

April 24, 2013

## STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

|                   |                     |
|-------------------|---------------------|
| USAN (AB-37)      | FUTUXIMAB           |
| PRONUNCIATION     | fue tux' i mab      |
| THERAPEUTIC CLAIM | Treatment of cancer |

## CHEMICAL NAMES

1. Immunoglobulin G1, anti-(human epidermal growth factor receptor extracellular domain III) (human-Mus musculus monoclonal 992 DS heavy chain), disulfide with human-Mus musculus monoclonal 992 DS light chain, dimer
2. Immunoglobulin G1-kappa, anti-(human EGFR (epidermal growth factor receptor, ERBB1, HER1) domain III), human-mouse chimeric monoclonal 992 DS  $\gamma$ 1 heavy chain (226-214')-disulfide with human-mouse chimeric  $\kappa$  light chain (1'-214'), dimer (232-232":235-235")-bisdisulfide

## STRUCTURAL FORMULA

## Heavy chain

|            |            |            |            |            |     |
|------------|------------|------------|------------|------------|-----|
| EVQLQQPGSE | LVRPGASVKL | SCKASGYTFT | SYWMHWVKQR | PGQGLEWIGN | 50  |
| IYPGSRSTNY | DEKFKSKATL | TVDTSSSTAY | MQLSSLTSED | SAVYYCTRNG | 100 |
| DYVSSGDAM  | DYWGQTSVT  | 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 |
| PG         |            |            |            |            | 452 |

## Light chain

|            |            |            |            |            |      |
|------------|------------|------------|------------|------------|------|
| DIQMTQTSS  | LSASLGDRVT | ISCRYSQDIG | NYLNWYQQKP | DGTVKLLIYY | 50'  |
| TSRLHSGVPS | RFSGSGSGTD | FSLTINNVEQ | EDVATYFCQH | YNTVPPTFGG | 100' |
| GTKLEIKRTV | AAPSVFIFPP | SDEQLKSGTA | SVVCLLNNFY | PREAKVQWKV | 150' |
| DNALQSGNSQ | ESVTEQDSKD | STYLSSTLT  | LSKADYKHK  | VYACEVTHQG | 200' |
| LSSPVTKSFN | RGEC       |            |            |            | 214' |

## Disulfide bridges location

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

## Glycosylation sites (N)

|     |       |
|-----|-------|
| 303 | 303'' |
|-----|-------|

|                   |   |
|-------------------|---|
| MOLECULAR FORMULA | $C_{6468}H_{10002}N_{1724}O_{2055}S_{46}$ |
|-------------------|---|

|                  |           |
|------------------|-----------|
| MOLECULAR WEIGHT | 146.3 kDa |
|------------------|-----------|

FUTUXIMAB

N13

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TRADEMARK

None as yet

SPONSOR

Symphogen

CODE DESIGNATIONS

992 DS, Sym004

CAS REGISTRY NUMBER

1310460-85-5

WHO NUMBER

9612

gbk