

March 25, 2015

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (CD-82) DENINTUZUMAB MAFODOTIN

PRONUNCIATION den" in tooz' ue mab ma" foe doe' tin

THERAPEUTIC CLAIM Treatment of B-cell malignancies

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human CD19 antigen) (human-Mus musculus monoclonal hBU12 heavy chain), disulfide with human-Mus musculus monoclonal hBU12 κ -chain, dimer, tetrakis(thioether) with N-[6-(3-mercapto-2,5-dioxo-1-pyrrolidinyl)-1-oxohexyl]-N-methyl-L-valyl-L-valyl-(3R,4S,5S)-3-methoxy-5-methyl-4-(methylamino)heptanoyl- (α R, β R,2S)- β -methoxy- α -methyl-2-pyrrolidinepropanoyl-L-phenylalanine
2. Immunoglobulin G1-kappa auristatin F conjugate, anti-[Homo sapiens CD19 (B lymphocyte surface antigen B4, Leu-12)], humanized monoclonal antibody; gamma1 heavy chain (1-450) [humanized VH (Homo sapiens IGHV4-31*02 (84.80%) -(IGHD)-IGHJ4*01) [10.7.12] (1-120) -Homo sapiens IGHG1*01 (CH1 (121-218), hinge (219-233), CH2 (234- 343), CH3 (344-448), CHS (449-450)) (121-450)], (223-213')- disulfide with kappa light chain (1'-213') [humanized V-KAPPA (Homo sapiens IGKV3-11*01 (85.30%) -IGKJ2*02) [5.3.9] (1'-106') - Homo sapiens IGKC*01 (107'-213')]; dimer (229-229":232-232")- bisdisulfide; conjugated, on an average of 4 cysteinyl, to monomethylauristatin F (MMAF), via a noncleavable maleimidocaproyl (mc) linker

STRUCTURAL FORMULA

Heavy chain

QVQLQESGPG	LVKPSQTLSL	TCTVSGGSIS	TSGMGVWIR	QHPGKGLEWI	50
GHIWDDDKR	YNPALKSRVT	ISVDTSKNQF	SLKLSSVTAA	DTAVYYCARM	100
ELWSYYFDYW	GQGLTIVTVSS	ASTKGPSVFP	LAPSSKSTSG	GTAALGCLVK	150
DYFPEPVTVS	WNSGALTSKV	HTFPAVLQSS	GLYSLSSVVT	VPSSSLGTQT	200
YICNVNHKPS	NTKVDKKEP	KSCDKHTTCP	PCPAPELLGG	PSVFLFPPKP	250
KDTLMISRTP	EVTCVVDVVS	HEDPEVKFNW	YVDGVEVHNA	KTKPREEQYN	300
STYRVVSVLT	VLHQDNLNGK	EYKCKVSNKA	LPAPIEKTIS	KAKGQPREPQ	350
VYTLPPSRDE	LTKNQVSLTC	LVKGFYPSDI	AVEWESNGQP	ENNYKTTTPV	400
LDSGGSFFLY	SKLTVDKSRW	QQGNVFNCSV	MHEALHNHYT	QKSLSLSPGK	450

Light chain

EIVLTQSPAT	LSLSPGERAT	LSCSASSSVS	YMHWYQQKPG	QAPRLLIYDT	50'
SKLASGIPAR	FSGSGSTDF	TLTISLSLEPE	DVAVYYCFQG	SVYPTFGQG	100'
TKLEIKRTVA	APSVFIFPPS	DEQLKSGTAS	VVCLLNNFYP	REAKVQWKVD	150'
NALQSGNSQE	SVTEQDSKDS	TYSLSTLTL	SKADYEKHKV	YACEVTHQGL	200'
SSPVTKSFNR	GEC				213'

Disulfide bridges

22-97	22"-97"	23'-87'	23""-87""	133'-193'
133""-193""	147-203	147""-203""	223-213'	223""-213""
229-229"	232-232"	264-324	264""-324""	370-428
370"-428"				

* An average of 2 not present, giving 4 cysteines capable of linking to mafodotin (C**)

