Ge Numbering	Heavy Chain Variations (EU Numbering)	INN (Year of First Approval)
G1e0	Natural sequence, usual glycosylation	Many examples
G1e1	Lacks CH1 + C220S C226S C229S P238S substitutions	abatacept (2005), belatacept (2011)
G1e2	Lacks CH1 + Production in *E. coli* (aglycosylation)	romiplostim (2008)
G1e3	Lack CH1 + Deletion of the 5 first amino acids of the hinge region	aflibercept (2011), efmoroctocog α (2014), eftrenonacog α (2014)
G1e4	Hypo- or afucosylation	mogamulizumab (2012), benralizumab (2017), naxitamab (2021), inebilizumab (2022) obinutuzumab (2013)
G1e5	Addition of a bisecting GlcNAc also indirectly inducing hypo- or afucosylation	
G1e6	F126L substitution	ramucirumab (2014), necitumumab (2015)
G1e7	L235A G237A substitutions	vedolizumab (2014)
G1e8	N297A substitution	atezolizumab (2016)
G1e9	L234F L235E P331S substitutions	durvalumab (2017), anifrolumab (2019)
G1e10	L234A L235A substitutions	etesevimab (2021), risankizumab (2019)
G1e11	K213A N297A substitutions	eptinezumab (2020)
G1e12	S239D K274Q (Y296F) Y300F (L309V) I332E A339T V397M substitutions	tafasitamab (2020)
G1e13	L235V F243L R292P Y300L P396L substitutions	margetuximab (2020)
G1e14	F405L substitution and afucosylation (A chain) K409R substitution and afucosylation (B chain)	amivantamab (2021)
G1e15	L234F L235E M252Y S254T T256E P331S substitutions	tixagevimab/cilgavimab (2021)
G1e16	M428L N434S substitutions	sotrovimab (2021)
G1e17	M252Y S254T T256E H433K N434F susbtitutions	efgartigimod (2021)
G1e18	N297G T366W substitutions (A chain) N297G T366S L368A Y407V substitutions (B chain)	mosunetuzumab (2022)
G1e19	M252Y S254T T256E substitutions	nirsevimab (2022)
G1e20	L234A L235A I253A H310A P329A S354C T366W H435A substitutions (A chain) Cκ replacing CH1, then L234A L235A I253A H310A P329G Y349C T366S L368A Y407V H435A substitutions (B chain)	faricimab (2022)

- Loss of effector functions
- Gain of effector functions
- Gain of FcRn binding
- Loss of effector functions and gain of FcRn binding
- Protein engineering (Fc fusion proteins, bispecific mAbs)

G2e

Ge Numbering	Heavy Chain Variations (EU Numbering)	INN (Year of First Approval)
G2e0	Natural sequence, usual glycosylation	Many examples
G2e1 (=G4e2)	Hybrid IgG2/IgG4 (before/after T260)	eculizumab (2017)
G2e2	A330S P331S substitutions	fremanezumab (2018)
G2e3 (=G4e5)	Hybrid IgG2/IgG4 (before/after T260) + M428L, N434S substitutions	ravulizumab (2018)
G2e4	K322A substitution	crizanlizumab (2019)
G2e5	C131S R133K (E137G) (E138G) C219S H268Q R355Q Q419E N434A substitutions	satralizumab (2020)
G2e6	C131S R133K (E137G) (E138G) C219S H268Q R355Q Q419E substitutions	nemolizumab (2022)

G4e

Ge Numbering	Heavy Chain Variations (EU Numbering)	INN (Year of First Approval)
G4e0	Natural sequence, usual glycosylation	natalizumab (2004), reslizumab (2016), ibalizumab (2018), tralokinumab (2021)
G4e1	S228P substitution	gemtuzumab ozogamicin (2000), pembrolizumab (2014), nivolumab (2014), cemiplimab (2018), etc.
G4e2 (=G2e1)	Hybrid IgG2/IgG4 (before/after T260)	eculizumab (2017)
G4e3	S228P F234A L235A substitutions	dulaglutide (2014), galcanezumab (2018)
G4e4	K196Q S228P F296Y K439E L445P substitutions + G446 removal (A chain) K196Q S228P F296Y E356K H435R L445P substitutions + G446 removal (B chain)	emicizumab (2017)
G4e5 (=G2e4)	Hybrid IgG2/IgG4 (before/after T260) + M428L, N434S substitutions	ravulizumab (2018)
G4e6	S228P L235E substitutions	sutimlimab (2022)
G4e7	S228P F234A L235A F405L (R409K) (A chain) S228P F234A L235A (B chain)	teclistamab (2022)