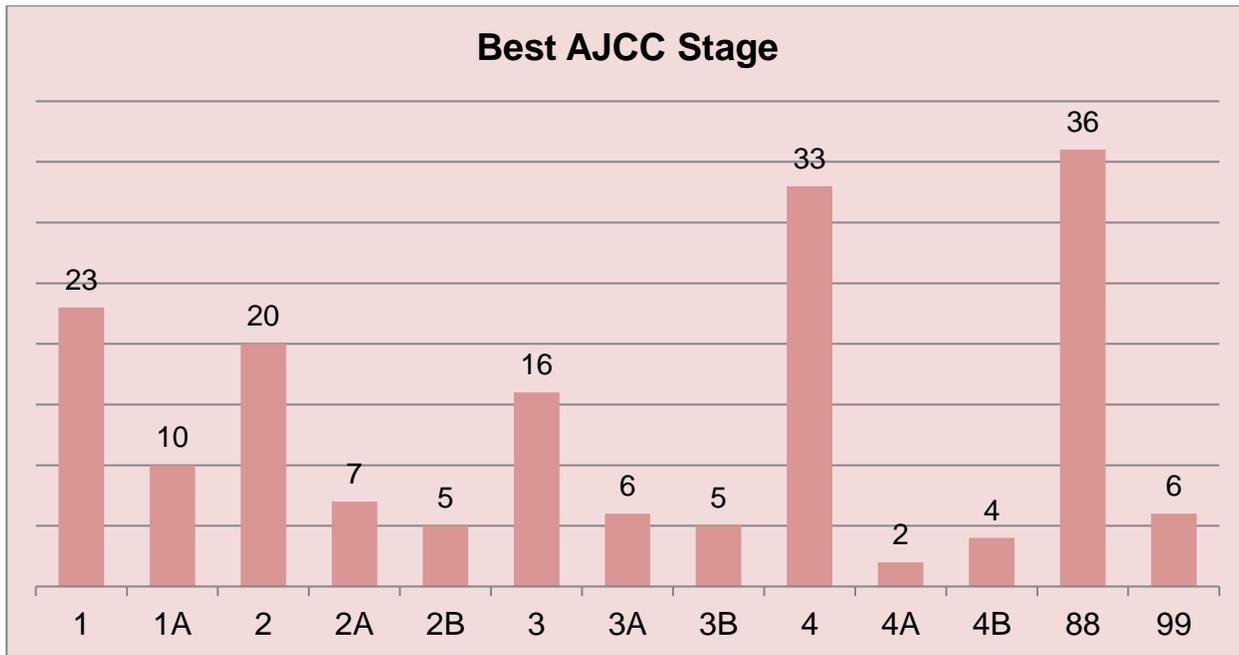
Class of Case	
(00) Initial diagnosis at MHA AND all treatment or a decision not to treat was done elsewhere	5
(10) Initial diagnosis at MHA or in an office of a physician with admitting privileges AND part or all of first course treatment or a decision not to treat was done at MHA	58
(12) Initial diagnosis in an office of a physician with admitting privileges AND all first course treatment or decision not to treat was done at MHA	9
(13) Initial diagnosis at MHA AND part of first course treatment was done at MHA; part of first course treatment was done elsewhere	7
(14) Initial diagnosis at MHA AND all first course treatment or a decision not to treat was done at MHA	54
(20) Initial diagnosis elsewhere AND all or part of first course treatment was done at MHA	14
(21) Initial diagnosis elsewhere AND part of first course treatment was done at MHA; part of first course treatment was done elsewhere	12
(22) Initial diagnosis elsewhere AND all first course treatment or a decision not to treat was done at MHA	14





Histology/Behavior	
Malignant lymphoma, NOS	2
Lymphoma, malignant, non-Hodgkin, NOS	17
Hodgkin lymphoma, classical	1
Hodgkin lymphoma, mixed cellularity, NOS	1
Hodgkin lymphoma, nodular lymphocyte predominant	1
Hodgkin lymphoma, nodular sclerosis, NOS	15
Lymphoma, malig, small B lymphocytic, NOS (Obsolete Dx 2010+)	5
Lymphoma, mantle cell	8
Lymphoma, malig, large B-cell, diffuse, (DLBCL), NOS	48
Burkitt lymphoma, NOS	1
Lymphoma, follicular, NOS	12
Lymphoma, follicular, grade 2	5
Lymphoma, follicular, grade 1	5
Lymphoma, follicular, grade 3	2
Lymphoma, marginal zone B-cell, NOS	3
Mycosis fungoides	1
Lymphoma, mature T-cell, NOS	3
Lymphoma, angioimmunoblastic T-cell	1
Lymphoma, anaplastic Ig cell, T cell & Null cell type	1
B-cell CLL/small lymphocytic lymphoma	40
T lymphoblastic leukemia/lymphoma	1





Stage I

Either of the following means the disease is stage I:

- The lymphoma is in only 1 lymph node area or lymphoid organ such as the tonsils (I).
- The cancer is found only in 1 area of a single organ outside of the lymph system (IE).

Stage II

Either of the following means the disease is stage II:

- The lymphoma is in 2 or more groups of lymph nodes on the same side of (above or below) the diaphragm (the thin band of muscle that separates the chest and abdomen). For example, this might include nodes in the underarm and neck area (II) but not the combination of underarm and groin nodes (III).
- The lymphoma is in a group of lymph node(s) and in one area of a nearby organ (IIE). It may also affect other groups of lymph nodes on the same side of the diaphragm.

Stage III

Either of the following means the disease is stage III:

- The lymphoma is in lymph node areas on both sides of (above and below) the diaphragm.
- The lymphoma is in lymph nodes above the diaphragm, as well as in the spleen.

Stage IV

The lymphoma has spread widely into at least one organ outside the lymph system, such as the bone marrow, liver, or lung.

Survival Rate for Lymphoma from MHA 2008- 2013

