POSTER TITLE

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INTRODUCTION

Obinutuzumab (GA101) is a novel Type II, glycoengineered anti-CD20 monoclonal antibody.

In pre-clinical models and clinical trials have shown the efficacy for the treatment of non-Hodgkin's lymphoma. Although GA101 has been approved in more than 100 countries or regions around the world, there are few real-world reports about efficacy and safety.

AIM

To evaluate the efficacy and safety of Obinutuzumab in the treatment of B cell non-Hodgkin lymphoma in our center.

METHOD

We analysed the B cell non-Hodgkin lymphoma patients who received Obinutuzumab combined with chemotherapy or maintenance treatment during September 2021 and July 2023, median follow up 9 months（1-20）, to evaluate efficacy and safety.

RESULTS

In all 165 patients, male 88（53%), female 77（47%）, median 56 (26-83) years. FL 80 (48%), MZL 22 (13%), CLL/SLL 13 (8%), DLBCL 42 (25%), others 8 (5%). Newly diagnosed patients 114 (69%), relapsed/refractory 51 (31%). 124 patients received Obinutuzumab combined therapy, and 42 (25%) patients received Obinutuzumab maintenance treatment. Median treatment 4 cycles（1-11）. I/II 33 (20 %), III/IV 131 (79 %). Low-medium group 91（55%）, medium-high group 74（45%）. ORR 66.7%, CRR 40.6%. 3 patients died of progression of disease. 1 elder patient died of pneumonia. Further subgroup analysis revealed, ORR（78% vs 22%, p<0.001）and CRR（81% vs 19%, p=0.02）of newly diagnosed patients were better than relapsed/refractory patients. There was no difference in CRR among different stages patients（I/II vs III/IV, 24% vs 76%, p=0.424）, ORR（58% vs 42%, p=0.373）and CRR (63% vs 37%, p=0.481）between low-medium and medium-high patients. The patients received more than 4 cycles treatment with better ORR and CRR. The intensive treatment of Obinutuzumab in first cycle could improve ORR (87% vs 13%, p=0.036,）and decreased IgM (p=0.0016）, but didn't not affect CRR （87% vs13%, p=0.343）, IgG (p=0.13） and IgA (p=0.41）. Maintenance treatment decreased IgM (p=0.00064）but not for IgG or IgA. In treatment related side effects, any adverse events were 42（25%）, more than grade III were 18（11%）, tumor lysis syndrome 11 (7%), only one patient need blood purification treatment and recovered. Liver injury 8 (5%) . All the infusion-related response 23（14%）were grade I-II. Only 2 patients delayed treatment because of the side effects.

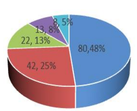

Figure 1. Summary of all the B-NHL patients.

Table 1. Baseline characteristics by CRR and ORR groups

		CRR			ORR		
	Overall (N=165)	0 (N=98)	1 (N=67)	P-value	0 (N=55)	1 (N=110)	P-value
Sex							
Male	88 (53 %)	54 (55 %)	34 (51 %)	0.695	32 (58 %)	56 (51 %)	0.473
Female	77 (47 %)	44 (45 %)	33 (49 %)		23 (42 %)	54 (49 %)	
Age(years)							
Mean ± SD	55.8 ± 12.1	56.9 ± 11.8	54.2 ± 12.3	0.169	58.6 ± 11.1	54.4 ± 12.3	0.029*
Median [Min, Max]	56.0 [26.0, 83.0]	57.5 [32.0, 79.0]	52.0 [26.0, 83.0]		59.0 [38.0, 77.0]	54.0 [26.0, 83.0]	
Diagnosis 1=FL,2=MZL,3=CLL/SLL,4=DLBCL/. 5=others							
1	80 (48 %)	36 (37 %)	44 (66 %)	0.003*	14 (25 %)	66 (60 %)	<0.001*
2	22 (13 %)	13 (13 %)	9 (13 %)		9 (16 %)	13 (12 %)	
3	13 (8 %)	11 (11 %)	2 (3 %)		6 (11 %)	7 (6 %)	
4	42 (25 %)	32 (33 %)	10 (15 %)		20 (36 %)	22 (20 %)	
5	8 (5 %)	6 (6 %)	2 (3 %)		6 (11 %)	2 (2 %)	
Stage							
I-II	33 (20 %)	17 (18 %)	16 (24 %)	0.424	11 (20 %)	22 (20 %)	1
III-IV	132 (80%)	80 (82 %)	51 (76 %)		44 (80 %)	88 (80 %)	
IPI							
1-2	91 (55 %)	49 (50 %)	42 (62 %)	0.481	27 (49 %)	64 (58 %)	0.373
≥3	74 (45 %)	49(50 %)	25(38 %)		28 (51 %)	46 (42 %)	
Newly diagnosis	114 (69 %)	60 (61 %)	54 (81 %)	0.02*	28 (51 %)	86 (78 %)	<0.001*
Relapsed/Refractory	51 (31 %)	38 (39 %)	13 (19 %)		27 (49 %)	24 (22 %)	
Treatment cycles							
Mean ± SD	4.01 ± 1.90	3.27 ± 1.58	5.09 ± 1.82	<0.001*	2.89 ± 1.26	4.56 ± 1.93	<0.001*
Median [Min, Max]	4.00 [1.00, 11.0]	3.00 [1.00, 8.00]	4.00 [2.00, 11.0]		3.00 [1.00, 6.00]	4.00 [1.00, 11.0]	
Intensive treatment in 1st cycle							
No	29 (18 %)	20 (20 %)	9 (13 %)	0.343	15 (27 %)	14 (13 %)	0.036*
Yes	136 (82 %)	78 (80 %)	58 (87 %)		40 (73 %)	96 (87 %)	

Table 2. The incidence of treatment related adverse events

Adverse events	The incidence of adverse events
Total adverse events	42(25 %)
III-IV grade	18 (11 %)
Tumor lysis syndrome	11 (7 %)
Liver injury	8 (5 %)
Renal injury	8 (5 %)
Infusion-related response	23 (14 %)
Delayed treatment	4 (2 %)

CONCLUSIONS

Obinutuzumab is safe and effective in the treatment of B-NHL.Different stage or IPI patients have similar results. When the patients received more than 4 or 5 cycles treatment will have better ORR or CRR .Further follow-up is still needed to determine the long-time efficacy and safety.

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