

September 30, 2015

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

| | |
|-------------------|---|
| USAN (CD-117) | PLOZALIZUMAB |
| PRONUNCIATION | plœ" za liz' oo mab |
| THERAPEUTIC CLAIM | Treatment of diabetic nephropathy and arteriovenous graft patency |

CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human CC chemokine receptor CCR2) (human-*Mus musculus* monoclonal 1D9 heavy chain), disulfide with human-*Mus musculus* monoclonal 1D9 κ -chain, dimer
2. Immunoglobulin G1-kappa, anti-(human C-C chemokine receptor type 2 (CCR2, monocyte chemoattractant protein 1 receptor, MPC-1-R, CD192 antigen)); humanized mouse monoclonal antibody: γ 1 heavy chain (1-447) [humanized VH (*Homo sapiens* IGHV3-73*01 (87%) –(IGHD)-IGHJ1*01) [8.10.8] (1-117) -*Homo sapiens* IGHG1*01{CH2 L⁵>A(235), G⁷>A(237)} (118-447)] (220-219')-disulfide with kappa light chain (1'-219') [humanized V-KAPPA (*Homo sapiens* IGKV2-30*02 (90%) –IGKJ5*01) [11.3.9] (1'-112') -*Homo sapiens* IGKC*01 (113'-219')], dimer (226-226":229-229")-bisdisulfide

STRUCTURAL FORMULA

Heavy chain

| | | | | | |
|------------|------------|------------|-------------|------------|-----|
| EVQLVESGGG | LVKPGGSLRL | SCAASGFTFS | AYAMNWRQA | PGKLEWVGR | 50 |
| IRTKNNNYAT | YYADSVKDRF | TISRDDSKNT | LYLQMNLSLKT | EDTAVYYCTT | 100 |
| FYGNVWGQG | TLVTVSSAST | KGPSVFLAP | SSKSTSGGTA | ALGCLVKDYF | 150 |
| PEPVTVSWNS | GALTSVHTF | PAVLQSSGLY | SLSSVVTVPS | SSLGTQTYIC | 200 |
| NVNHKPSNTK | VDKKVEPKSC | DKTHTCPPCP | APELAGAPSV | FLFPPKPKDT | 250 |
| LMISRTPEVT | CVVVDVSHED | PEVKFNWYVD | GVEVHNAKTK | PREEQYNSTY | 300 |
| RVSVLTVLH | QDNLNGKEYK | CKVSNKALPA | PIEKTISKAK | GQPREPQVYT | 350 |
| LPFSRDELTK | NQVSLTCLVK | GFYPSDIAVE | WESNGQPENN | YKTTTPVLDS | 400 |
| DGSFFLYSKL | TVDKSRWQQG | NVFCSSVMHE | ALHNHYTQKS | LSLSPGK | 447 |

Light chain

| | | | | | |
|------------|------------|-------------|-------------|-------------|------|
| DVVMTQSPLS | LPVTLGQPAS | ISCKSSQSLI | DSDGKTFILNW | FQQRPGQSPR | 50' |
| RLIYLVSKLD | SGVPDRFSGS | GSGETDFTLKI | SRVEAEDVGV | YYCWQGTTHFP | 100' |
| YTFGQGTGLE | IKRTVAAPSV | FIFPPSDEQL | KSGTASVCL | LNNFYPREAK | 150' |
| VQWKVDNALQ | SGNSQESVTE | QDSKDYSTYSL | SSTLTLSKAD | YEKHKVYACE | 200' |
| VTHQGLSSPV | TKSFNRGEC | | | | 219' |

Disulfide bridges

| | | | | | | | |
|----------|------------|----------|-----------|-----------|-------------|---------|-----------|
| 22-98 | 22"-98" | 23'-93' | 23""-93"" | 139'-199' | 139""-199"" | 144-200 | 144"-200" |
| 219'-220 | 219""-220" | 226-226" | 229-229" | 261-321 | 261""-321" | 367-425 | 367"-425" |

Glycosylation sites (N)

Asn-297 Asn-297"

MOLECULAR FORMULA

C₆₄₉₀H₁₀₀₅₂N₁₇₃₆O₂₀₁₈S₄₂

MOLECULAR WEIGHT

146.0 kDa

| | |
|----------------------------|--|
| TRADEMARK | None as yet |
| SPONSOR | Takeda Pharmaceuticals International Co. |
| CODE DESIGNATIONS | MLN1202, hu1D9 |
| <u>CAS</u> REGISTRY NUMBER | 1610761-46-0 |
| UNII | 4XG66BMN0D |
| WHO NUMBER | 10124 |

gbk