

June 24, 2015

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (CD-100) LUMRETUZUMAB

PRONUNCIATION lum" re tooz' ue mab

THERAPEUTIC CLAIM Treatment of cancer

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human neuregulin receptor HER3) (human-*Mus musculus* monoclonal heavy chain), disulfide with human-*Mus musculus* monoclonal light chain, dimer
2. Immunoglobulin G1-kappa, anti-(human receptor tyrosine-protein kinase erbB-3 (proto-oncogene-like protein c-ErbB-3, tyrosine kinase-type cell surface receptor HER3, EC=2.7.10.1)); humanized mouse monoclonal antibody: γ 1 heavy chain (1-449) [humanized VH (*Homo sapiens* IGHV1-18*01 (90%) – (IGHD)-IGHJ4*01) [8.8.13] (1-120) -(*Homo sapiens* IGHG1*01{CH3 del-K¹⁰⁷>-(450)}) (121-449)] (223-220')-disulfide with κ light chain (1'-220') [humanized V-KAPPA (*Homo sapiens* IGKV4-1*01 (93%) –IGKJ2*01) [12.3.9] (1'-113') -(*Homo sapiens* IGKC*01) (114'-220')], dimer (229-229":232-232")-bisdisulfide

STRUCTURAL FORMULA

Heavy chain

QQQLVQSGAE	VKKPGASVKV	SCKASGYTFR	SSYISWVRQA	PGQGLEWMGW	50
IYAGTGPSY	NQKLQGRVTM	TTDTSTSTAY	MELRSLRSD	TAVYYCARHR	100
DYYSNSLTW	GQGLTLTVSS	ASTKGPSVFP	LAPSSKSTSG	GTAALGCLVK	150
DYFPEPVTVS	WNSGALTSKV	HTFPAVLQSS	GLYSLSSVVT	VPSSSLGTQT	200
YICNVNHKPS	NTKVDKVEP	KSCDKTHTCP	PCPAPPELLGG	PSVFLFPPKP	250
KDTLMISRTP	EVTCTVVDVDS	HEDPEVKFNW	YVDGVEVHNA	KTKPREEQYN	300
STYRVVSVLT	VLHQDWLNGK	EYKCKVSNKA	LPAPIEKTIS	KAKGQPREPQ	350
VYTLPPSRDE	LTKNQVSLTC	LVKGFYPSDI	AVEWESNGQP	ENNYKTTTPPV	400
LDSDGSFFLY	SKLTVDKSRW	QQGNVFCSSV	MHEALHNHYT	QKSLSLSPG	449

Light chain

DIVMTQSPDS	LAVSLGERAT	INCKSSQSVL	NSGNQKNYLT	WYQQKPGQPP	50'
KLLIYWASTR	ESGVPDRFSG	SGSGTDFTLT	ISSLAEDVA	VYQCSDYSY	100'
PYTFGQGTKL	EIKRTVAAPS	VFIFPPSDEQ	LKSGTASVVC	LLNNFYPREA	150'
KVQWKVDNAL	QSGNSQESVT	EQDSKSTYS	LSSTLTLSKA	DYEKHKVYAC	200'
EVTHQGLSSP	VTKSFNRGEC				220'

Disulfide bridges location

22-96	22"-96"	23'-94'	23"-94"	140'-200'	140"-200"	147-203	147"-203"
220'-223	220"-223"	229-229"	232-232"	264-324	264"-324"	370-428	370"-428"

Glycosylation sites

Asn-300 Asn-300"

MOLECULAR FORMULA

C₆₅₁₂H₁₀₀₆₄N₁₇₃₆O₂₀₅₂S₄₄ (peptide)

MOLECULAR WEIGHT

146.9 kDa (peptide)

TRADEMARK	None as yet
SPONSOR	Genentech/Roche
CODE DESIGNATIONS	RG7116, RO5479599
<u>CAS</u> REGISTRY NUMBER	1448327-63-6
UNII	Y6M3205516
WHO NUMBER	9952

gbk