

Novel Bispecific Antibodies for Follicular lymphoma

April 25 2023

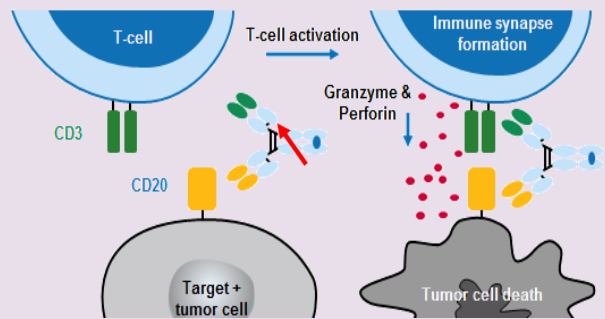
Sameh Gaballa, MD MSc
Associate Member
Department of Malignant Hematology
Lymphoma Section
H. Lee Moffitt Cancer Center



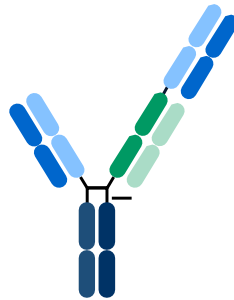
Bispecific antibodies in development

Mosunetuzumab (CD3xCD20)

FDA Approved Dec 2022



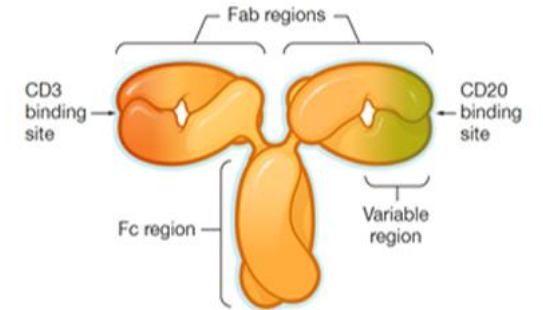
Glofitamab (CD3xCD20)



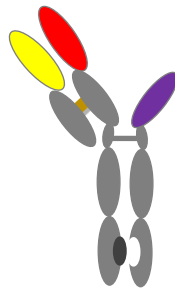
Epcoritamab (CD3xCD20)



Odronextamab (CD3xCD20)



TNB-486 (CD3xCD19)



Fc Tail

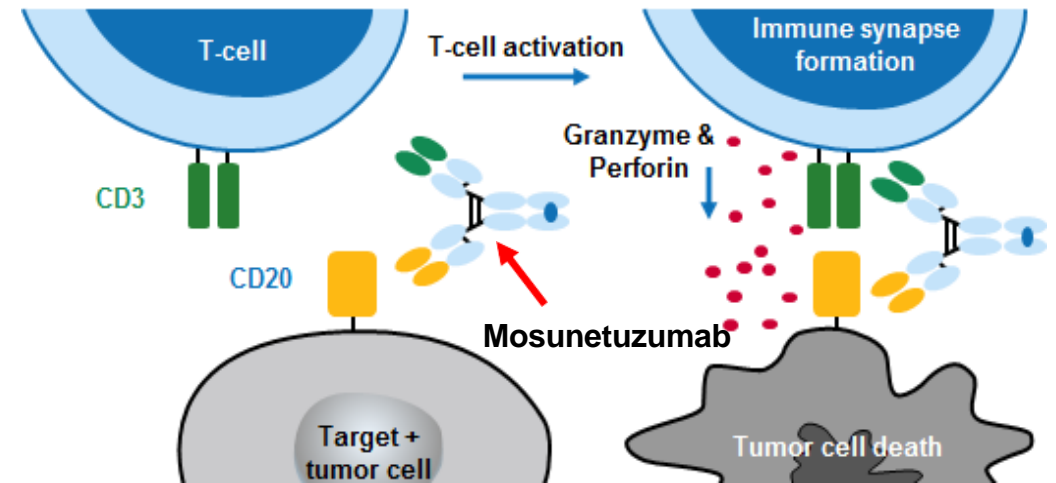
Plamotamab (CD3xCD20)



Mosunetuzumab (CD20 x CD3 T-cell Engager: First FDA approved bispecific antibody for R/R FL (Dec 2022))

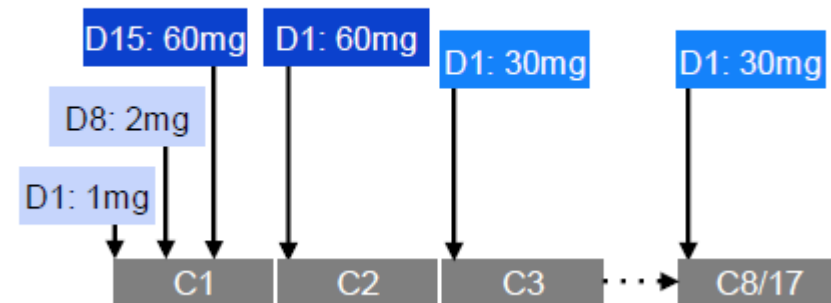


- Mosunetuzumab (**first-in-class**) is now FDA approved for the treatment of **relapsed/refractory follicular lymphoma (R/R FL)** after ≥ 2 prior systemic therapies.
- Redirects T cells to engage and eliminate malignant B cells
- Off the Shelf outpatient treatment



Mosunetuzumab administration

- IV mosunetuzumab administered in 21-day cycles with step-up dosing in C1
- Fixed-duration treatment: 8 cycles if CR after C8; 17 cycles if PR/SD after C8
- Re-treatment with mosunetuzumab permitted at relapse for patients who achieved CR
- No mandatory hospitalization



Mosunetuzumab:

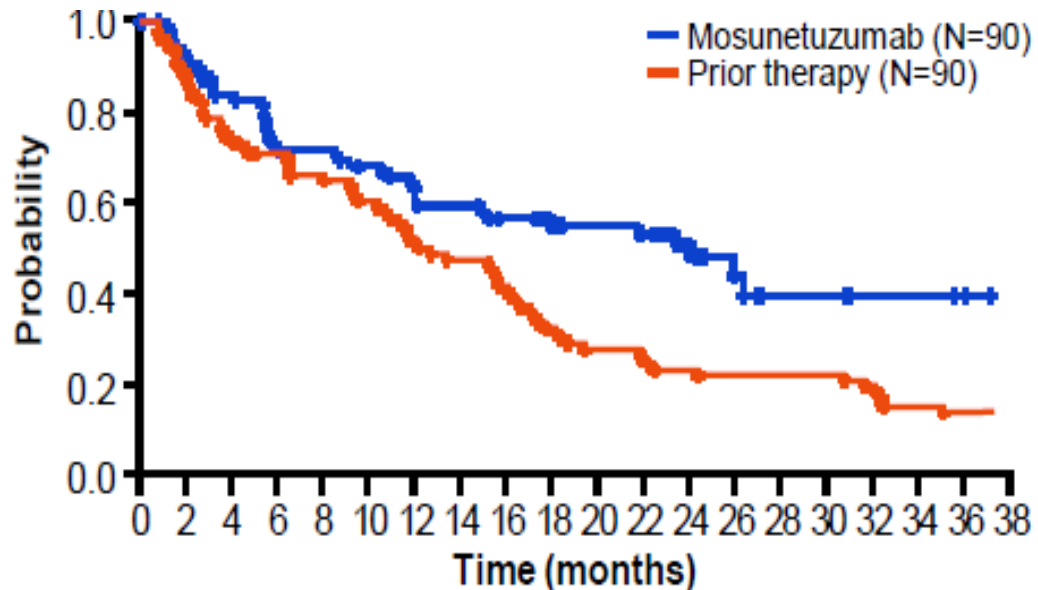
Baseline characteristics: Heavily pretreated patients

	N=90
Median age, years (range)	60 (29–90)
Male	61%
ECOG PS	
0	59%
1	41%
Ann Arbor stage	
I/II	23%
III/IV	77%
Median lines of prior therapy, n (range)	3 (2–10)
Refractory to last prior therapy	69%
Refractory to any prior anti-CD20 therapy	79%
Progression of disease within 24 months from start of first-line therapy (POD24)	52%
Double refractory to prior anti-CD20 and alkylator therapy	53%
Prior autologous stem cell transplant	21%

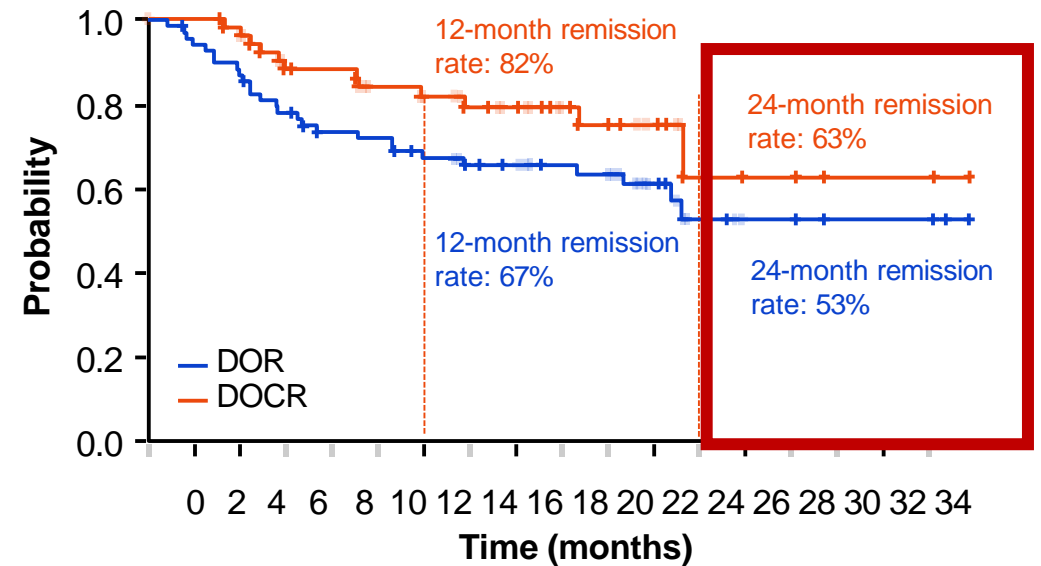
Mosunetuzumab: Efficacy Analysis

ORR	78%
CR	60%
Median FU	28.3

mPFS: 24 months

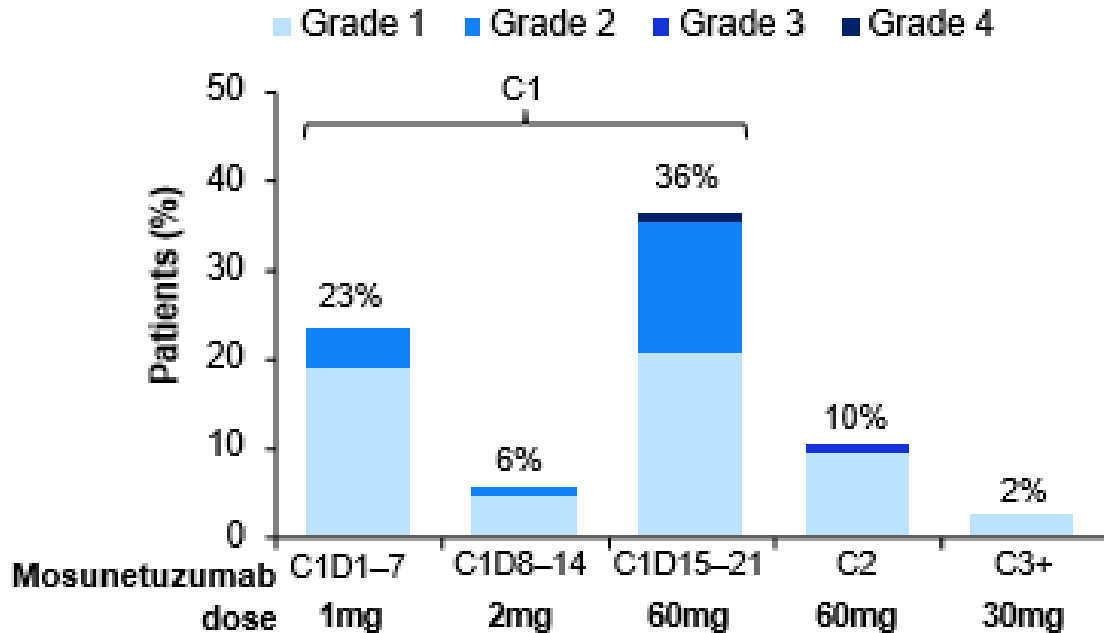


mDOR: NR and mDOCR: NR

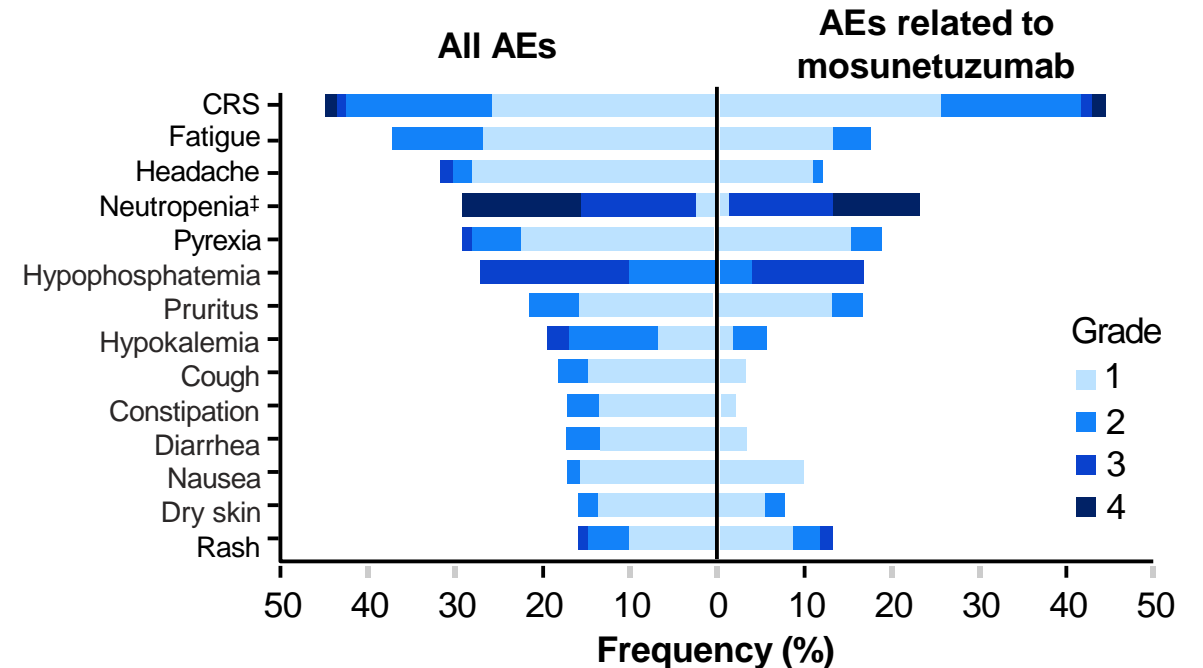


Mosunetuzumab: Safety profile

CRS by cycle and grade



AEs (≥15%) by grade and relationship with mosunetuzumab



**CRS mostly low grade (Grade 3/4: 2%) and occurred during Cycle 1
ICANs 3% (all grade 1-2)**

Other Bispecifics (CD3/CD20)



Glofitamab in R/R FL

Phase I/II

Monotherapy or combination with obinutuzumab

Intravenous

C1: D1, 8, 15
then q21 days

Fixed duration: 12 cycles

Epcoritamab + Rituximab + Lenalidomide in R/R FL

Phase I/II (EPCORE NHL-2)

Combined with R2

Subcutaneous

Weekly first 2 cycles
Afterwards Q21 days

Up to 2 years

Odronextamab in R/R FL

Phase 2 (ELM-2)

Monotherapy

Intravenous

C1: D1/2, 8/9, 15
Cycles 2-4: D1,8,15 then maintenance Q2w

Till disease progression

CAR-T vs Bispecifics



	Axi-cel	Tisa-cel	Mosunetuzumab (CD3xCD20)	Odronextamab (CD3xCD20)	Epcoritamab + R2 (CD3xCD20)	Glofitamab (CD3xCD20)
ORR %	94%	86%	78%	82%	95%	81%
CR %	79%	68%	60%	75%	80%	70%
mPFS	39.6%	Not reached	24 mo	20.2 mo	Not reached	Not reported
mDOR	38.6%	Not reached	Not reached	20.5 mo	Not reached	Not reported
CRS						
Gr 1-2	72% (1-2)	48.5% (1-2)	43% (1-2)	56% (1-2)	43% (1-2)	55% (1-2)
Gr 3-4	6% (3-4)	0% (3-4)	2% (3-4)	1.6% (3)	0% (3-4)	0% (3-4)
ICAN (Neuro toxicity)						
Gr 1-2	41%	12%	3% (1-2)	1.5%	1/76 pts (Gr 1)	0%
Gr ≥ 3	15%	1 %	0%	0%	0%	0%
Duration of therapy	One time!	One time!	8-17 cycles	Till PD	Up to 2 years	12 cycles
Median follow-up	31 mo	28.9%	28.3 mo	17.3 mo	6.4 mo	4.4



Thank you!!

Email: Sameh.Gaballa@moffitt.org