

October 26, 2016

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (DE-170)

EMAPALUMAB

PRONUNCIATION

em" a pal' ue mab

THERAPEUTIC CLAIM

Treatment of hemophagocytic lymphohistocytosis (HLH) and other conditions associated with abnormally high levels of the cytokine interferon gamma (IFN γ)

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human interferon γ) (human monoclonal NI-0501 heavy chain), disulfide with human monoclonal NI-0501 light chain, dimer
2. Immunoglobulin G1-lambda 2, anti-(human interferon gamma (IFN-gamma, immune interferon)); human monoclonal antibody: γ 1 heavy chain (1-453) [human VH (*Homo sapiens* IGHV3-23*01 –(IGHD)-IGHJ5*02 (92%)) [8.8.16] (1-123) -*Homo sapiens* IGHG1*03 (124-453)], (226-216')-disulfide with λ 2 light chain (1'-217') [human V-LAMBDA (*Homo sapiens* IGLV6-57*01 (99%) – IGLJ3*02) [8.3.10] (1'-111') -*Homo sapiens* IGLC2*01 (112'-217')], dimer (232-232":235-235")-bisdisulfide

STRUCTURAL FORMULA

Heavy chain

EVQLLESGGG	LVQPGGSLRL	SCAASGFTFS	SYAMSWVRQA	PGKGLEWVSA	50
ISGSGGSTYY	ADSVKGRFTI	SRDNSKNTLY	LQMNSLRAED	TAVYYCAKDG	100
SSGWYVPHWF	DPWGQGLTIVT	VSSASTKGPS	VFPLAPSSKS	TSGGTAALGC	150
LVKDYFPEPV	TVSWNSGALT	SGVHTFPAVL	QSSGLYSLSS	VVTVPSSSLG	200
TQTYICNVNH	KPSNTKVDKR	VEPKSCDKTH	TCPPCPAPEL	LGGPSVFLFP	250
PKPKDTLMIS	RTPEVTCVVV	DVSHEDPEVK	FNWYVDGVEV	HNAKTKPREE	300
QYNSTYRVVS	VLTVLHQDWL	NGKEYKCKVS	NKALPAPIEK	TISKAKGQPR	350
EPQVYTLPPS	REEMTKNQVS	LTCLVKGFYP	SDIAVEWESN	GQPENNYKTT	400
PPVLDSDGSF	FLYSKLTVDK	SRWQQGNVFS	CSVMHEALHN	HYTQKSLSL	450
PGK					453

Light chain

NFMLTQPHSV	SESPGKTVTI	SCTRSSGSIA	SNYVQWYQQR	PGSSPTTVLY	50'
EDNQRPSGVP	DRFSGSIDSS	SNSASLTISG	LKTEDEADYY	CQSYDGSNRW	100'
MFGGGTKLTV	LGQPKAAPSV	TLFPPSSEEL	QANKATLVCL	ISDFYPGAVT	150'
VAWKADSSPV	KAGVETTTPS	KQSNNKYAAS	SYLSLTPEQW	KSHRSYSCQV	200'
THEGSTVEKT	VAPTECS				217'

Disulfide bridges location

22-96	22"-96"	22'-91'	22'''-91'''	139'-198'	139'''-198'''	150-206	150"-206"
216'-226'	216'''-226'''	232-232"	235-235"	267-327	267"-327"	373-431	373"-431"

Glycosylation sites (N)

Asn-303 Asn-303"

MOLECULAR FORMULA

C₆₄₃₀H₉₈₉₈N₁₇₁₈O₂₀₃₈S₄₆ (non-glycosylated)

MOLECULAR WEIGHT	145.4 kDa (non-glycosylated)
TRADEMARK	Gamifant, Gamhalty
SPONSOR	Novimmune S.A.
CODE DESIGNATIONS	NI-0501
<u>CAS</u> REGISTRY NUMBER	1709815-23-5
UNII	3S252O2Z4X
WHO NUMBER	10319

gbk