

CAP256-VRC26 bnAb characteristics and autologous free virus neutralization

| Autologous free virus neutralization, IC50 [µg/ml] <sup>1</sup> |                                       |                                                    |                    |                        |                       |                        |                        |                        |                         |                     |                        |                        |                        |                       |                        |                        |                       |                           |          |                                     |
|-----------------------------------------------------------------|---------------------------------------|----------------------------------------------------|--------------------|------------------------|-----------------------|------------------------|------------------------|------------------------|-------------------------|---------------------|------------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|-----------------------|---------------------------|----------|-------------------------------------|
|                                                                 |                                       |                                                    | PI-like viruses    |                        |                       |                        |                        |                        |                         | SU-like viruses     |                        |                        |                        |                       |                        |                        |                       | PI/SU recombinant viruses |          |                                     |
| bnAbs                                                           | Heterologous breadth [%] <sup>1</sup> | AA mutations heavy chain from UCA [%] <sup>2</sup> | 6-wk <sup>PI</sup> | 23-wk.16 <sup>PI</sup> | 30-wk.8 <sup>PI</sup> | 34-wk.18 <sup>PI</sup> | 42-wk.16 <sup>PI</sup> | 48-wk.17 <sup>PI</sup> | 176-wk.C2 <sup>PI</sup> | 15-wk <sup>SU</sup> | 34-wk.31 <sup>SU</sup> | 34-wk.77 <sup>SU</sup> | 34-wk.81 <sup>SU</sup> | 42-wk.5 <sup>SU</sup> | 42-wk.18 <sup>SU</sup> | 42-wk.24 <sup>SU</sup> | 48-wk.8 <sup>SU</sup> | 176-wk.F1                 | 176-wk.4 | Autologous breadth [%] <sup>3</sup> |
| VRC26.12                                                        | 7                                     | 25.7                                               |                    | 1.6360                 | 0.6430                | 0.5243                 | 9.0680                 |                        |                         | 0.0310              |                        | 0.0087                 | 0.0077                 |                       |                        | 0.0124                 |                       |                           |          | 44                                  |
| VRC26.07                                                        | 13                                    | 25.3                                               |                    |                        | 1.6050                |                        |                        |                        |                         | 0.0027              | 0.2090                 | 0.0027                 | 0.0020                 | 0.3101                | 1.4600                 | 0.0026                 | 0.5799                |                           |          | 50                                  |
| VRC26.21                                                        | 13                                    | 32.2                                               |                    |                        | 6.1170                |                        |                        |                        |                         | 0.0009              | 0.0079                 | 0.0016                 | 0.0012                 | 0.0042                | 0.0098                 | 0.0004                 | 0.0036                |                           |          | 50                                  |
| VRC26.06                                                        | 17                                    | 22.9                                               | 0.0021             | 0.0031                 | 0.0145                | 0.0013                 | 0.0801                 | 7.4980                 |                         | 0.0212              | 0.0148                 | 0.0029                 | 0.0140                 | 4.4880                | 2.7980                 | 0.0240                 | 0.0243                |                           |          | 78                                  |
| VRC26.01                                                        | 20                                    | 20.8                                               |                    |                        |                       |                        |                        |                        |                         | 0.0599              |                        | 0.0121                 | 0.0389                 |                       |                        | 2.3420                 |                       |                           |          | 22                                  |
| VRC26.31                                                        | 20                                    | 29.5                                               |                    |                        |                       |                        |                        |                        |                         | 0.0037              | 0.1386                 | 0.0010                 | 0.0065                 | 0.2525                | 2.1160                 | 0.0012                 | 0.3417                |                           |          | 44                                  |
| VRC26.05                                                        | 22                                    | 23.4                                               |                    |                        |                       |                        |                        |                        |                         | 0.0066              | 0.1117                 | 0.0008                 | 0.0057                 | 0.0952                | 1.9920                 | 0.0019                 | 0.4459                |                           |          | 44                                  |
| VRC26.10                                                        | 24                                    | 27.8                                               | 7.5180             |                        |                       |                        |                        |                        |                         | 0.0066              | 0.3123                 | 0.0093                 | 0.0262                 | 0.5619                | 2.8350                 | 0.0054                 | 0.7466                |                           |          | 50                                  |
| VRC26.17                                                        | 28                                    | 22.9                                               |                    |                        |                       |                        |                        |                        |                         | 0.0012              | 0.0106                 | 0.0017                 | 0.0042                 | 0.0963                | 0.0433                 | 0.0010                 | 0.0193                |                           |          | 44                                  |
| VRC26.08                                                        | 46                                    | 28.8                                               |                    |                        | 6.3880                |                        |                        |                        |                         | 0.0009              | 0.0045                 | 0.0031                 | 0.0003                 | 0.0267                | 0.0341                 | 0.0009                 | 0.0620                |                           |          | 50                                  |
| VRC26.09                                                        | 46                                    | 22.9                                               |                    |                        | 5.0370                |                        |                        |                        |                         | 0.0009              | 0.0024                 | 0.0009                 | 0.0011                 | 0.0098                | 0.0466                 | 0.0010                 | 0.0794                |                           |          | 50                                  |
| VRC26.25                                                        | 63                                    | 22.8                                               | 1.9470             | 0.4936                 | 0.0006                | 0.1081                 | 0.4405                 | 0.2644                 |                         | 0.0012              | 0.0017                 | 0.0004                 | 0.0009                 | 0.0043                | 0.0050                 | 0.0004                 | 0.0019                |                           |          | 78                                  |

<sup>1</sup>IC50 obtained from autologous free virus neutralization assays on A3.01-CCR5 target cells.

<sup>2</sup>Data for heterologous breadth and amino acid mutations in the heavy chain from the unmutated common ancestor as published in Doria-Rose et al, 2015.

<sup>3</sup>The autologous breadth is based on the neutralization of the autologous viruses listed in this table.

IC50 [µg/ml]      <0.01      >0.01, <1      >1      Not sensitive