

Supplementary Materials 2

Comprehensive Assessment of Adverse Event Profiles Associated with Bispecific Antibodies in Multiple Myeloma

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Table B. Baseline characteristics for MM patients for each target in percentage.

Target Group	All	BCMA	Tec+Tal	GPRC5D/FcRH5	Tal+Dara/Pom
Total Number of patients in studies	2374	1276	157	841	100
Sex					
Male	45.32	42.71	31.21	57.31	
Female	36.77	36.76	28.66	42.69	
Not Reported	17.91	20.53	40.13	0	100
Race					
White	53.54	48.75	47.77	68.25	
Black or African American	8.51	9.25	10.83	7.97	
Asian	2.53	3.06	0.64	2.38	
Other	1.1	0.78	0.64	1.78	
Not Reported	34.32	38.16	40.12	19.62	100
Bone Marrow Plasma Cells <50%	19.12	18.1		26.52	
Bone Marrow Plasma Cells ≥50%	11.75	9.95	12.1	15.81	
Missing Bone Marrow Plasma Cells	69.13	71.95	87.9	57.67	100
Type of Myeloma					
IgG	11.2	5.49	23.57	18.91	
Non-IgG	8.93	1.65	33.76	16.41	
IgA	0.84	1.57			
IgD	0.04	0.08			
Light chain	1.01	1.88			
Unknown	77.98	89.33	42.67	64.68	100
Plasmacytomas					
0	10.78	2.59		26.52	
≥1	8.09	2.74		18.67	
Missing Plasmacytomas	81.13	94.67	100	54.81	100
Extramedullary Plasmacytoma	15.54	12.15	38.85	15.81	20
ECOG Performance Status					
0	20.77	25.16	21.66	16.41	
≥1	38.16	47.73	38.22	28.18	
Missing ECOG Performance Status	41.07	27.11	40.12	55.41	100
International Staging System(ISS)					
I	26.45	24.29	26.75	32.82	
II	25.91	25.31	18.47	31.27	
III	15.54	16.07	15.29	16.65	
Unkown	32.1	34.33	39.49	19.26	100
Highrisk Cytogenetic	21.36	19.83	38.22	20.1	25
Standard	12.43	8.7		21.88	
Missing	66.21	71.47	61.78	58.02	75
del(17p)	2.53	2.43		3.45	
t(4;14)	1.85	1.65		2.73	
t(14;16)	0.25	0.39		0.12	
Previous Therapy Exposure					
Triple-class	72.33	74.06	59.87	80.62	
Pentadrug	58.72	58.15	64.33	60.64	41
Belantamab Mafodotin	3.16	0.55	11.46	5.95	
Pomalidomide	0.34				8
Daratumumab	0.76	1.41			

Prior BsAb	1.31	0.08		1.55	17
Anti-BCMA CAR-T	0.93	0.63			14
Anti-BCMA BsAb	3.79	0.08		6.42	35
BCM ADC	1.14			3.21	
Anti-BCMA& CAR-T	0.21	0.39			
Proteasomeinhibitor(PI)	12.89			36.39	
Immunomodulatorydrugs (IMiDs)	12.89			36.39	
Bispecific Antibody	4.72		4.46	12.49	
Anti-CD38 Monoclonalantibody(Mc	16.26			36.03	83
Selinexor	1.52			4.28	
CAR T-cell Therapy	3.88		2.55	10.11	3
Previous Stem-Cell Transplantation	51.18	45.45	47.13	66.71	
Refractoriness Status					
Triple Refractory	73.84	71.94	82.8	78.36	46
Penta Refractory	26.28	30.56	19.75	24.02	1
Anti-CD38 Monoclonalantibody(Mc	50.72	32.13	59.24	75.51	66
Daratumumab	4.55	1.33	57.96		
Isatuximab	0.21		3.18		
Immunomodulatorydrugs(IMiDs)	39.6	16.38	57.96	76.1	
Lenalidomide	15.88		52.87	34.96	
Pomalidomide	14.41		39.49	32.82	4
Thalidomide	2.36		11.46	4.52	
Proteasomeinhibitor(PI)	36.06	15.36	54.14	68.37	
Carfilzomib	2.61		39.49		
Bortezomib	2.44		36.94		
Ixazomib	0.42		6.37		
Refractory to Last Line of Therapy	66.76	71.08	55.41	70.27	
Prior BCMA-directedTX(BDT)	2.57	2.04			35
Selinexor	1.26			3.57	
Patients Refractory to Prior BsAb	0.67				16

Table C. Efficacy for different responses in MM patients reported in 22 different studies.

Abbreviation	Tec	TecU1	TecU2	TecPh1 ^b	TecPh2	Tecout	Elr	ElrP1 ^c	ElrP2B	F	Linvo	RS458U2	RS458U3	AMG4	AMG7	CC	Aln	ABBVSD	ABBVD ^d	ABBVD ^e	ABBV	RES458	Tec+Tal	Tec+TalU	Tal405U2	Tal800U2	TalSC	TalIV	Tal 0.4	Tal 0.8	Tal TCR	Cevo	Tal+Dara	Tal+Pom ^f	
Target ^g	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BGC	BGC	GC	GC	GC	GC	GC	GC	GC	GC	FC	GCD	GCP
Total	165	22	15	14	26	11	113	56	29	22	73	104	117	42	75	19	47	51	30	43	224	69	63	94	20	44	220	102	143	154	78	160	65	35	
ORR ^h N, (%)	104 (63)	11 (50)	9 (60)	9 (64)	20 (77)	7 (64)	75 (61)	33 (59)	17 (59)	8 (36)	35 (48)	50 (48)	83 (71)	13 (31)	17 (23)	10 (53)	21 (45)	29 (57)	25 (83)	15 (35)	69 (56)	27 (40)	53 (84)	73 (78)	21 (70)	28 (64)	88 (68)	73 (72)	106 (74)	107 (69)	52 (67)	69 (43)	51 (78)	30 (86)	
sCR ^h N, (%)	54 (33)			6 (43)	16 (62)	0	19 (15)			4 (18)	21 (29)	19 (18)	51 (44)		4 (5)		7 (15)	4 (8)	12 (40)	5 (12)	21 (17)			25 (27)	7 (23)	5 (11)	21 (16)	28 (27)	33 (23)	46 (30)	25 (32)				
CR ^h N, (%)	11 (7)			1 (7)	1 (4)	1 (9)	24 (20)			0	2 (3)	3 (3)	6 (5)	9 (21)	1 (1)		0	7 (14)	6 (20)	1 (2)	14 (11)			20 (21)	0	5 (11)	6 (5)	11 (11)	14 (10)	16 (10)	7 (9)				
VGPR ^h N, (%)	32 (19)	2 (9)		2 (14)	3 (12)	5 (45)	26 (21)			2 (9)	9 (12)	19 (18)	16 (14)	2 (5)	6 (8)	3 (16)	4 (9)	8 (16)	6 (20)	3 (7)	17 (14)	12 (18)		25 (27)	10 (33)	13 (30)	42 (32)	34 (33)	38 (27)	29 (19)	11 (14)	14 (22)	11 (31)		
PR ^h N, (%)	7 (4)	3 (14)		0	0	1 (9)	6 (5)			2 (9)	3 (4)	9 (9)	9 (8)	2 (5)	6 (8)	3 (16)	10 (21)	10 (20)	1 (3)	6 (14)	17 (14)	2 (3)		3 (3)	4 (13)	5 (11)	14 (11)	11 (11)	21 (15)	16 (10)	9 (12)	8 (12)	1 (3)		
≥ CR (sCR+CR)/N, (%)	65 (39)	6 (27)		7 (50)	17 (65)	1 (9)	43 (35)			4 (18)	23 (32)	22 (21)	57 (49)		5 (7)	4 (21)	7 (15)	11 (22)	18 (60)	6 (14)	35 (28)	13 (19)	21 (33)	45 (48)	7 (23)	10 (23)	27 (21)	39 (38)	47 (33)	61 (40)	32 (41)	29 (45)	18 (51)		
≥ VGPR (VGPR+CR+sCR)/N, (%)	97 (59)	8 (36)		9 (64)	20 (77)	6 (55)	69 (56)			6 (27)	32 (44)	41 (39)	73 (62)		11 (15)	7 (37)	11 (23)	19 (37)	24 (80)	9 (21)	52 (42)	25 (37)		70 (74)	17 (57)	23 (52)	69 (53)	62 (61)	85 (59)	90 (58)	43 (55)	43 (66)	29 (83)		
Median Duration of Progression-free Survival (Month)	11.3							12.88 ^m	NR ⁿ			9.3	NR ⁿ			3.33	NR ⁿ	NR ⁿ	NR ⁿ	NR ⁿ	10.4														
Median Overall Survival (OS)(Month)	18.3							17.4 ⁿ	NR ⁿ			33.2	31.4																						
Median Duration of Response (DOR)(Month)	18.4							10.8 ^m	NR ⁿ		12.3	31.5	29.4	8.4			36.53	NR ⁿ	NR ⁿ	NR ⁿ	NR ⁿ					10.2	7.8						15.6	NR ⁿ	
MRO ^h Negativity Rate	44				9		26					71	106	5	4		14				8														
MRO ^h Negativity Status					10																						11								
Median Time to Response (TTR)(Month)			0.5 ⁿ				1.2						1.5	1	1	1.05	1						1.8	0.9	1.2								1		
Median Time to First Response (≥ PR) (Month)	1.2				1.22																								1.2	1.3	1.2			1	
Median Time to Best Response(Month)	3.8				5.88										2.8										9.3	2.3								1	
Prior BCMA Therapy N, (%)					5 (33)																													13 (8.13)	
After BCMA Therapy N, (%)					2 (13)																														
Median Time Until the Onset of CRS (Day)	2				2 ^m	2	2					0.18 ^p	0.46 ^p				3	1	1 ^r	1 ^r	1		2	2	2		2	1.08 ^p	1.16 ^p	1.14 ^p		1			
Median Duration Time to CRS (Day)	2				3.04 ^m	3	2			2		0.54 ^p	0.65 ^p				2	1	1 ^r	1 ^r	1		2					0.6 ^p	0.71 ^p	0.86 ^p		2			

*Agents abbreviation: Tecdistimab: Tec, TecU1, TecU2, TecJPh2, TecJPh2, Tecout; Elranatamab: Elr, ElrP1, ElrP2B; F182112: F; Linvoseltamab (REGN-5458): Linvo, RES458, RS458U2, RS458U3; AMG420: AMG4;

AMG701: AMG7; CC-93269 (Anixutamab):CC, Aln; ABBV-383 (TnB-383B): ABBV, ABBVSD, ABBVLD; REGN5458: RES458; Tecdistimab + Talquetamab = Taltec+Tal, Tec+TalU; Talquetamab : Tal405U2, Tal800U2, TalSC, TalIV, Tal 0.4, Tal 0.8, Tal TCR; Cevastamab: Cevo; Talquetamab-dr-daratumumab: Tal+Dara; Talquetamab + Pomalidomide: Tal+Pom.

**Targets: BC: BCMA, BGC: BCMA+ GPRCSD × CD3, GC: GPRCSD × CD3, FC: FC8H5 × CD3

GCD: GPRCSD × CD3+Daratumumab, GCP: GPRCSD × CD3+ Pomalidomide.

a. Overall response rate

b. Complete response

c. Very good partial response

d. Strength complete response

e. Partial response

f. Complete response or better

g. Very good partial response or better

h. Minimal Residual Disease

k. Converted to the months by divided to 4 (each months 4 weeks)

m. Weighted mean of medians calculated based on median-reported events

n. Not reached

p. Converted to the days by divided to 24

q. Each subgroup were separated from ABBV, ABBVSD, and the ≥40 mg and 60 mg cohort (n = 81) of the study

Table D. Overall efficacy reported for different responses in MM patients based on grouped targets

Target Group	All	BCMA	Tec+Tal	GPRC5D/FcRH5	Tal+Dara/Pom
Total Number of patients in studies	2374	1276	157	841	100
ORR ^a	60.57	53.84	80.25	64.68	81
sCR ^d	18.24	19.04	15.92	19.62	
CR ^b	6.99	6.82	12.74	7.02	
VGPR ^c	17.02	13.87	15.92	21.05	25
PR ^e	7.96	7.6	1.91	9.51	9
≥ CR (sCR+CR) ^f	28.64	26.96	42.04	26.52	47
≥ VGPR (VGPR+CR+sCR) ^g	44.23	40.67	44.59	46.25	72
Prior BCMA Therapy	0.76	0.39		1.55	
After BCMA Therapy	0.08	0.16			

a. Overall response rate

b. Complete response

c. Very good partial response

d. Strength complete response

e. Partial response

f. Complete response or better

g. Very good partial response or better

Table E. Adverse events (safety profiles) including hematological, and non-hematological, reported for each agent in 22 studies

Abbreviation	Tec	TecU1	TecU2	TecJPH1	TecJPH2	Tecout	Elr	ElrP1	ElrP2B	F	Livo	RS458U2	RS458U3	AMG4	AMG7	CC	Aln	ABBVSD	ABBVID ^b	ABBVL ^d	ABRV	RES458	Tec+Tal	Tec+TalU	TalM05U2	TalM00U2	TalSC	TalIV	Tal_0.4	Tal_0.8	Tal_TCR	Cevo	Tal+Dara	Tal+Pom					
Target ^c	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BC	BGC	BGC	BGC	BGC	BGC	BGC	BGC	BGC	BGC	BGC	BGC	BGC					
Total	165	22	15	14	26	11	123	56	29	22	73	104	117	42	75	19	47	51	30	43	124	68	63	94	30	44	130	102	143	154	78	160	65	35					
Any Grade N (%)	165 (100)						123 (100)			18 (82)	102 (88)	117 (100)	20 (48)		15 (79)	42 (89)	50 (98)	30 (100)	41 (95)	121 (98)	66 (97)	89 (72)	52 (76)	94 (100)	30 (100)	44 (100)	130 (100)	102 (100)	143	154	78	159 (99)	65 (100)	35 (100)					
Grade 3/4 N (%)	156 (95)						87 (71)			14 (64)	75 (72)	86 (74)			15 (79)	29 (62)	40 (78)	22 (73)	27 (63)	89 (72)	52 (76)	90 (96)	26 (87)	38 (86)	112 (86)	92 (90)					94 (59)	51 (78)	31 (89)						
Hematologic: N, (%)																																							
Neutropenia	117 (71)	8 (36)					4 (36)	60 (49)				12 (55)	25 (34)	30 (29)	50 (43)	17 (23)	10 (53)	16 (34)	21 (41)	16 (53)	9 (21)	46 (37)	11 (16)	69 (73)	20 (67)	16 (36)	67 (52)	48 (47)	50 (35)	44 (29)	40 (51)	29 (18)	25 (38)	21 (60)					
Anemia	86 (52)	2 (9)						60 (49)				7 (32)	34 (47)	44 (42)	45 (38)	32 (43)	8 (42)	16 (34)	17 (33)	11 (37)	8 (19)	36 (29)		38 (60)	53 (56)	18 (60)	19 (43)	63 (48)	59 (58)	64 (45)	66 (43)	38 (49)	51 (32)	34 (52)	9 (26)				
Lymphopenia	57 (35)	21 (95)						46 (37)				15 (68)	20 (27)	18 (17)	14 (12)			11 (22)	5 (17)	3 (7)	19 (15)				12 (40)	17 (39)	42 (32)	53 (52)	40 (28)	46 (30)	15 (19)								
Leukopenia	29 (18)	8 (36)										11 (50)														12 (40)	8 (18)	32 (25)	38 (37)	23 (16)	29 (19)	17 (22)							
Thrombocytopenia	66 (40)	7 (32)						38 (31)				4 (18)	17 (23)	20 (19)	23 (20)			13 (25)	7 (23)	9 (21)	29 (23)			40 (43)	11 (37)	10 (23)	39 (30)	36 (35)	39 (27)	45 (29)	30 (38)			7 (20)					
G3/4 N, (%)																																							
Neutropenia G3/4	106 (64)	8 (36)					4 (36)	60 (49)				9 (41)	22 (30)	28 (27)	49 (42)	10 (53)	44 (30)	18 (35)	15 (50)	9 (21)	42 (34)	9 (13)	47 (75)	64 (68)	18 (60)	14 (32)	59 (45)	27 (26)	44 (31)	33 (21)	37 (47)	26 (16)	17 (26)	17 (49)					
Anemia G3/4	61 (37)	2 (9)						46 (37)				1 (5)	30 (41)	39 (38)	36 (31)	8 (42)	8 (17)	7 (14)	7 (23)	6 (14)	20 (16)		27 (43)	36 (38)	9 (30)	10 (23)	36 (28)	34 (33)	45 (31)	40 (26)	21 (27)	35 (22)		9 (26)					
Lymphopenia G3/4	54 (33)	21 (95)						31 (25)				13 (59)	17 (23)	18 (17)	13 (11)			10 (20)	3 (10)	3 (7)	16 (13)				12 (40)	17 (39)	42 (32)	48 (47)	37 (26)	40 (26)	13 (17)								
Leukopenia G3/4	12 (7)	8 (36)										10 (45)												9 (30)	6 (14)	24 (18)	16 (16)	11 (8)	18 (12)	14 (18)									
Thrombocytopenia G3/4	35 (21)	7 (32)						29 (24)				2 (9)	16 (22)	16 (15)	17 (15)	1 (1)	4 (21)	5 (10)	4 (13)	6 (14)	15 (12)		28 (30)	7 (23)	5 (11)	26 (20)	13 (13)	29 (20)	28 (18)	21 (27)				7 (20)					
Non-Hematologic: N, (%)																																							
CRS ^e	119 (72)	9 (41)	7 (47)				8 (57)	21 (81)	0			71 (58)	46 (82)	14 (48)	16 (73)	31 (42)	57 (55)	54 (46)	16 (38)	46 (61)	17 (89)	25 (53)	36 (71)	23 (77)	12 (28)	71 (57)	26 (38)	51 (81)	74 (79)	23 (77)	35 (80)	94 (72)	50 (49)	113 (79)	115 (75)	57 (73)	128 (80)	51 (78)	26 (74)
ICANS ^b	5 (3)	5 (23)					0	0	0			4 (3)						9 (8)						1 (2)	2 (4)														
CRS Treatments	110 (67)						8 (57)	21 (81)	67 (54)									5 (7)	8 (42)							3 (3)	3 (10)	2 (5)	6 (6)	13 (9)	12 (8)	2 (3)	21 (13)	3 (5)	2 (6)				
CRS Treatments with Infections	60 (36)						7 (50)	17 (65)	27 (22)									26 (25)	22 (19)	1 (2)	5 (7)	10 (53)	12 (26)			24 (26)	19 (63)	24 (55)	67 (52)	38 (37)	50 (35)	57 (37)	37 (47)	70 (44)					
CRS Treatments with Neurotoxicity	14 (8)						0	3 (12)	10 (8)			15 (14)	13 (11)	12 (29)	5 (7)	8 (17)										1 (3)	3 (7)	6 (5)	11 (11)	5 (3)	6 (4)	11 (14)	41 (26)						
Infections	126 (76)						9 (64)	20 (77)	4 (36)			86 (70)	44 (79)	18 (62)												84 (89)	14 (47)	15 (34)	12 (12)	85 (59)	105 (68)	59 (76)	68 (43)	41 (63)	25 (71)				
Hypogammaglobulin	123 (75)						3 (21)	15 (58)										9 (9)	19 (16)																				
Neurotoxicity (ingen)	24 (15)						3 (21)	2 (8)																															
Neurotoxicity G3/4	1 (1)						0	0																															
Hypogammaglobulin	3 (2)						0	1 (4)																															
Hypogammaglobulin	65 (39)																																						
CRS G3/4	1 (1)						0	0	0			0	2 (2)	1 (1)	1 (2)	3 (4)	1 (5)	0	1 (2)	2 (7)	0	3 (2)	0	2 (3)	2 (2)	1 (3)	0	1 (1)	5 (5)	3 (2)	1 (1)	1 (1)	2 (1)	0	1 (3)				
ICANS G3/4 (Immune)	2 (9)						0	0	0					3 (3)																									
Infections G3/4	74 (45)						2 (14)	5 (19)				49 (40)	31 ^d (55)	11 ^d (38)				23 (32)	42 (36)	8 (19)	5 (26)					60 (64)	2 (7)	3 (7)											
General: N, (%)																																							
Arthralgia	36 (22)											17 (23)	34 (33)	35 (30)				6 (12)	6 (20)	10 (23)	22 (18)				7 (23)	4 (9)	21 (16)	33 (32)	30 (21)	27 (18)	18 (23)								
Arthralgia G3/4	1 (1)											0	3 (3)	0				0	0	0	0					7 (23)	0	0	1 (1)	3 (3)	2 (1)	0	0	1 (1)					
Bonepain	29 (18)											15 (21)														1 (3)	1 (2)	6 (6)	3 (2)	1 (1)									
Bonepain G3/4	6 (4)											1 (1)																	3 (2)	1 (1)									
Backpain	27 (16)						1 (7)	0				17 (23)	24 (23)	24 (21)												3 (10)	9 (20)	18 (14)	22 (22)	2 (1)	4 (3)	9 (12)							
Backpain G3/4	4 (2)											3 (4)	5 (5)	3 (3)																									
Bacterial Infection																																							
Bronchopulmon																																							
Bacteremia																																							
Bronchitis	22 (13)						0	2 (8)																															
Bronchitis G3/4	0																																						
Cellulitis	4 (2)																																						
Cytomegalovirus																																							
Constipation	34 (21)						2 (14)	0																															
Constipation G3	0						0	0																															
Cough	33 (20)																																						
Cough G3/4	0																																						
Covid-19	29 (18)						1 (7)	1 (4)				36 (29)																											
Covid-19 G3/4	20 (12)											19 (15)																											
Cystitis							1 (7)	2 (8)																									</						

Agents abbreviation: Teclistimab: Tec, TecU1, TecU2, TecIPh2, TecIPh2, Tecout ; Eranatamab: Elr, ElrP1, ElrP2b; F182112: F; Linvoseltamab (REGN-5458): Linvo, RS4548, RS458U2, RS458U3; AMG420: AMG4; AMG701: AMG7; CC-93269 (alnuctamab) CC, Aln; ABBV-383 (TNB-383B) ABBV, ABBVSD, ABBVD, ABBVDL; REGN4548: RS4548, Teclistamab + Talquetamab: Tec+Tal, Tec+TalU ; Talquetamab : Tal405U2, Tal800U2, Tal5C, TalIV, Tal_0.4, Tal_0.8, Tal_TCR; Cevostamab: Cevo; Talquetamab+daratumumab: Tal+Dara ; Talquetamab + Pomalidomide: Tal+Pom.

****Targets:** BC: BCMA, BGC: BCMA× GPRCSD × CD3, GC: GPRCSD × CD3, FC: FCRH5 × CD3

GCD: GPRCSD × CD3×Daratumumab, GCP: GPRCSD × CD3× Pomalidomide.

a. Cytokine release syndrome

b. Immune effector cell-associated neurotoxicity syndrome

c. Multiple cohorts combined together

d. Based on total patients of the study

e. Each subgroup were separated from ABBV, ABBVSD, and the ≥40 mg and 60 mg cohort (n = 81) of the study.

Table F. Adverse events (Safety) including hematological, and non- hematological, reported for each agent for each target in percentage.

Target Group	All	BCMA	Tec+Tal	GPRC5D/FcRH5	Tal+Dara/Pom
Total Number of patients in studies	2374	1276	157	841	100
Adverse Event					
Any Grade	67.73	74.37	59.87	55.29	100
Grade 3or4	53.16	57.05	57.32	43.04	82
Hematologic	2.82	5.25			
Neutropenia	40.35	37.7	74.52	37.34	46
Anemia	39.17	32.76	57.96	44.95	43
Lymphopenia	19.21	18.1		26.75	
Leukopenia	8.72	3.76		18.91	
Thrombocytopenia	21.44	19.75	25.48	24.97	7
Average Hematologic	25.8	22.4	31.6	30.6	19.2
G3/4	2.7	5.02			
Neutropenia G3/4	35.17	33.86	70.7	30.68	34
Anemia G3/4	24.52	21.94	40.13	27.35	9
Lymphopenia G3/4	17.73	16.61		24.85	
Leukopenia G3/4	5.39	2.35		11.65	
Thrombocytopenia G3/4	13.52	12.3	17.83	15.34	7
Average Hematologic G3/4	19.3	17.4	25.7	22	10
Non-Hematologic					
CRS	64.95	56.82	79.62	73.13	77
ICANS	3.96	2.04	2.55	7.02	5
CRS Treatments	27.55	17.16	38.85	44.47	
CRS Treatments with Tocilizumab	24.14	14.66	15.29	43.04	
CRS Treatments with Steroids	6.91	6.27		9.99	
Infections	45.75	45.3	53.5	42.57	66
Hypogammaglobulinemia	11.88	14.58		4.88	55
Neurotoxicity (ingeneral)	2.74	4.08		1.55	
Neurotoxicity G3/4	0.21	0.08	0.64	0.36	
Hypogammaglobulinemia G3/4	2.61	0.39		6.78	
hypogammaglobulinemia TX with IVIG	3.62	5.09			21
CRS G3/4	1.47	1.25	2.55	1.66	1
ICANS G3/4 (Immune Effector Cell-associated Neurotoxicity Syndror	0.63	0.55	0.64	0.83	0
Infections G3/4	20.3	21.63	38.22	14.51	24
General					
Arthralgia	12.89	13.01		16.65	
Arthralgia G3/4	0.42	0.31		0.71	
Bonepain	2.36	3.45		1.43	
Bonepain G3/4	0.46	0.55		0.48	
Backpain	6.74	7.29		7.97	
Backpain G3/4	0.93	1.18		0.83	
Bacterial Infection	0.04	0.08			
Bronchopulmonary Aspergillosis	0.04	0.08			
Bacteremia	0.34	0.63			
Bronchitis	1.43	1.88	5.73	0.12	
Bronchitis G3/4	0.17	0	1.91	0.12	
Cellulitis	0.21	0.39			
Cytomegalovirus Chorioretinitis	0.25	0.08	3.18		
Constipation	8.21	6.03		14.03	
Constipation G3/4	0.08	0		0.24	
Cough	18.16	16.07	26.75	21.88	
Cough G3/4	0.04	0	0.64	0	
Covid-19	10.83	9.72	24.2	10.7	5
Covid-19 G3/4	3.71	5.02	10.83	0.83	
Cystitis	0.13	0.24			
Cytomegalovirus Infection	0.42	0.78			
Dyspnea	1.31	1.33		1.66	
Dyspnea G3/4	0.08	0.08		0.12	
Diarrhea	23.42	23.59	28.66	24.97	
Diarrhea G3/4	1.56	1.8	1.91	1.31	
Decrease Appetite	8.64	4.78		17.12	
Decrease Appetite G3/4	0.46	0.16		1.07	
Dysgeusis	23.84	0.16	38.85	50.77	76
Drymouth	12.51		25.48	26.28	36

Drymouth G3/4	0		0	0	
Dysphagia	6.4			18.07	
Dysphagia G3/4	0.13			0.36	
Decreased Weight	10.74		20.38	26.52	
Decreased Weight G3/4	0.8		3.18	1.66	
Dental Caries	0.17	0.24		0.12	
Dental Caries G3/4	0.04			0.12	
Fatigue	25.02	24.76	16.56	26.52	29
Fatigue G3/4	1.47	1.1	5.1	1.55	
Folliculitis	0.04	0.08			
Gaitdisturbance	0			0	
Gastroenteritis	0.04	0.08			
Headache	14.32	14.73		18.07	
Headache G3/4	0.55	0.63		0.59	
hypertension	1.6	1.57		2.14	
hypertension G3/4	1.01	0.71		1.78	
Hypophosphatemia	6.19	4.39		10.82	
Hypophosphatemia G3/4	3.03	1.02		7.02	
Hyponatremia	0.63	0.55		0.95	
Hyponatremia G3/4	0.46	0.24		0.95	
Hypotension	0.72	0.24		1.66	
Hypotension G3/4	0.21			0.59	
Hypokalemia	5.86	9.25		2.5	
Hypokalemia G3/4	1.98	2.74		1.43	
Hypoxia	0.04	0.08			
Insomnia	0.29	0.47		0.12	
Insomnia G3/4	0.04	0		0.12	
Injection Site Reaction	5.14	8.07		2.26	
Injection Site ReactionG3/4	0	0		0	
Increased Alanine Aminotransferase	4.3	0.16	0	11.89	
Increased Alanine Aminotransferase G3/4	1.26	0.08		3.45	
Increased Aspartate Aminotransferase	3.66	0.08		10.23	
Increased Aspartate Aminotransferase G3/4	0.88			2.5	
Increased γ-glutamyltransferase	2.82			7.97	
Increased γ-glutamyltransferase G3/4	1.22			3.45	
Influenza	0.29	0.16	3.18		
Nasopharyngitis	1.01	0.78	8.92		
Nausea	18.49	20.38		21.28	
Nausea G3/4	0.25	0.47		0	
Naildisorder	15.92		31.21	36.39	23
Naildisorder G3/4	0.08			0.24	
Nasal Congestion	1.73	3.21			
Nasal Congestion G3/4	0	0			
Oral Candidiasis	0.04	0.08			
Oral Herpes	0.04	0.08			
Oropharyngeal Pain	1.73	2.43		1.19	
Oropharyngeal Pain G3/4	0	0		0	
Pain					
Paininextremity	4.76	7.6		1.9	
Paininextremity G3/4	0.04	0.08		0	
Peripheral Polyneuropathy G3/4	0.08	0.16			
Pyrexia	21.36	17.55	30.57	27.94	
Pyrexia G3/4	0.72	0.63	1.27	0.83	
paresthesia	0.04			0.12	
Pneumonia	6.32	7.29	21.66	1.9	7
Pneumonia G3/4	3.62	4.47	12.1	1.19	
Psychiatric/Neurological	2.74			7.73	
Psychiatric/Neurological G3/4	0.25			0.71	
Peripheral Edema (fluid retention)	2.23	4.15			
Peripheral Edema (fluid retention) G3/4	0.08	0.16			
Pharyngitis	0.04	0.08			
Pneumonia Cytomegaloviral	0.04	0.08			
Peripheral Sensory Neuropathy	0.8	1.49			
Periodontitis	0.04	0.08			
Rash Relat Edevent	11.29	0.24	23.57	26.28	7
Rash Related EventG3/4	1.26		0.64	3.45	

	Sialoadenitis	0.04	0.08			
	Stomatitis	0.72	0.16		1.78	
	Stomatitis G3/4	0.08	0		0.24	
	Sinusitis	1.18	1.18	7.64	0.12	
	Sinusitis G3/4	0.17	0.16	0.64	0.12	
	Somnolence	0.04	0.08			
	Skin-Related	20.98	0.08	36.31	47.21	43
	Skin-Related G3/4	0.13		0	0.36	
	Sepsis	1.1	1.25	4.46	0.36	
	Subcutaneous Abscess	0.04	0.08			
	Tinea Infection	0.04	0.08			
	Tinea Pedis	0.08	0.16			
	Tinea Pedis G3/4	0	0			
	Upper Respiratory Tract Infection	4.13	4.7	14.65	1.78	
	Upper Respiratory Tract Infection G3/4	0.29	0.16	1.91	0.24	
	Vomiting	3.66	6.82			
	Vomiting G3/4	0.04	0.08			
Death		12.55	19.75		5.11	3
	Progressive Disease	3.58	6.66			
	Adverse Event	3.88	4.31		4.28	1
	Infection	0.63	0.63		0.59	2
	Covid-19	0.63	1.18		0	
	Realted to Medication	0.42	0.71		0.12	