

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

USAN (FG-137)                      INSULIN EFSITORA ALFA

PRONUNCIATION                      in' su lin ef'' sye tor' a al' fa

THERAPEUTIC CLAIM                      Treatment of diabetes mellitus

### CHEMICAL NAMES

1.     Insulin [16-glutamic acid, 25-histidine, 27-glycine, 28-glycine, 29-glycine, 30-glycine] (human B-chain) fusion protein with peptide (synthetic 7-amino acid linker) fusion protein with insulin [47-threonine, 51-aspartic acid, 58-glycine] (human A-chain) fusion protein with peptide (synthetic 20-amino acid linker) fusion protein with immunoglobulin G2 (human Fc fragment), dimer
2.     *Homo sapiens* Insulin B-chain [Y<sup>16</sup>>Y(16), F<sup>25</sup>>H(25), TPKT<sup>27-30</sup>>GGGG(27-30)] (1-30) fusion protein with diglycylseryltetraglycyl (31-37) Insulin A-chain [I<sup>10</sup>>T(47), Y<sup>14</sup>>D(51), N<sup>21</sup>>G(58)] (38-58) fusion protein with tris(tetraglycylglutaminy)pentaglycyl (59-78) *Homo sapiens* Immunoglobulin heavy constant gamma 2 {del-CH1, hinge-(7-12), CH2, CH3[K<sup>107</sup>>del(300)]} (79-299), dimer (80-80':83-83')-bisdisulfide, expressed in CHO cells, alfa glycosylated

### STRUCTURAL FORMULA

| Monomer chain |            |            |            |            |     |
|---------------|------------|------------|------------|------------|-----|
| FVNQHLCGSH    | LVEALELVCG | ERGFHYGGGG | GGSGGGGIV  | EQCCTSTCSL | 50  |
| DQLENYCGGG    | GGQGGGGQGG | GGQGGGGGEC | PPCPAPPVAG | PSVFLFPPKP | 100 |
| KDTLMI SRTP   | EVTCVVVDVS | HEDPEVQFNW | YVDGVEVHNA | KTKPREEQFN | 150 |
| STFRVVS VLT   | VVHQDWLNGK | EYKCKVSNKG | LPAPIEKTIS | KTKGQPREPQ | 200 |
| VYTLPPSREE    | MTKNQVSLTC | LVKGFYPSDI | AVEWESNGQP | ENNYKTTPPM | 250 |
| LDSGGSFFLY    | SKLTVDKSRW | QQGNVFSCSV | MHEALHNHYT | QKSLSLSPG  | 299 |

| Disulfide bridges location |        |         |           |         |           |  |
|----------------------------|--------|---------|-----------|---------|-----------|--|
| 7-44                       | 7'-44' | 19-57   | 19'-57'   | 43-48   | 43'-48'   |  |
| 80-80'                     | 83-83' | 114-174 | 114'-174' | 220-278 | 220'-278' |  |

Glycosylation sites (N)  
Asn-150    Asn-150'

**MOLECULAR FORMULA**                      C<sub>2810</sub>H<sub>4296</sub>N<sub>776</sub>O<sub>882</sub>S<sub>32</sub> (non-glycosylated)

**MOLECULAR WEIGHT**                      64.09 kDa (non-glycosylated)

**TRADEMARK**                                  None as yet

**SPONSOR**                                      Eli Lilly and Company

**CODE DESIGNATIONS**                      LY3209590

**CAS REGISTRY NUMBER**                      2131038-11-2

UNII

OZ465SMQ28

WHO NUMBER

11184

gbk