

Preliminary Safey and Efficacy data of Combination Polatuzumab Vedotin, Rituximab, Cyclophosphamide, Adriamycin, Prednisone(Pola-RCHP) in patients with Diffuse Large B cell Lymphoma (DLBCL) in the Standard of Care setting: A single center experience.

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Background

- Polatuzumab vedotin, an antibody drug conjugated to a microtubule inhibitor auristatin targeting CD 79b.
- Polatuzumab in combination with RCHP, demonstrated superior PFS among intermediate to high risk DLBCL when compared to standard of care R-CHOP.
- POLARIX Trial demonstrated a complete response rate (CR) at 78%, progression free survival (PFS) at 2 years was 77%.
- Adverse events were mainly Neutropenia, and infections.
- Polatuzumab was FDA approved in April 19, 2023.
- Here we assess the preliminary safety and efficacy of Pola-CHP compared to historical RCHOP in patients with DLBCL treated in Moffitt

Methods

Study Design: Retrospective analysis

- **Population Description: Patients with DLBCL receiving SOC Pola-RCHP** at Moffitt Cancer Center from 12/2022 to 4/2024 comparing outcomes with historical R-CHOP cohort treated at our institution from 1/2020- 9/2019.
- **Inclusion Criteria:**
  - ❖Diagnosis of DLBCLand age ≥ 18 years treated with Pola-RCHP were included in safely analysis
  - ❖Patients who completed total 6 cycles of Pola-RCHP were included in efficacy analysis
- Serum samples were collected, and Imaging were done at regular interval
- Toxicity/Response Assessment: Treatment-related toxicities were graded based CTCAE guidelines. Response were assessed based on interim and end of treatment imaging

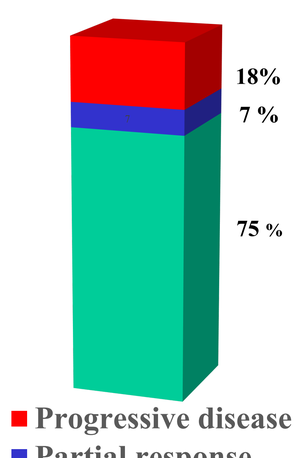
Baseline Characteristics

	N= 36
Patient Age, Median (Range)	**66 (21, 78)**
Male Sex, n (%)	**22 (61.1%)**
ECOG PS, n (%)	
0-1	**34 (94%)**
2+3	**2 (6%)**
IPI , n (%)	
1	**2 (5.5%)**
2	**11 (30 %)**
3	**14 (39%)**
4	**9 (25%)**
Denovo n (%)	**25 (69 %)**
Transformed DLBCL n (%)	**11 (31 %)**
DLBCL phenotype n (%)	
Germinal Center	**19 (53%)**
Non-Germinal Center	**17 (47%)**
Ann Arbor Stage, n (%)	
I	**1 (3%)**
II	**3 (8 %)**
III	**6 (17%)**
IV	**26 (72%)**
Extra-nodal disease	**26 (72%)**
Bulky disease	**13 (37%)**
CNS disease	**1 (3%)**

Toxicities, Adverse Events and efficacy

	Overall N = 36
Any Neutropenia, n (%)	**8 (22.2%)**
Grade 3	5(14%)
Grade 4	3(8.3%)
Any Infection, n (%)	**8 (22.2%)**
Grade 2	1(3%)
Grade 3	6(17%)
Grade 4	1 (3%)
Death while on treatment	**1(3%)**
Overall Response Rate, ORR	**23 (82%)**
Progressive disease, PD	**5(18%)**
CNS progression	1 (3.5%)
Extra-nodal progression	4(14.3%)

Response with Pola-RCHP



Current status of patient on Pola-RCHP

Total patients prescribed Pola-RCHP	36
Completed 6 cycles of Pola-RCHP (n)	28
In middle of treatment	4
Treatment discontinued due to adverse events	2
Lost to follow up	1
Treatment changed /Change in diagnosis	1
Alive	35

Conclusions

- Preliminary efficacy analysis shows that Pola-RCHP is at least similar to R-CHOP for DLBCL patients with IPI score >2. Longer follow up is needed for survival outcome analysis.
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- The safety profile was similar to POLARIX trial.

Comparison of Demographics, Safety and efficacy of Pola R CHP with Historical CHOP data

	Pola-RCHP N= 36	Historical R-CHOP N= 92
Median age, range	66(21, 78)	66(33, 85)
IPI>2	94%	85%
Extra-nodal disease	72%	60%
Complete Response (CR)	75%	68.5%
CNS relapse	3.5%	2.4%
Grade-3 or higher Neutropenia	22%	77%
Incidence of Infection	22%	27%

References

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