

| Patient                     | Measurement | VPε-sLTε       | VPε-sLTμ       | VPε-sLTv  | VPμ-sLTε       | VPμ-sLTμ       | VPμ-sLTv       | VPv-sLTε       | VPv-sLTμ       | VPv-sLTv       | Number Measurements | VPε-sLTμ-Saturated. |
|-----------------------------|-------------|----------------|----------------|-----------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------|---------------------|
| No. of parameters           |             | 7              | 6              | 5         | 6              | 7              | 6              | 5              | 6              | 7              |                     | 4                   |
| No. of parameters Patient C |             | 4              | 3              | 3         | 4              | 4              | 4              | 3              | 3              | 4              |                     |                     |
| A                           | RSS         | 0.83700        | <b>0.21630</b> | 0.46290   | 0.38430        | 0.30860        | 0.42640        | 1.02090        | 0.35370        | 13.17120       | 7                   |                     |
|                             | <i>f</i>    | 0.11957        | 0.03090        | 0.06613   | 0.05490        | 0.04409        | 0.06091        | 0.14584        | 0.05053        | 1.88160        |                     |                     |
|                             | BIC         | -1.24552       | -12.66353      | -9.28353  | -8.64023       | -8.22997       | -7.91255       | -3.74703       | -9.22105       | 18.04623       |                     |                     |
|                             | ΔBIC        | 11.41801       | <b>0.00000</b> | 3.38000   | 4.02330        | 4.43357        | 4.75098        | 8.91650        | 3.44248        | 30.70976       |                     |                     |
|                             | AIC         | -0.86689       | -12.33899      | -9.01308  | -8.31569       | -7.85134       | -7.58801       | -3.47658       | -8.89651       | 18.42486       |                     |                     |
|                             | ΔAIC        | 11.47210       | <b>0.00000</b> | 3.32591   | 4.02330        | 4.48766        | 4.75098        | 8.86241        | 3.44248        | 30.76385       |                     |                     |
| B                           | RSS         | 0.47900        | <b>0.07840</b> | 0.42320   | 0.22070        | 0.15330        | 0.15630        | 0.43110        | 0.13960        | 0.43590        | 7                   |                     |
|                             | <i>f</i>    | 0.06843        | 0.01120        | 0.06046   | 0.03153        | 0.02190        | 0.02233        | 0.06159        | 0.01994        | 0.06227        |                     |                     |
|                             | BIC         | -5.15238       | -19.76743      | -9.91119  | -12.52257      | -13.12751      | -14.93776      | -9.78173       | -15.72873      | -5.81240       |                     |                     |
|                             | ΔBIC        | 14.61505       | <b>0.00000</b> | 9.85624   | 7.24486        | 6.63992        | 4.82967        | 9.98570        | 4.03870        | 13.95503       |                     |                     |
|                             | AIC         | -4.77375       | -19.44289      | -9.64074  | -12.19803      | -12.74888      | -14.61322      | -9.51128       | -15.40419      | -5.43377       |                     |                     |
|                             | ΔAIC        | 14.66914       | <b>0.00000</b> | 9.80215   | 7.24486        | 6.69401        | 4.82967        | 9.93161        | 4.03870        | 14.00912       |                     |                     |
| C                           | RSS         | 0.17920        | 0.14420        | 0.17220   | 0.14980        | 0.14980        | 0.14980        | 0.14700        | 0.14700        | <b>0.14280</b> | 14                  |                     |
|                             | <i>f</i>    | 0.01280        | 0.01030        | 0.01230   | 0.01070        | 0.01070        | 0.01070        | 0.01050        | 0.01050        | 0.01020        |                     |                     |
|                             | BIC         | -50.46011      | -56.14139      | -53.65701 | -55.60799      | -52.96893      | -55.60799      | -55.87215      | -55.87215      | -53.63892      |                     |                     |
|                             | ΔBIC        | <b>5.68128</b> | <b>0.00000</b> | 2.48438   | <b>0.53340</b> | 3.17246        | <b>0.53340</b> | <b>0.26924</b> | <b>0.26924</b> | 2.50247        |                     |                     |
|                             | AIC         | -53.01634      | -58.05856      | -55.57418 | -57.52516      | -55.52516      | -57.52516      | -57.78932      | -57.78932      | -56.19515      |                     |                     |
|                             | ΔAIC        | <b>5.04222</b> | <b>0.00000</b> | 2.48438   | <b>0.53340</b> | <b>2.53340</b> | <b>0.53340</b> | <b>0.26924</b> | <b>0.26924</b> | 1.86341        |                     |                     |
| D                           | RSS         | <b>0.00020</b> | 0.00174        | 0.43690   | 0.04320        | 0.74250        | 0.63700        | 0.07480        | 0.52190        | 9.35600        | 4                   |                     |
|                             | <i>f</i>    | 0.00005        | 0.00044        | 0.10923   | 0.01080        | 0.18563        | 0.15925        | 0.01870        | 0.13048        | 2.33900        |                     |                     |
|                             | BIC         | -29.85862      | -22.64289      | -1.92591  | -9.79507       | 2.96795        | 0.96865        | -8.98546       | 0.17147        | 13.10295       |                     |                     |
|                             | ΔBIC        | <b>0.00000</b> | 7.21573        | 27.93271  | 20.06355       | 32.82657       | 30.82727       | 20.87316       | 30.03009       | 42.96157       |                     |                     |
|                             | AIC         | -25.56268      | -18.96066      | 1.14262   | -6.11284       | 7.26389        | 4.65088        | -5.91693       | 3.85371        | 17.39889       |                     |                     |
|                             | ΔAIC        | <b>0.00000</b> | 6.60202        | 26.70530  | 19.44984       | 32.82657       | 30.21356       | 19.64575       | 29.41639       | 42.96157       |                     |                     |
| E                           | RSS         | 1.38510        | 0.44730        | 2.05310   | <b>0.40660</b> | 0.69740        | 0.88140        | 24.28010       | 2.30030        | 19.20330       | 8                   |                     |
|                             | <i>f</i>    | 0.17314        | 0.05591        | 0.25664   | 0.05083        | 0.08718        | 0.11018        | 3.03501        | 0.28754        | 2.40041        |                     |                     |
|                             | BIC         | 0.52674        | -10.59509      | -0.48352  | -11.35829      | -4.96261       | -5.16883       | 19.27893       | 2.50543        | 21.56122       |                     |                     |
|                             | ΔBIC        | 11.88502       | <b>0.76320</b> | 10.87477  | <b>0.00000</b> | 6.39568        | 6.18945        | 30.63722       | 13.86372       | 32.91950       |                     |                     |

|                     |              |          |                |          |                |          |                |          |                |          |   |                 |
|---------------------|--------------|----------|----------------|----------|----------------|----------|----------------|----------|----------------|----------|---|-----------------|
|                     | AIC          | -0.02935 | -11.07174      | -0.88073 | -11.83494      | -5.51870 | -5.64548       | 18.88172 | 2.02878        | 21.00512 |   |                 |
|                     | $\Delta$ AIC | 11.80558 | <b>0.76320</b> | 10.95421 | <b>0.00000</b> | 6.31623  | 6.18945        | 30.71666 | 13.86372       | 32.84006 |   |                 |
| F                   | RSS          | 5.02810  | 0.62390        | 5.24450  | 0.99700        | 0.85260  | <b>0.48240</b> | 5.25820  | 0.48250        | 17.01750 | 4 | 0.65240         |
|                     | $f$          | 1.25703  | 0.15598        | 1.31113  | 0.24925        | 0.21315  | 0.12060        | 1.31455  | 0.12063        | 4.25438  |   | 0.16310         |
|                     | BIC          | 10.61905 | 0.88553        | 8.01501  | 2.76057        | 3.52102  | -0.14334       | 8.02545  | -0.14251       | 15.49585 |   | -1.70839        |
|                     | $\Delta$ BIC | 10.76239 | <b>1.02887</b> | 8.15835  | 2.90391        | 3.66436  | <b>0.00000</b> | 8.16879  | <b>0.00083</b> | 15.63919 |   | <b>-1.56505</b> |
|                     | AIC          | 14.91499 | 4.56776        | 11.08354 | 6.44280        | 7.81696  | 3.53890        | 11.09398 | 3.53973        | 19.79179 |   | 0.4643          |
|                     | $\Delta$ AIC | 11.37610 | <b>1.02887</b> | 7.54465  | 2.90391        | 4.27807  | <b>0.00000</b> | 7.55508  | <b>0.00083</b> | 16.25290 |   | <b>-2.79246</b> |
| $f_{\text{SUM}}$    |              | 1.63101  | <b>0.26472</b> | 1.81587  | 0.40800        | 0.56264  | 0.48397        | 4.58619  | 0.61961        | 10.94786 |   |                 |
| Median $\Delta$ BIC |              | 11.09020 | <b>0.38160</b> | 9.00729  | 3.46360        | 5.41462  | 4.79033        | 9.45110  | 3.74059        | 23.17448 |   |                 |
| Median $\Delta$ AIC |              | 11.42410 | <b>0.38160</b> | 8.67340  | 3.46360        | 5.40195  | 4.79033        | 9.39701  | 3.74059        | 23.50837 |   |                 |

The results for the residual sum of squares (RSS), the objective function  $f$  (Eq. 6), BIC,  $\Delta$ BIC, AIC and  $\Delta$ AIC (Eq. 8 and 9) are shown for each one of the hypotheses and patients; as well as for a special case of the VP $\epsilon$ -sLT $\mu$  for patient F, assuming a saturating anti-sLT response. The sum of the objective functions over all patients is shown as  $f_{\text{SUM}}$ . In bold are highlighted: The lowest per patient values for  $f$ , as well as the scores of  $\Delta$ BIC and  $\Delta$ AIC within the range of substantial empirical support ( $<2$ ). The definitions of the hypotheses are shown in S2 Table.