

October 29, 2014

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (CD-23)	LIGELIZUMAB
PRONUNCIATION	lye" je liz' ue mab
THERAPEUTIC CLAIM	Treatment of severe asthma and chronic spontaneous urticaria
CHEMICAL NAMES	

1. Immunoglobulin G1, anti-(human immunoglobulin E) (human-*Mus musculus* monoclonal clone CL-2C γ 1-chain), disulfide with human-*Mus musculus* monoclonal clone CL-2C κ -chain, dimer
2. Immunoglobulin G1-kappa, anti-(human Ig epsilon chain C region); humanized mouse monoclonal antibody: γ 1 heavy chain (1-453) [humanized VH (human IGHV1-69*08 (81%) -(IGHD)-IGHJ4*01) [8.8.16] (1-123) –human IGHG1*01 (124-453)] (226-214')-disulfide with kappa light chain (1'-214') [humanized V-KAPPA (human IGKV3-15*01 (86%) –IGKJ4*01) [6.3.9] (1'-107') –human IGKC*01 (108'-214')] dimer (232-232':235-235'')-bisdisulfide

STRUCTURAL FORMULA

Heavy chain

QVQLVQSGAE	VMKPGSSVKV	SCKASGYTFS	WYWLEWVRQA	PGHGLEWMGE	50
IDPGTFTTNY	NEKFKARVTF	TADTSTSTAY	MELSSLRSED	TAVYYCARFS	100
HFSGSNYDYF	DYWGQGLVLT	VSSASTKGPS	VFPLAPSSKS	TSGGTAALGC	150
LVKDYFPEPV	TVSWNSGALT	SGVHTFPAVL	QSSGLYSLSS	VVTVPSSSLG	200
TQTYICNVNH	KPSNTRVDKK	VEPKSCDKTH	TCPPCPAPEL	LGGPSVFLFP	250
PKPKDTLMIS	RTPEVTCVVV	DVSHEDPEVK	FNWYVDGVEV	HNAKTKPREE	300
QYNSTYRVVS	VLTVLHQDWL	NGKEYKCKVS	NKALPAPIEK	TISKAKGQPR	350
EPQVYTLPPS	RDELTKNQVS	LTCLVKGFYP	SDIAVEWESN	GQPENNYKTT	400
PPVLDSDGSF	FLYSKLTVDK	SRWQQGNVFS	CSVMHEALHN	HYTKKSLSL	450
PGK					453

Light chain

EIVMTQSPAT	LSVSPGERAT	LSCRASQSIG	TNIHWYQQKP	GQAPRLLIYY	50'
ASESISGIPA	RFSGSGSGTE	FSLTISLQSL	EDFAVYYCQQ	SWSWPTTFGG	100'
GTKVEIKRTV	AAPSVFIFPP	SDEQLKSGTA	SVVCLLNIFY	PREAKVQWKV	150'
DNALQSGNSQ	ESVTEQDSKD	STYLSLSTLT	LSKADYEKHK	VYACEVTHQG	200'
LSSPVTKSFN	RGEC				214'

Disulfide bridges

22-96	22"-96"	23'-88'	23'''-88'''	134'-194'	134'''-194'''	150-206	150"-206"
214'-226	214'''-226'''	232-232"	235-235"	267-327	267"-327"	373-431	373"-431"

Glycosylation sites (N)

Asn-303 Asn-303''

MOLECULAR FORMULA $C_{6534}H_{10000}N_{1716}O_{2038}S_{44}$ (peptide)

MOLECULAR WEIGHT 146.6 kDa (peptide)

TRADEMARK None as yet

LIGELIZUMAB

N14

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SPONSOR

Novartis Pharma AG

CODE DESIGNATIONS

QGE031

CAS REGISTRY NUMBER

1322627-61-1

UNII

L8LE0L691T

WHO NUMBER

9653

gbk