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POSTER ABSTRACTS

623.MANTLE CELL, FOLLICULAR, AND OTHER INDOLENT B CELL LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

Real-World Response Rates across Lines of Therapy Among Patients with Relapsed/Refractory Follicular Lymphoma

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Background: Follicular lymphoma (FL) is the most common indolent subtype of non-Hodgkin lymphoma. Despite the generally indolent nature of the condition, there are subgroups of FL patients who may not have an indolent experience, with their disease not responding to multiple lines of therapy. Thus, optimization of novel therapy could improve patient outcomes. This analysis examined treatment patterns, overall response rates (ORR), and complete response (CR) rates by line of therapy (LOT) in relapsed/refractory (R/R) FL in third-line or later (3L+) therapy.

Methods: This retrospective observational study was conducted using the COTA database, comprising electronic health records (EHR) from academic (50%) and community (50%) practices in the US. Adults with a confirmed diagnosis of FL, with 3L+ therapy initiation in 2010 or later, at least 3 months of follow-up, and any response assessment after 3L initiation were included. LOTs eligible for inclusion met the following conditions: treatment with an anti-CD20, alkylating agent, or lenalidomide, and no investigational drug in the selected LOT. In addition, patients with only 3L had that line selected; patients with more than 1 eligible LOT had only 1 LOT randomly selected for the analysis. Outcomes were assessed by FL International Prognostic Index (FLIPI), double refractory (DR) status, and type of therapy. DR status was defined as being refractory (disease progression or initiation of a new LOT in <6 months) to an anti-CD20 monoclonal antibody therapy and an alkylating agent. Chemoimmunotherapy (CIT) regimens included obinutuzumab/rituximab + bendamustine (OB/BR), rituximab/obinutuzumab+cyclophosphamide, doxorubicin, vincristine, and prednisolone (R/O+CHOP), R/O+CVP, R/O+other alkylating agent, and R/O+fludarabine and cyclophosphamide (FC). Novel therapies included lenalidomide + rituximab (R^2), phosphatidylinositol-3-kinase (PI3K) inhibitors, and chimeric antigen receptor T-cell therapy (CAR T). The proportion of patients with CR (as retrieved from clinician documentation in EHR) as the physician-reported response within each LOT was calculated. ORR was calculated as the proportion of patients with a CR or PR. Response rates were reported by LOT (3L, 4L, 5L+) and stratified by patient age (<65 vs ≥65 years), FLIPI score (low/intermediate vs high), and DR (not DR vs DR).

Results: Overall, 240 patients with R/R 3L+ FL were included: 3L (n=140), 4L (n=55), and 5L+ (n=45). At 3L initiation, median age was 66 years and most patients were male (58.8%), White (89.6%), and had FL grade 1/2 (72.5%); 47.9% of patients were DR, 22.9% had novel therapy use, and 51.3% had CIT use. A total of 152 patients had FLIPI scores available, 38.2% of whom had high-risk scores at 3L initiation. Among all R/R 3L+ FL patients, ORR was 67.9%, with CR in 30.4% (**Figure 1**). Response rates decreased across LOTs for both ORR (3L: 72.9%; 4L: 65.5%; 5L+: 55.6%) and CR (3L: 35.0%; 4L: 30.9%; 5L+: 15.6%) (**Figure 2**). ORR was higher among all R/R 3L+ FL patients <65 years vs ≥65 years (75.5% vs 62.3%), as was CR rate (36.3% vs 26.1%). Among the subset of R/R 3L+ FL patients with a FLIPI score, those with low/intermediate risk vs high risk had a greater ORR (78.7% vs 58.6%) and CR rate (36.2% vs 20.7%). ORR was also higher for R/R 3L+ patients without DR status vs with DR status (73.0% vs 63.2%), as was CR rate (37.4% vs 24.0%). Patients receiving novel therapy 3L+ had an ORR of 70.9% and a CR rate of 27.3%. Among R/R 3L+ FL patients, more LOTs of CIT were associated with decreased response rates; patients with CIT in 1 LOT vs CIT in >2 LOTs had greater ORR (76.4% vs 69.2%) and CR rate (37.4% vs 26.9%).

Conclusions: This analysis provides granular details on patients with R/R FL with poor prognosis. Patients with FL who progress to later LOTs have worsening response rates. This analysis included more patients with later LOTs than previously published reports, providing additional insight into response rates as treatment progresses. Lower response rates were observed among patients ≥65 years, those with a high-risk FLIPI score, and those with DR status. The high utilization of CIT in later LOTs, despite suboptimal response rates, especially among subgroups of patients with FL who may not have indolent experience of the disease, underlines the need for efficacious alternative therapies in patients with R/R 3L+ FL.

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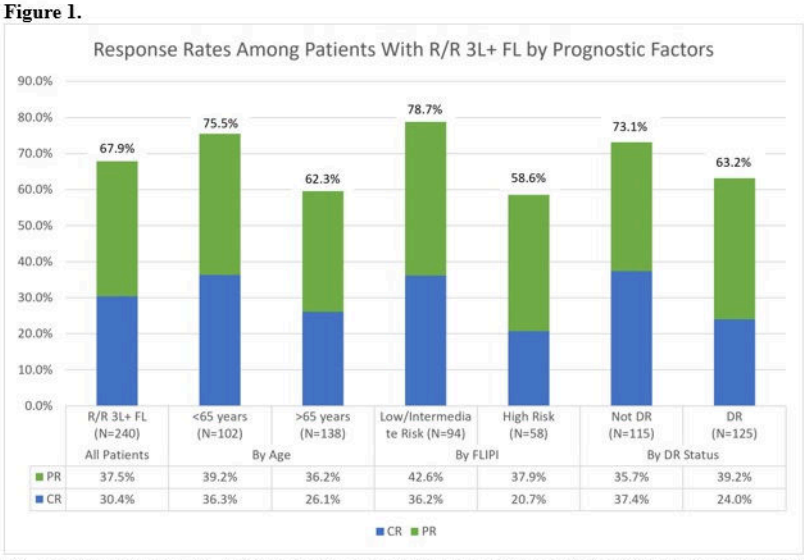
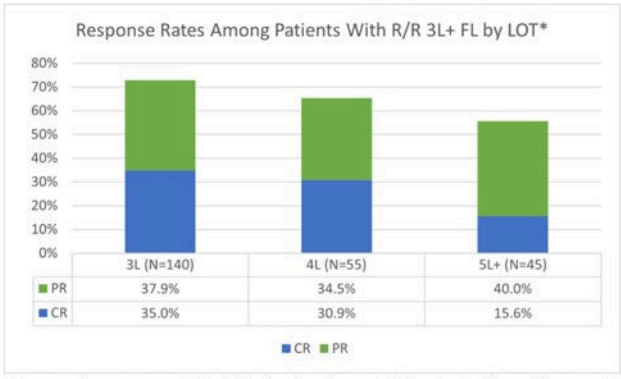
Figure 1.



CR, complete response; DR, double refractory; FL, follicular lymphoma; FLIPI, FL International Prognostic Index; L, line; LOT, line of therapy; PR, partial response; R/R relapsed/refractory.

Figure 2.



CR, complete response; FL, follicular lymphoma; L, line; LOT, line of therapy; PR, partial response; R/R relapsed/refractory.
*LOT patient counts are mutually exclusive. R/R 3L+ FL patients were randomly selected to 1 LOT (3L, 4L, or 5L+); patients with only 3L had that line selected; patients with more than 1 eligible LOT had only 1 LOT randomly selected for the analysis.

Figure 1

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