

A Retrospective Review of Outcomes Associated With Treatment Modalities Utilized In The Management of Diffuse Large B Cell Non-Hodgkin's Lymphoma

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A Retrospective Review of Outcomes Associated With Treatment Modalities Utilized in the Management of Diffuse Large B-Cell Non-Hodgkin's Lymphoma

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Introduction

- Diffuse Large B-Cell Lymphoma (DLBCL) is the **most common aggressive Non-Hodgkin's Lymphoma subtype**¹
- National Comprehensive Cancer Network (NCCN) **issues peer-reviewed guidelines** for DLBCL treatment²
- National Cancer Institute (NCI) **publishes** Surveillance, Epidemiology, and End Results (SEER) **statistics for DLBCL**³

Objectives

- Determine if workup and treatment for DLBCL rendered at LVHN was in compliance** with NCCN guidelines
- Compare LVHN's DLBCL population trends** to those published by the NCI

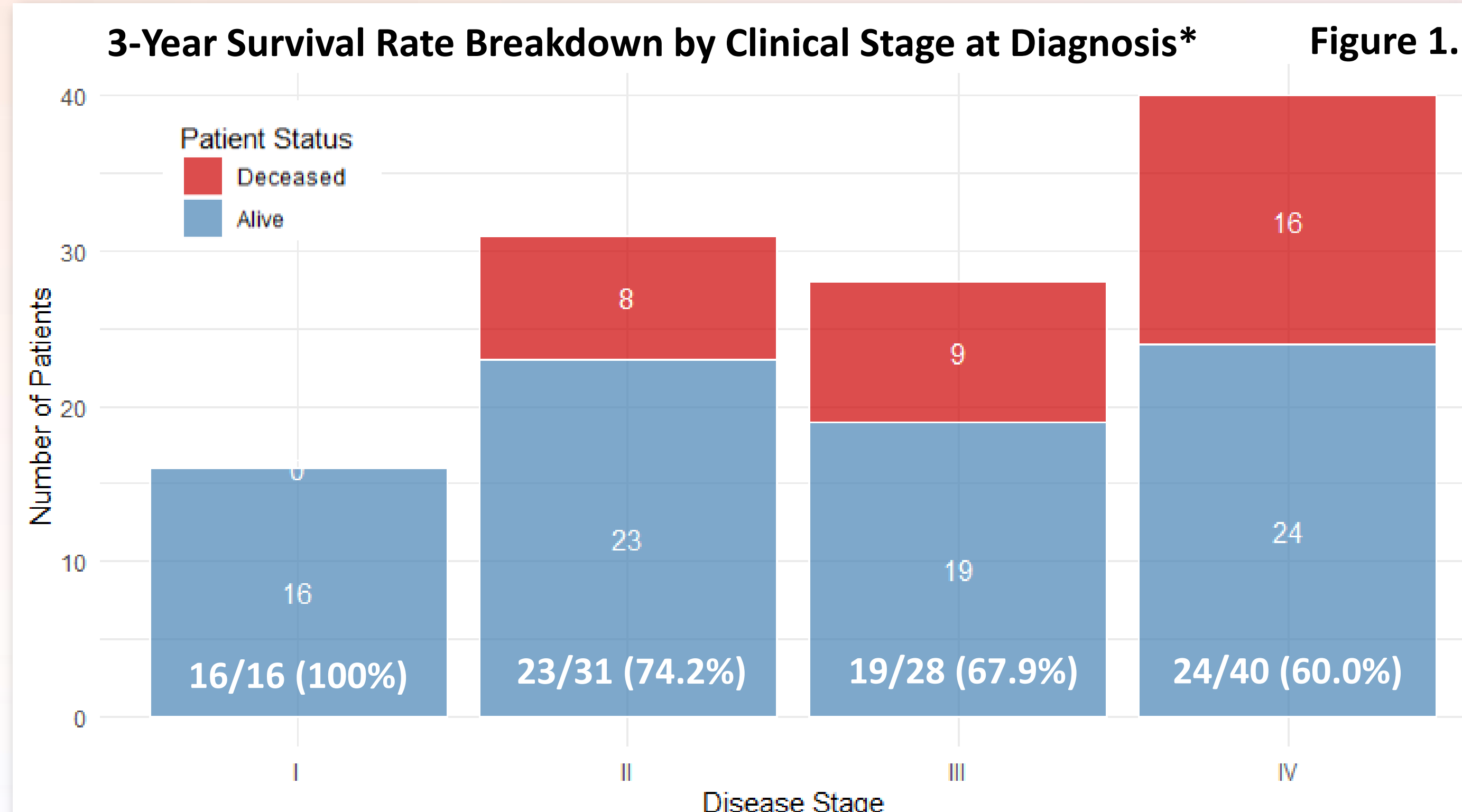
Methods

- Retrospective chart review of 269 DLBCL patients** identified by LVHN's Tumor Registry from 2014 to 2018
- Utilized **EPIC and Mosaik** to access electronic medical records (EMR) to record:
 - Demographic information
 - Chemotherapy regimen
 - Baseline:
 - Lugano staging (I, II, III, IV)
 - Viral testing results
 - Lactate dehydrogenase measurement
 - B symptom presence
 - PET scan completion status
 - Echocardiogram/MUGA completion status
- Removed 88 patients** from initial dataset due to:
 - Initial treatment at another hospital – **41 (46.6%)**
 - Treatment by pediatrics unit – **3 (3.4%)**
 - Patient declined treatment or entered hospice without treatment – **14 (15.9%)**
 - DLBCL was primary CNS disease – **22 (25.0%)**
 - Patient expired before treatment could be initiated – **8 (9.1%)**
- Determined compliance based on NCCN guidelines² for first-line chemotherapy and workup procedures

Results

Table 1. Survival Rate Comparison

Source	Time-Scale	Total % Per Stage at Dx				
		I	II	III	IV	Overall
LVHN*	3-years	100%	74.2%	67.9%	60.0%	72.4%
NCI SEER ³	5-years	73.3%	72.7%	63.7%	52.7%	63.8%



*Calculations in Table 1. and Figure 1. omit patients from 2018 that are not yet 3 years out from diagnosis.

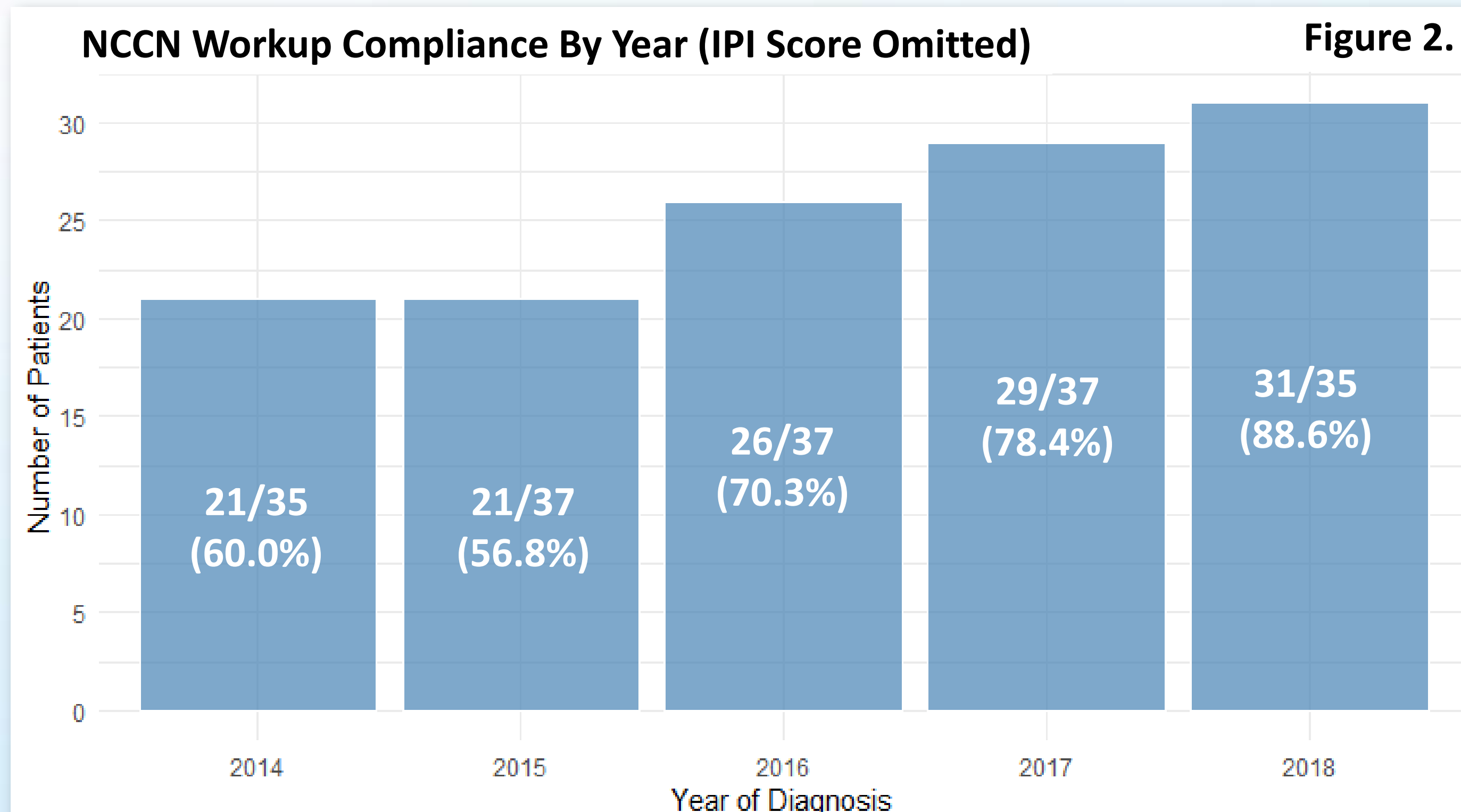


Table 2. NCCN Workup Guidelines Compliance*

IPI Score	Compliant Patients	Total Patients	Total % Compliance
Included	27	181	14.9%
Omitted	128	181	70.7%

*Compliance = Documented LDH, ECOG, ± B Symptoms, PET Scan, Hepatitis B test, ECHO/MUGA [+anthracycline]

*Compliance = First treatment modality followed NCCN flowchart³ for selection based on stage group at diagnosis

Table 3. NCCN Treatment Guidelines Compliance*			
Stages at Dx	Compliant Patients	Total Patients	Total % Compliance
I & II	61	67	91.0%
III & IV	84	93	90.3%

Conclusions

- Comparison to SEER statistics:
 - LVHN's 3-year survival rates exceed all corresponding 5-year metrics provided by SEER
 - DLBCL outcomes are at or exceeding national average
 - Though, direct comparison is difficult due to different time-scales
- NCCN workup:
 - Found a **general absence of documented IPI scores**
 - Led to a low overall workup compliance (14.9%)
 - However, IPI is a prognostic index and doesn't have large impact on care plan
 - When omitted, 70.7% of workups are compliant**
- NCCN treatment:
 - Overall treatment compliance was 145/150 (90.6%)**
 - Deviations from compliance can be explained case-to-case
- Overall:
 - LVHN is compliant with NCCN guidelines and provides a high standard of care for its DLBCL patients.**

Recommendations

- In **2 years, recalculate survival rates** per stage to have direct comparison to 5-year SEER statistics
- Emphasize better documentation of IPI score in EMR**
 - IPI scores have been documented as general prognostic statements such as "high risk"
 - Can be converted to numerical score, however nothing differentiates these statements from a general prognosis
 - NCCN occasionally uses IPI to select chemotherapy regimen
 - IPI should be consistently documented to ensure proper care

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