

# Comparison of Bispecific T-Cell Engagers (BTCEs)



BTCEs in Lymphoma

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BTCEs in Multiple Myeloma

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BTCEs in Other Indications

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BTCEs in Combination Regimens

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# Table 1. BTCEs in Lymphoma

Drug	Mosunetuzumab-axgb (LUNSUMIO®, LUNSUMIO VELO™) 1-3		Epcoritamab-bysp (EPKINLY®) 4, 5		Glofitamab-gxmb (COLUMVI™) 6, 7
<b>Manufacturer</b>	Genentech, Inc.		AbbVie Inc. and Genmab US, Inc.		Genentech, Inc.
<b>Target</b>	CD3xCD20		CD3xCD20		CD3xCD20
<b>Indication(s)</b>	FL following 2 or more lines of therapy		(1) LBCL following 2 or more lines of therapy (2) FL following 2 or more lines of therapy		DLBCL following 2 or more lines of therapy
<b>Route of Administration</b>	IV (LUNSUMIO®) or SC (LUNSUMIO VELO™)		SC		IV
<b>Dosing Schedule</b>	C1: Days 1, 8, 15 C2+: Day 1, every 21 d, for up to 8 cycles for patients achieving CR; for up to 17 cycles for patients achieving PR or SD		C1-3: Days 1, 8, 15, and 22 C4-9: Days 1 and 15 C10+: Day 1, every 28 d until progression		C1: Obinutuzumab, Day 1; glofitamab Days 8 and 15 C2-12: Day 1, every 21 d
<b>CRS Mitigation</b>					
<b>SUD Schedule</b>	<b>IV</b> C1D1: 1 mg C1D8: 2 mg C1D15: 60 mg (FFD)	<b>SC</b> C1D1: 5 mg C1D8: 45 mg (FFD) C1D15: 45 mg	<b>LBCL</b> CD1: 0.16 mg C1D8: 0.8 mg C1D15: 48 mg (FFD) C1D22: 48 mg	<b>FL</b> C1D1: 0.16 mg C1D8: 0.8 mg C1D15: 3 mg C1D22: 48 mg (FFD)	C1D1: Obinutuzumab C1D8: 2.5 mg (first dose of glofitamab) C1D15: 10 mg C2D1+: 30 mg (FFD)
<b>Premedications</b>	(1) Acetaminophen 500–1,000 mg (2) Diphenhydramine 50–100 mg (or equivalent) (3) Dexamethasone 20 mg or methylprednisolone 80 mg  Note: Premedications are recommended for IV mosunetuzumab during C1 and C2 and for SC administration during C1 only. Regardless of route of administration, any patient who experienced CRS of any grade with the previous dose should receive premedications prior to the next dose.		(1) Acetaminophen 650–1,000 mg (2) Diphenhydramine 50 mg (or equivalent) (3) Dexamethasone 15 mg or prednisolone 100 mg (or equivalent), before C1 treatments and for 3 consecutive days after.  Continue dexamethasone thereafter if G2 or G3 CRS with prior dose		(1) Acetaminophen 500–1,000 mg (2) Diphenhydramine 50 mg (or equivalent) (3) Dexamethasone 20 mg (or equivalent) on C1D8, C1D15, C2D1, and C3D1. Continue if CRS occurs with prior dose
<b>Hospitalization</b>	Consider		LBCL: C1D15 (FFD): 24-h admission FL: Consider		C1D8: 24-h admission

Drug	Mosunetuzumab-axgb (LUNSUMIO®, LUNSUMIO VELO™) 1-3					Epcoritamab-bysp (EPKINLY®) 4, 5					Glofitamab-gxgm (COLUMVI™) 6, 7				
	G1	G2	G3	G4	G5		G1	G2	G3	G4-5	G1	G2	G3	G4	G5
CRS Incidence	26%	17%	1%	1%	0%	LBCL	37%	17%	3%	0%	47%	12%	3%	1%	0%
						FL	45%	9%	0%	0%					
	Time course for CRS onset		Median time to CRS onset			Time course for CRS onset			Median time to CRS onset		Time course for CRS onset		Median time to CRS onset		
	C1D1: 23% C1D8: 6% C1D15: 36% C2D1: 10% C3+D1: 2%		C1D1: 5 h C1D8: 20 h C1D15: 27 h C2D1: 38 h				LBCL	FL		LBCL	FL	C1D8: 42% C1D15: 25% C2: 26% C3+: 1%		C1D8: 14 h (range: 6-52 h)	
					C1D1	6%	12%	After most recent dose	24 h (range: 0-10d)	59 h (range: 0.1-7d)					
					C1D8	12%	6%								
					C1D15	43%	15%	After FFD	21 h (range: 0-7 d)	61 h (range: 0.1-7d)					
					C1D22	5%	37%								
Median Duration of CRS	3 d (range: 1-29 d)					2 d (range: 1-27 d)					31 h (range: 0.5-317 h)				
ICANS Incidence	G1-2		G3-5				G1	G2	G3	G4-5	G1-2	G3-4	G5		
	3%		0%			LBCL	5%	1%	0%	0.6%	5%	3%	0%		
					FL	4%	2%	0%	0%						
Any Grade Adverse Events (with >25% Incidence)	Lymphopenia (84%-100%), hypophosphatemia (48%-78%), anemia (60%-68%), leukopenia (60%), neutropenia (50%-58%), thrombocytopenia (33%-46%), CRS (30%-44%), fatigue (39%-42%), hyperglycemia (42%), rash (35%-39%), increased AST (28%-39%), hypomagnesemia (25%-34%), hypokalemia (27%-33%), increased ALT (32%-34%), headache (17%-32%), pyrexia (11%-29%), hyperuricemia (22% to 28%), musculoskeletal pain (20%-28%)					Lymphopenia (87%-94%), anemia (59%-62%), hyponatremia (51%-56%), hypophosphatemia (LBCL: 56%), injection site reactions (FL: 58%; LBCL: 27%), leukopenia (53%-58%), neutropenia (50%-55%), CRS (49%-51%), thrombocytopenia (48%-49%), increased AST (44%-48%), increased ALT (45%-47%), serious infection (FL: 40%; LBCL: 15%), hypercreatininemia (FL: 36%; LBCL: 24%), fatigue (29%-37%), upper respiratory tract infection (FL: 29%; LBCL: <10%), skin rash (FL: 28%; LBCL: 15%), hypokalemia (FL: 20%; LBCL: 34%), increased ALP (FL: 29%), hyperbilirubinemia (FL: 28%), hypomagnesemia (FL: 20%; LBCL: 31%), musculoskeletal pain (28%), pyrexia (24%-26%), diarrhea (20%-26%)					Lymphopenia (90%), hypofibrinogenemia (84%), anemia (72%), CRS (70%), hypophosphatemia (69%), neutropenia (56%), thrombocytopenia (56%), hyponatremia (49%), hypocalcemia (48%), increased GGT (33%), hypokalemia (32%)				
Grade 3 or > Adverse Events (with >25% Incidence)	Lymphopenia (22%-98%), hypophosphatemia (46%), hyperglycemia (42%), neutropenia (26%-40%)					Lymphopenia (77%-82%), neutropenia (14%-32%)					Lymphopenia (83%), hypophosphatemia (28%), neutropenia (26%)				
REMS Program	No					No					No				
Initial Approval	December 2022					May 2023 (LBCL), June 2024 (FL) Note: See Table 4 for information on epcoritamab in combination with lenalidomide and rituximab					June 2023				
Pivotal Trial(s)	GO29781					EPCORE NHL-1					NP30179				

**Table 2 (1 of 2). BTCEs in Multiple Myeloma**

Drug	Teclistamab-cqyv (TECVAYLI®) <sup>8, 9</sup>				Talquetamab-tgvs (TALVEY®) <sup>10, 11</sup>			
<b>Manufacturer</b>	Janssen Biotech, Inc.				Janssen Biotech, Inc.			
<b>Target</b>	CD3xBCMA				CD3xGPRC5D			
<b>Indication(s)</b>	MM following 4 or more lines of therapy				MM following 4 or more lines of therapy			
<b>Route of Administration</b>	SC				SC			
<b>Dosing Schedule</b>	C1: Days 1, 4, 7 C2+: Weekly until progression For patients who have achieved and maintained a CR or better for >6 mo, consider biweekly dosing				<b>Weekly Dosing</b> C1: Days 1, 4, 7 C2+: Weekly until progression		<b>Biweekly Dosing</b> C1: Days 1, 4, 7, 10 C2+: Every 2 weeks until progression	
<b>CRS Mitigation</b>								
<b>SUD Schedule</b>	C1D1: 0.06 mg/kg C1D3: 0.3 mg/kg C1D5: 1.5 mg/kg (FFD)				<b>Weekly Dosing</b> C1D1: 0.01 mg/kg C1D4: 0.06 mg/kg C1D7: 0.4 mg/kg (FFD)		<b>Biweekly Dosing</b> C1D1: 0.01 mg/kg C1D4: 0.06 mg/kg C1D7: 0.4 mg/kg C1D10: 0.8 mg/kg (FFD)	
<b>Premedications</b>	(1) Acetaminophen 650–1,000 mg (or equivalent) for C1 (2) Diphenhydramine 50 mg (or equivalent) for C1 (3) Dexamethasone 16 mg for C1				(1) Acetaminophen 650–1,000 mg (or equivalent) for C1 (2) Diphenhydramine 50 mg (or equivalent) for C1 (3) Dexamethasone 16 mg (or equivalent) for C1			
<b>Hospitalization</b>	All SUDs and FFD: 48-h admission				All SUDs and FFD: 48-h admission			
<b>CRS Incidence</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4–5</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4–5</b>
	50%	21%	1%	0%	57%	17%	2%	0%
	<b>Time course for CRS onset</b>		<b>Median time to CRS onset</b>		<b>Time course for CRS onset</b>		<b>Median time to CRS onset</b>	
	C1D1: 42% C1D3: 35% C1D5: 24% Subsequent doses: <3%		All doses: 2 d (range: 1–6 d)		<b>Weekly Dosing</b> C1D1: 29% C1D4: 44% C1D7: 30% <b>Biweekly Dosing</b> C1D7: 33% C1D10: 12%		All doses: 27 h (range: 0.1–167 h)	
<b>Median Duration of CRS</b>	2 d (range: 1–9 d)				17 h (range: 1–622 h)			
<b>ICANS Incidence</b>	Any grade: 6%				Any grade: 9%			
<b>Any Grade Adverse Events (with &gt;25% Incidence)</b>	Lymphopenia (92%), leukopenia (86%), neutropenia (84%), pyrexia (76%), CRS (72%), thrombocytopenia (71%), hypoalbuminemia (68%), anemia (67%), neurotoxicity (57%), musculoskeletal pain (44%), increased ALP (42%), hypophosphatemia (38%), increased GGT (37%), injection-site reaction (37%), hyponatremia (35%), increased AST (34%), fatigue (33%), hypocalcemia (31%), hypercreatininemia (30%), infection (30%), diarrhea (29%), increased ALT (28%), upper respiratory tract infection (26%), nausea (25%), headache (25%)				Lymphopenia (90%), pyrexia (83%), CRS (76%), leukopenia (73%), dysgeusia (49%–70%), anemia (67%), neutropenia (64%), weight loss (35%–62%), thrombocytopenia (62%), hypoalbuminemia (66%), neurotoxicity (55%), nail disorder (50%), increased ALP (49%), hypophosphatemia (44%), musculoskeletal pain (43%), skin disorder (41%), rash (38%), increased GGT (38%), fatigue (37%), xerostomia (34%), increased ALT (33%), increased AST (31%), hypokalemia (31%), hyponatremia (31%), xerosis (30%)			

Drug	Teclistamab-cqyv (TECVAYLI®) <sup>8, 9</sup>	Talquetamab-tgvs (TALVEY®) <sup>10, 11</sup>
<b>Grade 3 or &gt; Adverse Events (with &gt;25% Incidence)</b>	Neutropenia (64%), anemia (37%), lymphopenia (32%)	Lymphopenia (80%), leukopenia (35%), neutropenia (35%), anemia (30%)
<b>REMS Program</b>	Yes	Yes
<b>Initial Approval</b>	October 2022	August 2023
<b>Pivotal Trial(s)</b>	MajesTEC-1	MonumentAL-1

**Table 2 (2 of 2). BTCEs in Multiple Myeloma**

Drug	Elranatamab-bcmm (ELREXFIO®) <sup>12, 13</sup>				Linvoseltamab-gcpt (LYNOZYFIC™) <sup>14, 15</sup>			
<b>Manufacturer</b>	Pfizer				Regeneron Pharmaceuticals, Inc.			
<b>Target</b>	CD3xBCMA				CD3xBCMA			
<b>Indication(s)</b>	MM following 4 or more lines of therapy				MM following 4 or more lines of therapy			
<b>Route of Administration</b>	SC				IV			
<b>Dosing Schedule</b>	C1: Days 1, 4, 8 C2+: Weekly through Week 24 Weeks 25–48 (in patients achieving a PR or better at 24 weeks with response maintained for ≥2 months): Biweekly Week 49+ (for patients who have maintained the response following 24 weeks of treatment at the biweekly dosing schedule): Every 4 wk				C1: Days 1, 8, 15 C2+: Weekly through Week 13 Week 14+: Biweekly Week 24+ (for patients who have achieved and maintained VGPR or better at or after Week 24 and received at least 17 doses of 200 mg): Every 4 wk			
<b>CRS Mitigation</b>								
<b>SUD Schedule</b>	C1D1: 12 mg C1D4: 32 mg C1D8: 76 mg (FFD)				C1D1: 5 mg C1D8: 25 mg C1D15: 200 mg (FFD)			
<b>Premedications</b>	(1) Acetaminophen 650 mg (or equivalent) for C1 (2) Diphenhydramine 25 mg (or equivalent) for C1 (3) Dexamethasone 20 mg (or equivalent) for C1				(1) Acetaminophen 650–1000 mg (or equivalent) for SUDs and first and second treatment doses (2) Diphenhydramine 25 mg (or equivalent) for SUDs and first and second treatment doses (3) Dexamethasone 40 mg (or equivalent) for SUDs and first treatment dose  Once tolerated without CRS or infusion-related reactions, 10 mg dexamethasone (or equivalent) prior to the subsequent treatment dose			
<b>Hospitalization</b>	C1D1: 48-h admission C1D4: 24-h admission				C1D1 and C1D8: 24-h admission			
<b>CRS Incidence</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4–5</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4–5</b>
	44%	14%	1%	0%	35%	10%	1%	0%
	<b>Time course for CRS onset</b>		<b>Median time to CRS onset</b>		<b>Time course for CRS onset</b>		<b>Median time to CRS onset</b>	
C1D1: 43% C1D4: 19% C1D8: 7% C2D1: 2%		All doses: 2 d (range: 1–9 d)		C1D1: 38% C1D8: 17% C1D15: 10% C2D1: 4%		All doses: 11 h (range: -1–184 h)		
<b>Median Duration of CRS</b>	2 d (range: 1–19 d)				15 h (range: 1–76 h)			
<b>ICANS Incidence</b>	Any grade: 3%				Any grade: 8%			

Drug	Elranatamab-bcmm (ELREXFIO®) <sup>12, 13</sup>	Linvoseltamab-gcpt (LYNOZYFIC™) <sup>14, 15</sup>
<b>Any Grade Adverse Events (with &gt;25% Incidence)</b>	Lymphopenia (91%), leukopenia (69%), anemia (68%), neutropenia (62%), thrombocytopenia (61%), neurotoxicity (59%), CRS (13%–58%), hypoalbuminemia (55%), fatigue (43%), severe infection (42%), increased AST (40%), hypercreatininemia (38%), injection-site reaction (37%), hypokalemia (36%), diarrhea (36%), increased ALT (36%), upper respiratory tract infection (36%), musculoskeletal pain (34%), increased ALP (34%), decreased CrCl (32%), pneumonia (25%–32%), decreased appetite (26%), skin rash (26%)	Lymphopenia (97%), anemia (72%), thrombocytopenia (64%), leukopenia (63%), neutropenia (62%), increased AST (61%), increased ALT (46%), hypophosphatemia(55%), neurotoxicity (54%), musculoskeletal pain (53%), hypercreatininemia (47%), CRS (46%), serious infection (42%), cough (39%), upper respiratory tract infection (35%), diarrhea (35%), fatigue (34%), pneumonia (28%)
<b>Grade 3 or &gt; Adverse Events (with &gt;25% Incidence)</b>	Lymphopenia (84%), neutropenia (51%), anemia (43%), leukopenia (40%), thrombocytopenia (32%)	Lymphopenia (92%), neutropenia (47%), anemia (42%), leukopenia (31%)
<b>REMS Program</b>	Yes	Yes
<b>Initial Approval</b>	August 2023	July 2025
<b>Pivotal Trial(s)</b>	MagnetisMM-3	LINKER-MM1

### Table 3. BTCEs in Other Indications

Drug	Blinatumomab (BLINCYTO®) <sup>16-19</sup>	Tebentafusp-tebn (KIMMTRAK®) <sup>20, 21</sup>	Tarlatamab-dlle (IMDELLTRA®) <sup>22-24</sup>
<b>Manufacturer</b>	Amgen, Inc.	Immunocore Commercial LLC	Amgen, Inc.
<b>Target</b>	CD3xCD19	CD3xgp100peptide-HLA	CD3xDLL3
<b>Indication(s)</b>	(1) MRD+ BCP-ALL (2) R/R BCP-ALL (3) BCP-ALL in the consolidation phase	HLA-A*02:01-positive unresectable or metastatic uveal melanoma	ES-SCLC following progression on platinum-based chemotherapy
<b>Route of Administration</b>	IV	IV	IV
<b>Dosing Schedule</b>	<b>MRD+ BCP-ALL and BCP-ALL in consolidation phase</b> Induction Cycle 1: Days 1-28 then 14 d off  Consolidation Cycles 2-4: Days 1-28 then 14 d off  <b>R/R BCP-ALL</b> Induction C1 and C2: Days 1-28 then 14 days off  Consolidation C3-5: Days 1-28 then 14 days off  Continued Therapy C6-9: Days 1-28 then 56 days off	Once weekly until progression	C1: Days 1, 8, 15 C2+: Days 1 and 15; every 28 d until progression
<b>CRS Mitigation</b>			
<b>SUD Schedule</b>	<b>R/R BCP-ALL</b> , Induction Cycle 1: Days 1-7: 9 mcg/d Days 8-28: 28 mcg/d  Note: See PI for dosing for patients under 45 kg	D1: 20 mcg D8: 30 mcg D15: 68 mcg (FFD)	C1D1: 1 mg C1D8: 10 mg (FFD) C1D15: 10 mg
<b>Premedications</b>	<b>MRD+ BCP-ALL and BCP-ALL in consolidation phase</b> Corticosteroid: Prednisone 100 mg (or equivalent) D1 in each cycle  <b>For adults with R/R BCP-ALL</b> Corticosteroid: Dexamethasone 20 mg D1 in each cycle, prior to a step-up dose, and when restarting an infusion after interruption of ≥4 h	None	(1) Dexamethasone 8 mg (or equivalent) on C1D1 and C1D8 (2) 1L NS IV over 4-5 h immediately after infusion completion on C1D1, C1C8, and C1D15
<b>Hospitalization</b>	<b>MRD+ BCP-ALL and BCP-ALL in consolidation phase:</b> C1 (3 d) and C2 (2 d)  <b>R/R BCP-ALL:</b> C1 (9 d), C2 (2 d)	D1, D8, and D15: 16 h monitoring  Monitoring should be done in an appropriate healthcare setting	C1D1, C1D8: 22-24 h monitoring C1D15: 6-8 h monitoring Subsequent infusions: 2 h monitoring  Monitoring should be done in an appropriate healthcare setting

Drug	Blinatumomab (BLINCYTO®) <sup>16-19</sup>		Tebentafusp-tebn (KIMMTRAK®) <sup>20, 21</sup>				Taratamab-dlle (IMDELLTRA®) <sup>22-24</sup>				
CRS Incidence	<b>MRD+ BCP-ALL</b> (any grade): 15% <b>R/R BCP-ALL</b> (any grade): 7% <b>BCP-ALL in consolidation phase</b> (any grade): 16%		<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4-5</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4</b>	<b>G5</b>
			12%	76%	1%	0%	34%	19%	1%	0.5%	0%
	<b>Time course for CRS onset</b>	<b>Median time to CRS onset</b>	<b>Time course for CRS onset</b>		<b>Median time to CRS onset</b>		<b>Time course for CRS onset</b>		<b>Median time to CRS onset</b>		
	Not reported	All doses: 2 d	Day 1: 85% Day 8: 75% Day 15: 60% Day 22: 30% Day 29: 10%		All doses: Within the day of the infusion		C1D1: 39% C1D8: 28% C1D15: 6% C1D1: 2%		All doses: 14 h (range: 1-268 h)		
Median Duration of CRS	5 d		2 d				4 d (IQR 2-6 d)				
ICANS Incidence	Any grade: 8%		N/A				<b>G1</b>	<b>G2-4</b>	<b>G5</b>		
							5%	4%	0%		
Any Grade Adverse Events (with >25% Incidence)	Pyrexia (55%-91%), lymphocytopenia (80%), infusion-related reactions (30%-77%), headache (23%-39%), neurotoxicity (65%), infections (28%-39%), tremor (31%), neutropenia (15%-31%), anemia (infants, children, adolescents: 41%; adults: 24%-25%), chills (28%), thrombocytopenia (infants, children, adolescents: 34%; adults: 10%-21%), hypertension (infants, children, adolescents: 26%; adults: 8%)		Lymphocytopenia (91%), CRS (89%), hypercreatininemia (87%), skin rash (83%), pyrexia (76%), pruritus (69%), hyperglycemia (66%), increased ALT (≤65%), increased AST (≤65%), fatigue (64%), anemia (51%), hypophosphatemia (51%), chills (48%), hypoalbuminemia (47%), hypocalcemia (45%), abdominal pain (45%), edema (45%), nausea (49%), hypotension (39%), hyperlipasemia (37%), hypomagnesemia (34%), increased ALP (34%), antibody development (29%-33%), headache (31%), xeroderma (31%), vomiting (30%), hyponatremia (30%), hyperkalemia (29%), hypopigmentation (28%), skin edema (27%), hyperbilirubinemia (27%), diarrhea (25%), erythema of skin (24%-25%)				Lymphocytopenia (65%-84%), neurotoxicity (≤65%), hyponatremia (57%-68%), CRS (55%-56%), anemia (51%-58%), fatigue (39%-51%), leukopenia (44%-50%), hypokalemia (41-50%), increased AST (40%-44%), increased ALT (32%-42%), infection (43%), pyrexia (29%-36%), decreased appetite (34%-37%), dysgeusia (28%-36%), thrombocytopenia (25%-33%), hypomagnesemia (21-33%), musculoskeletal pain (27%-30%), constipation (30%), hypercreatininemia (23%-29%), hypernatremia (26%-35%), prolonged PTT (26%), nausea (22%-25%)				
Grade 3 or > Adverse Events (with >25% Incidence)	Lymphocytopenia (80%), neutropenia (15% to 28%)		Lymphocytopenia (56%)				Lymphocytopenia (27%-57%)				
REMS Program	No		No				No				
Initial Approval	December 2014		January 2022				May 2024				
Pivotal Trial(s)	BLAST, TOWER, ECOG-ACRIN E1910		IMCgp100-202				DeLLphi-301, DeLLphi-304				

**Table 4 (1 of 2). BTCEs in Combination Regimens**

Combination	Epcoritamab-bysp (EPKINLY®) and R <sup>2</sup> (Lenalidomide and Rituximab) <sup>25</sup>			Teclistamab-cqyv (TECVAYLI®) and Talquetamab-tgvs (TALVEY®) <sup>26, 27</sup>			
Indication(s)	FL following 1 or more lines of therapy			MM following 4 or more lines of therapy			
Dosing Schedule	Cycle length: 28 d			Cycle length: 28 d			
	<b>Epcoritamab</b>	<b>Lenalidomide</b>	<b>Rituximab</b>	C1: 3 SUDs administered 2–4 days apart and prior to FFD C2: Teclistamab and talquetamab biweekly C4+ (if PR or better is achieved): Teclistamab and talquetamab monthly until progression			
	C1-3: Day 1, 8, 15, and 22 C4-12: Day 1	C1-12: QD, Days 1-21	C1: Day 1, 8, 15, 22 C2-5: Day 1				
<b>CRS Mitigation</b>							
SUD Schedule	C1D1: 0.16 mg C1D8: 0.8 mg C1D15: 3 mg C1D22: 48 mg (FFD)			<b>SUD</b>	<b>Talquetamab</b>	<b>Teclistamab</b>	
				SUD 1	0.01 mg/kg	0.06 mg/kg	
				SUD 2	0.06 mg/kg	0.3 mg/kg	
				SUD 3	0.4 mg/kg	1.5 mg/kg	
				FFD	0.8 mg/kg	3 mg/kg	
Premedications	(1) Acetaminophen 650–1,000 mg (2) Diphenhydramine 50 mg (or equivalent) (3) Dexamethasone 15 mg or prednisolone 100 mg (or equivalent), before C1 treatments and for 3 consecutive days after  Continue dexamethasone thereafter if G2 or G3 CRS with prior dose			Teclistamab is administered before talquetamab.  (1) Acetaminophen 650–1,000 mg (or equivalent) for C1 (2) Diphenhydramine 50 mg (or equivalent) for C1 (3) Dexamethasone 16 mg for C1			
Hospitalization	Consider			For 48 h after administration of all SUDs and FFD			
CRS Incidence	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4</b>	<b>G1-2</b>	<b>G3</b>	<b>G4-5</b>
	19%	5%	12%	0%	77%	2%	0%
	<b>Time course for CRS onset</b>		<b>Median time to CRS onset</b>		Median time to onset and duration of CRS were 2 days each.		
	C1D1: 5% C1D8: 4% C1D15: 2% C1D22: 18%		From the most recent dose: 78 h (range: 0.2–12 d)  After the FFD: 41 h (range: 0.3–12 d)				
ICANS Incidence	Any grade: 1%			Any grade: 3% (G3: 1%)			
What is Different Between the Single Agent(s) and Combination Therapy?	<ul style="list-style-type: none"> <li>When epcoritamab is used as a single agent for FL, it is continued until disease progression or unacceptable toxicity. When used with R<sup>2</sup>, treatment is continued for a total of 12 cycles or until disease progression or unacceptable toxicity, whichever occurs first.</li> <li>CRS occurred in less patients when used in combination with R<sup>2</sup> (26%) versus monotherapy (49%).</li> <li>When epcoritamab is used in combination with R<sup>2</sup>, dosing shifts to once per cycle beginning in Cycle 4, with administration only on Day 1 for Cycles 4 and beyond.</li> </ul>			<ul style="list-style-type: none"> <li>Step up dosing is different.</li> <li>In combination, talquetamab is administered every 2 weeks, while teclistamab is given at a higher dose and less frequent interval (3 mg/kg every 2 weeks) compared with weekly dosing when used as monotherapy (1.5 mg/kg every week).</li> </ul>			

Combination	Epcoritamab-bysp (EPKINLY®) and R <sup>2</sup> (Lenalidomide and Rituximab) <sup>25</sup>	Teclistamab-cqyv (TECVAYLI®) and Talquetamab-tgvs (TALVEY®) <sup>26, 27</sup>
<b>Additional Considerations</b>	<ul style="list-style-type: none"> <li>REMS program with lenalidomide</li> </ul>	<ul style="list-style-type: none"> <li>Both agents require unique REMS Dispense Authorizations (RDAs).</li> </ul>
<b>Any Grade Adverse Events (with &gt;25% Incidence)</b>	Rash (46%), upper respiratory tract infections (33%), fatigue (31%), injection site reactions (27%), constipation (26%)	CRS (79%), neutropenia (73%), taste changes (65%), nonrash skin adverse event (61%), anemia (56%), nail-related adverse event (52%), pyrexia (51%), diarrhea (48%), cough (45%), dry mouth (43%), thrombocytopenia (43%), COVID-19 (40%), rash adverse event (39%), pneumonia (36%), weight decrease (34%), fatigue (28%)
<b>Grade 3 or &gt; Adverse Events (with &gt;25% Incidence)</b>	None	Neutropenia (68%), anemia (38%), thrombocytopenia (30%)
<b>Initial Approval</b>	November 18, 2025	<b>Not</b> FDA-approved as of February 2, 2026
<b>Pivotal Trial</b>	EPCORE FL-1	RedirecTT-1

**Table 4 (2 of 2). BTCEs in Combination Regimens**

Combination	Epcoritamab-bysp (EPKINLY®) and GEMOX (Gemcitabine and Oxaliplatin) <sup>28</sup>				Glofitamab-gxmb (COLUMVI™) and GEMOX (Gemcitabine and Oxaliplatin) <sup>29</sup>			
<b>Indication(s)</b>	DLBCL following 1 or more lines of therapy				DLBCL following 1 or more lines of therapy			
<b>Dosing Schedule</b>	Cycle length: 28 d				Cycle length: 21 d			
	<b>Epcoritamab</b>	<b>GEMOX</b>			<b>Obinutuzumab</b>	<b>Glofitamab</b>	<b>GEMOX</b>	
	C1-3: Day 1, 8, 15, and 22 C4-12: Day 1	C1-4: Gemcitabine: Day 1 and 15 Oxaliplatin: Day 1 and 15			C1D1 only	C1: Day 8 and Day 15 C2-12: Day 1	C1-8: Gemcitabine: Day 1 Oxaliplatin: Day 1	
<b>CRS Mitigation</b>								
<b>SUD Schedule</b>	C1D1: 0.16 mg C1D8: 0.8 mg C1D15: 48 mg (FFD) C1D22: 48 mg				C1D1: Obinutuzumab C1D8: 2.5 mg (first dose of glofitamab) C1D15: 10 mg C2D1: 30 mg (FFD)			
<b>Premedications</b>	(1) Acetaminophen 650–1,000 mg (2) Diphenhydramine 50 mg (or equivalent) (3) Dexamethasone 15 mg or prednisolone 100 mg (or equivalent), before C1 treatments and for 3 consecutive days after  Continue dexamethasone thereafter if G2 or G3 CRS with prior dose.				(1) Acetaminophen 500–1,000 mg (2) Diphenhydramine 50 mg (or equivalent) (3) Dexamethasone 20 mg (or equivalent) on C1D8, C1D15, C2D1, and C3D1.  Continue dexamethasone thereafter if CRS occurs with prior dose.			
<b>Hospitalization</b>	C1D15 (FFD): 24-h admission				C1D8 (first glofitamab dose): 24-h admission			
<b>CRS Incidence</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4-5</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G4-5</b>
	28%	23%	1%	0%	31%	11%	2%	0%
	<b>Time course for CRS onset</b>		<b>Median time to onset of CRS</b>		<b>Time course for CRS onset</b>		<b>Median time to onset of CRS</b>	
C1: 84% C1D15 (FFD): 63%		Most events occurred in C1 following FFD.		C1D8: 35 C1D15: 13% C2D1: 11% C3D1: 7% C4+: 11%		C1D8: 14 h C1D15: 32 C2D1: 38 h C3+: 37 h		
<b>ICANS Incidence</b>	Any grade: 3% (G3: 1%)				Any grade: 2% (G3: 1%)			
<b>What is Different Between the Single Agent(s) and Combination Therapy?</b>	<ul style="list-style-type: none"> <li>Combination allows dose-dense GemOx without new safety signals.</li> </ul>				<ul style="list-style-type: none"> <li>Glofitamab combination therapy retains the same obinutuzumab lead-in and step-up dosing strategy as monotherapy; differences are primarily related to the addition of fixed-duration chemotherapy rather than changes to glofitamab administration.</li> </ul>			
<b>Additional Considerations</b>	<ul style="list-style-type: none"> <li>Fixed duration GemOx</li> </ul>				<ul style="list-style-type: none"> <li>Fixed duration GemOx</li> <li>A single dose of obinutuzumab is administered on C1D1, 7 days prior to the first glofitamab dose, for CRS mitigation.</li> </ul>			
<b>Any Grade Adverse Events (with &gt;25% Incidence)</b>	Thrombocytopenia (73%), infections (72%), neutropenia (65%), anemia (59%), CRS (52%), diarrhea (47%), nausea (40%), fatigue (35%), hypokalemia (31%), pyrexia (29%), COVID-19 (29%), increased ALT (28%), increased AST (25%), peripheral neuropathy (25%)				Thrombocytopenia (48%), CRS (44%), neutropenia (42%), anemia (41%), nausea (39%), peripheral neuropathy (36%), diarrhea (34%), increased AST (33%), increased ALT (32%)			

Combination	Epcoritamab-bysp (EPKINLY®) and GEMOX (Gemcitabine and Oxaliplatin) <sup>28</sup>	Glofitamab-gxbm (COLUMVI™) and GEMOX (Gemcitabine and Oxaliplatin) <sup>29</sup>
Grade 3 or > Adverse Events (with >25% Incidence)	Thrombocytopenia (59%), neutropenia (57%), anemia (43%), infections (29%)	Not reported
Initial Approval	Not FDA-approved as of February 2, 2026	Not FDA-approved as of February 2, 2026
Pivotal Trial	EPCORE NHL-2	STARGLO

**Abbreviations:** ALL: Acute Lymphoblastic Leukemia; ALP: alkaline phosphatase; ALT: Alanine Aminotransferase; AST: Aspartate Aminotransferase; BCMA: B-Cell Maturation Antigen; BCP: B-cell Precursor; BTCE: Bispecific T-Cell Engager; CR: Complete Response; CrCl: Creatinine Clearance; CRS: Cytokine Release Syndrome; C: Cycle; CD: Cluster of Differentiation; D: Day; DLBCL: Diffuse Large B Cell Lymphoma; DLL3: Delta-like ligand 3; ES-SCLC: Extensive Stage Small Cell Lung Cancer; FFD: First full dose; FL: Follicular Lymphoma; G1: Grade 1; G2: Grade 2; G3: Grade 3; G4: Grade 4; G5: Grade 5; GGT (gamma-glutamyl transferase); GPRC5D: G-protein-coupled receptor, class C, group 5, member D; HLA: Human Leukocyte Antigen; ICANS: Immune Effector Cell-Associated Neurotoxicity Syndrome; IQR: Interquartile Range; IV: Intravenous; LBCL: Large B-Cell Lymphoma; MM: Multiple Myeloma; MRD: Minimal Residual Disease; N/A: Not applicable; NS: Normal Saline; PTT: Partial Thromboplastin Time; PR: Partial Response; R/R: relapsed or refractory; SC: Subcutaneous; SD: Stable Disease; VGPR: Very Good Partial Response; WBC: White Blood Cell

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