

Lymphoma Care Site Analysis Mercy and Unity Cancer Center

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Incidence:

This report will review lymphoma diagnosis and treatment results from the Mercy and Unity Cancer program. Figure 1 shows the number of lymphomas in the last 25 years at Mercy and Unity Hospitals. Nationally, the incidence of lymphomas has increased, particularly during the 1970's and 1980's. The increase over this period at Mercy and Unity reflects this national trend as well as the increasing utilization of our cancer program.

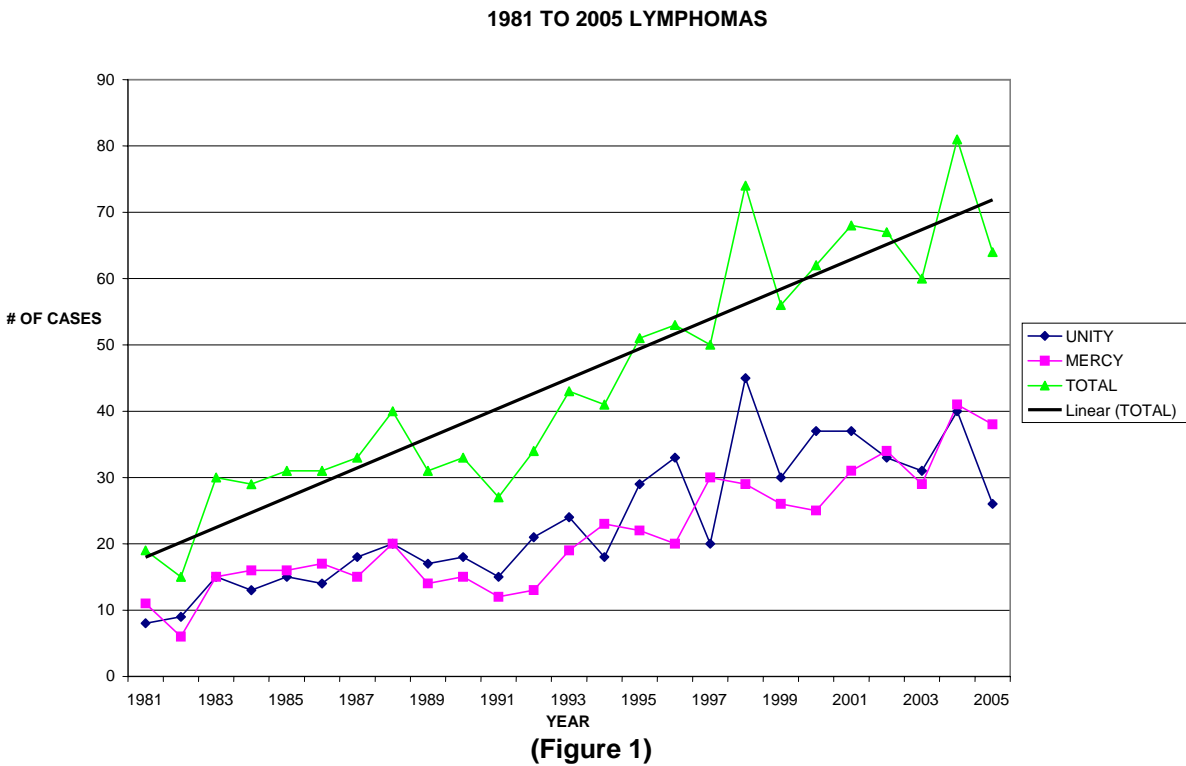


Figure 2 lists all of the different lymphoma types diagnosed at Mercy and Unity during the target period (1997-2001). There are many different lymphoma subtypes. Our list is inclusive, presenting all subtypes of lymphoproliferative malignancies except acute leukemia. We have combined many of these individual subtypes into four major categories, which have adequate numbers for analysis.

Category	Number of Cases
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Diffuse Large B-cell lymphoma (DLBCL)	94
Follicular lymphoma (FL)	72
Hodgkin Lymphoma (HL)	47
Small lymphocytic lymphoma/chronic lymphocytic leukemia (SLL/CLL)	47

1997-2001 LYMPHOMA HISTOLOGY DISTRIBUTION

	TOTAL VALUES	
	NUMBER	PERCENT
Malignant lymphoma large cell diffuse NOS	91	29.4
Chronic lymphocytic leukemia	34	11
Hodgkin disease nodular sclerosis, nos	31	10
Malignant lymphoma small cleaved cell follicular	30	9.7
Malignant lymphoma mixed small cleaved & Ig. cell follicular	28	9.1
Malignant lymphoma small lymphocytic NOS	13	4.2
Malignant lymphoma lymphocytic inter. diffuse	13	4.2
Malignant lymphoma lymphoplasmacytic	11	3.6
Malignant lymphoma follicular NOS	11	3.6
Malignant lymphoma nos	9	2.9
Hodgkin disease mixed cellularity nos	7	2.3
Hodgkin disease NOS	6	1.9
Marginal zone B-cell lymphoma, nos	5	1.6
Malignant lymphoma immunoblastic NOS	3	1
Malignant lymphoma large cell follicular nos	3	1
Peripheral T cell lymphoma NOS	3	1
Hodgkin disease nodular sclerosis lymphocytic depletion	2	0.6
Large cell lymphoma	2	0.6
Malignant lymphoma non Hodgkin NOS	1	0.3
Hodgkin disease nodular sclerosis lymphocytic predominance	1	0.3
Malignant lymphoma mixed small & large cell diffuse	1	0.3
Burkitt's lymphoma NOS (Burkitt's tumor)	1	0.3
Splenic marginal zone B-cell lymphoma, NOS (C42.2)	1	0.3
Peripheral T cell lymphoma AILD	1	0.3
Cutaneous lymphoma	1	0.3
ANY OTHERS	0	0

OVERALL TOTALS

309

100

(Figure 2)

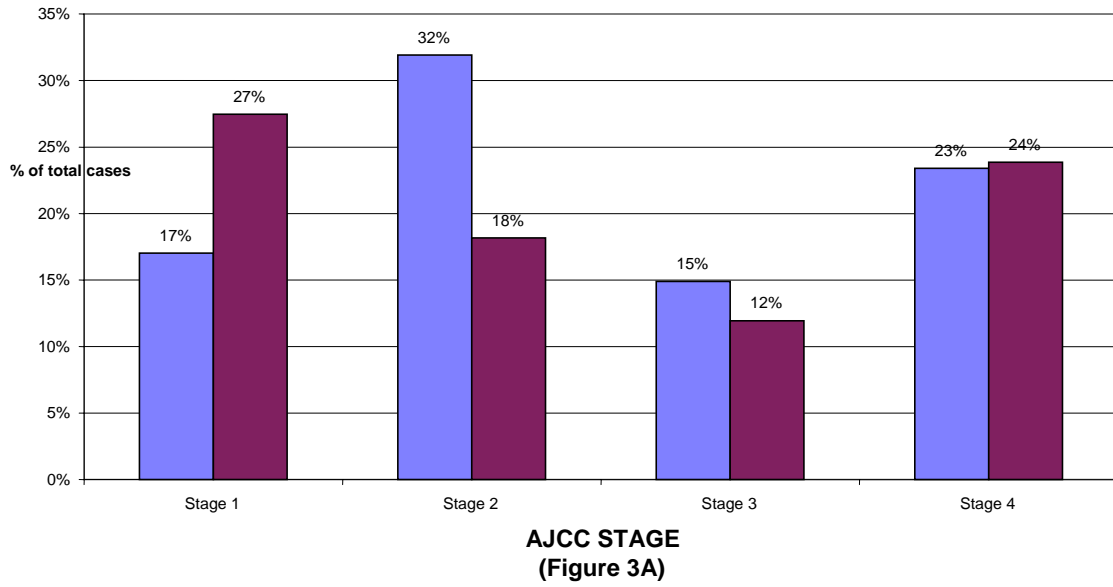
Stage at Diagnosis:

Figures 3A, 3B, and 3C show stage distribution at diagnosis of DLBCL, FL, and HL for Mercy and Unity compared with national data. Stages 1 and 2 designate a disease that is localized or limited to one side of the diaphragm. Stage 3 and 4 disease is more extensive. SLL/CLL is not included in the staging analysis because the vast majority of these cases are stage 4 (particularly with bone marrow involvement) at diagnosis.

Noteworthy deviations from national results include the lower proportion of Stage 1 DLBCL at Mercy and Unity, the great percentage of Stage 4 FL, and the greater proportion of stage 2 HL at our center. Some of this discrepancy, particularly with stage 4 FL, results from underestimates in the national data and the presence of greater than 15% unknown stage in this data.

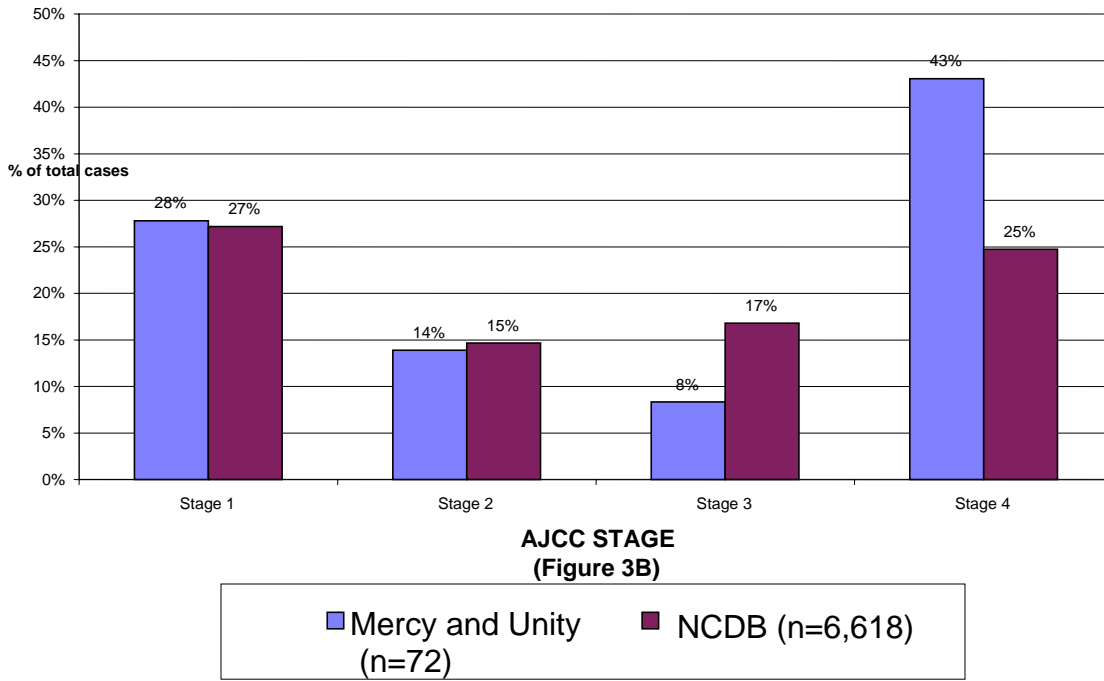
While it is true that survival improves when lymphoma is diagnosed at an earlier stage, even stage 4 disease (particularly in DLBCL) can be cured. There are no nationally recognized screening tests for lymphoma. The public should be kept aware of general cancer warning signs, such as weight loss or feeling a lump, and should be encouraged to comply with the recommended schedule for general physical exams.

**1997-2001 DIFFUSE LARGE B-CELL LYMPHOMAS
AJCC STAGE PERCENTAGE
Mercy and Unity VS. NCDB**

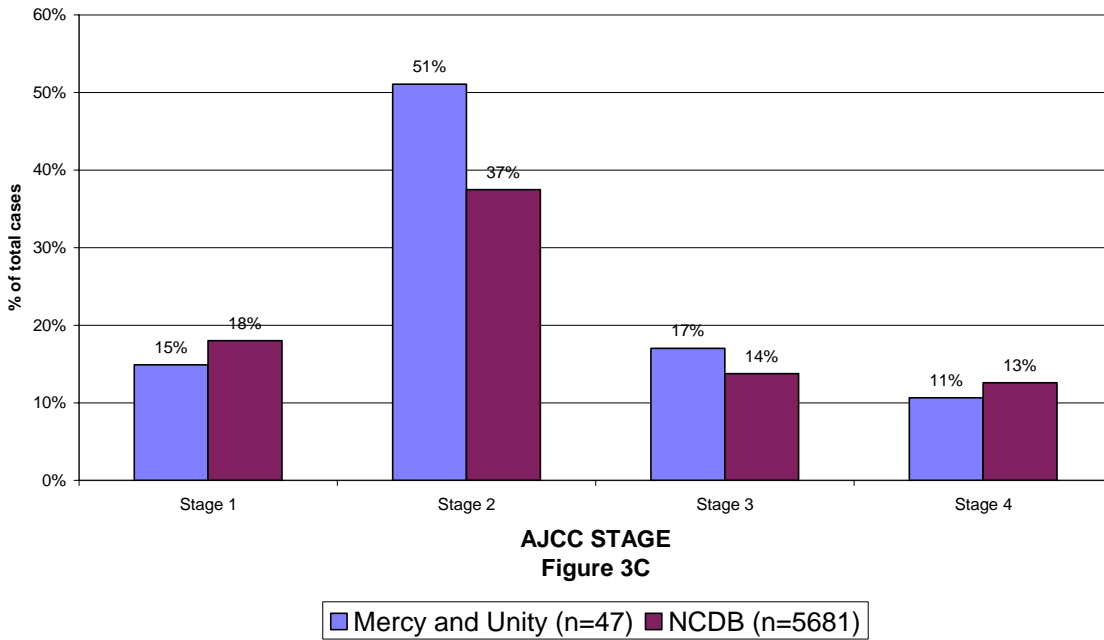


■ Mercy and Unity (n=94) ■ NCDB (n=13,306)

**1997-2001 FOLLICULAR LYMPHOMAS
AJCC STAGE PERCENTAGE
Mercy and Unity VS. NCDB**



**1997-2001 HODGKIN LYMPHOMAS
AJCC STAGE PERCENTAGE
Mercy and Unity VS. NCDB**

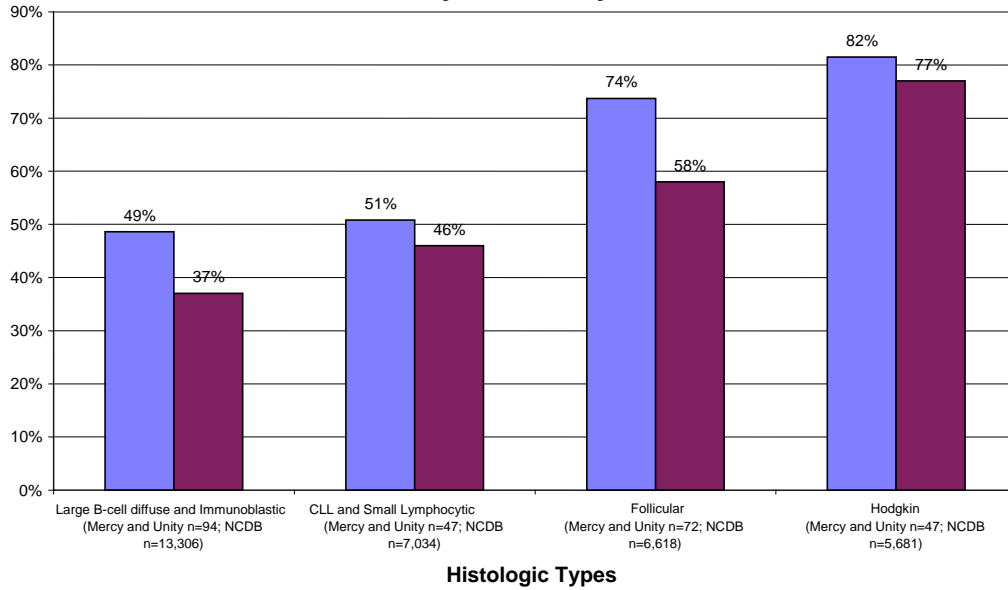


Outcomes:

Treatment for lymphoma involves radiation therapy as an option for Stage 1 and 2 disease and systemic (drug) therapy potentially for all stages. Figure 4 summarizes 5-year survivals for our 4 categories of lymphoma compared with national results.

5-year observed survival percentage

**Lymphoma 5-year Observed Survival
Mercy and Unity vs. NCDB**



**Histologic Types
Figure 4**

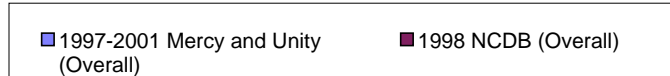
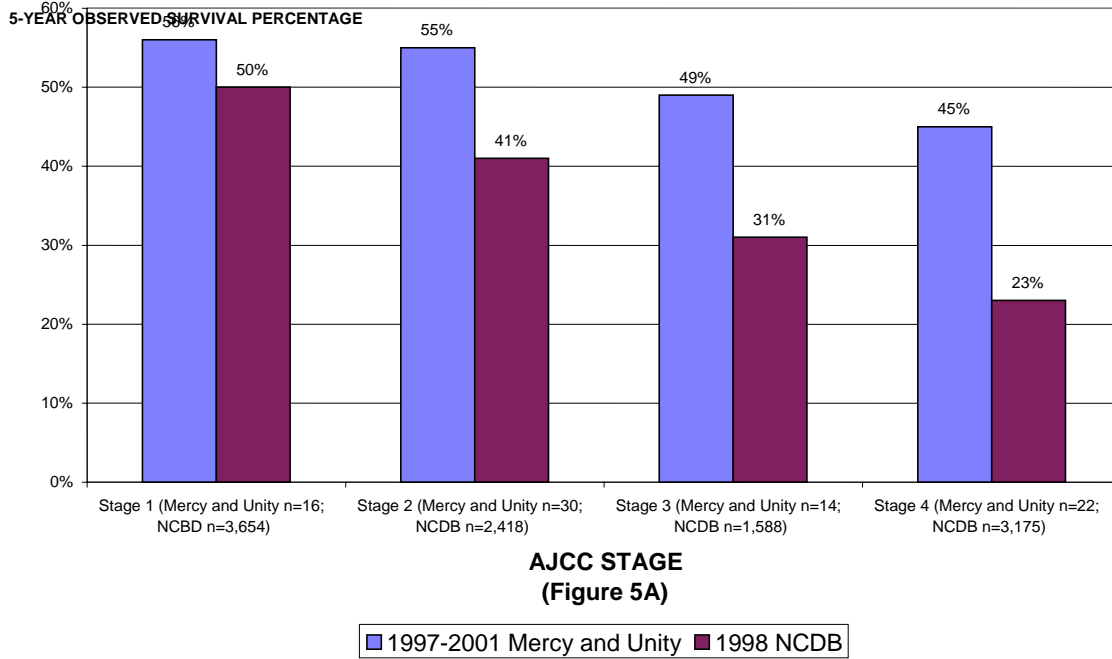
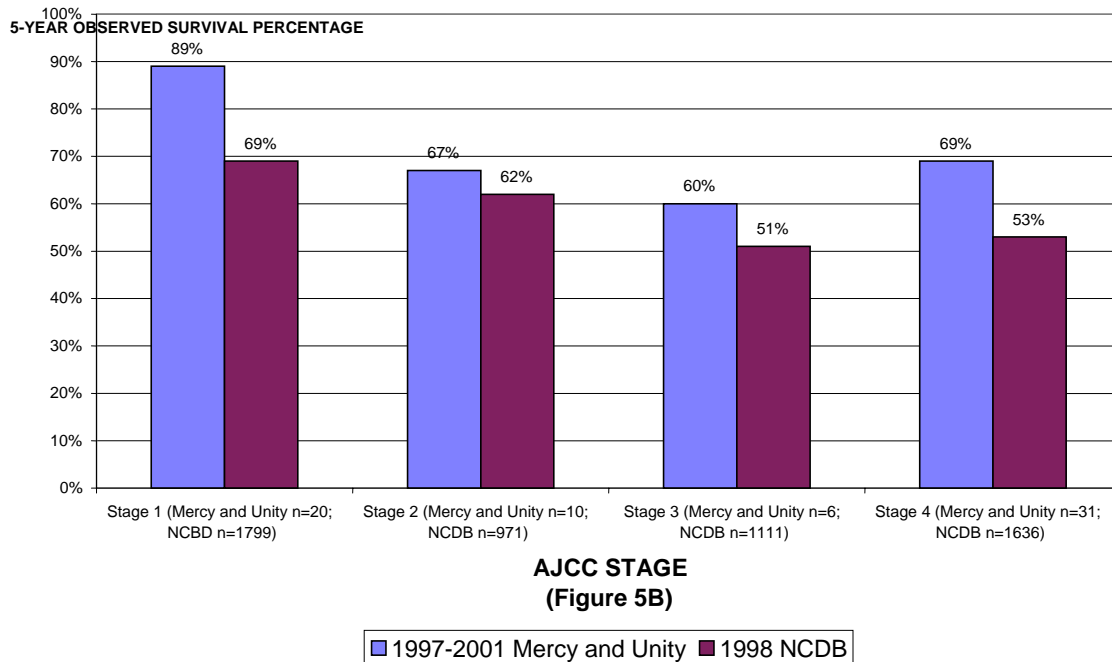


Figure 5A, 5B, and 5C presents 5-year survival data by stage for the DLBCL, FL, and HL categories.

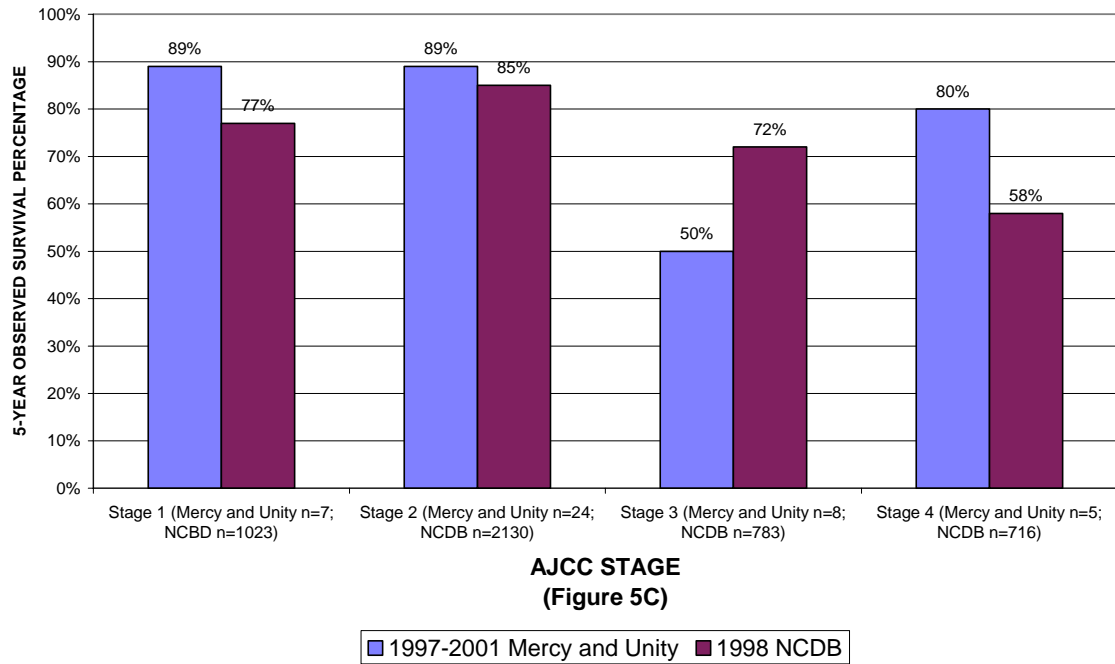
**LARGE B-CELL DIFFUSE LYMPHOMA
5-YEAR OBSERVED SURVIVAL - AJCC STAGE I-IV**



**FOLLICULAR LYMPHOMA
5-YEAR OBSERVED SURVIVAL - AJCC STAGE I-IV**



**HODGKIN LYMPHOMA
5-YEAR OBSERVED SURVIVAL - AJCC STAGE I-IV**



The overall survival data shows that Mercy and Unity exceeds national results in all of the discussed lymphoma categories. When the results are broken down by stage, the findings are consistent with the overall picture. One exception is Stage 3 HL where 5-year national survival exceeded that at Mercy and Unity. It should be noted that, for this category, there were only eight cases from Mercy and Unity.

Conclusions:

There has been approximately a fourfold increase in lymphoma cases treated at Mercy and Unity over the last 25 years. This growth far exceeds that experienced nationally and reflects increased utilization of our cancer program. Our five-year survivals for each of the four major lymphoma categories discussed exceeded the national outcomes. This result reflects favorably on the management of lymphoma patients cared for at Mercy and Unity.