

## EQA round: PIG1/24 - IgG subclasses

Deadline: 8.3.2024

Setup: groups - R (manufacturer of kit); minimal size of the groups n = 5

|                                                                     |                                                                      |                                                   |
|---------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------|
| RoM = robust average                                                | AV = assigned value                                                  | D <sub>max</sub> = acceptable difference          |
| SD = standard deviation                                             | CVP = consensus of all participants                                  | LL = lower limit                                  |
| CV = coefficient of variation                                       | CVPG = consensus of the participants' groups                         | UL = upper limit                                  |
| N <sub>tot</sub> = total number of the results                      | U <sub>AV</sub> = expanded uncertainty of the assigned value (k = 2) | N <sub>eva</sub> = number of the results assessed |
| N <sub>out</sub> = number of the results removed before calculation |                                                                      | N <sub>suc</sub> = number of successful results   |
|                                                                     |                                                                      | S <sub>rel</sub> = relative success               |

| Test<br>Sample<br>Group             | [unit] | RoM   | SD    | CV<br>[%] | N <sub>tot</sub> | N <sub>out</sub> | Comparability                               |                 |                  |     |       | N <sub>eva</sub> | N <sub>suc</sub> | S <sub>rel</sub><br>[%] |     |
|-------------------------------------|--------|-------|-------|-----------|------------------|------------------|---------------------------------------------|-----------------|------------------|-----|-------|------------------|------------------|-------------------------|-----|
|                                     |        |       |       |           |                  |                  | AV                                          | U <sub>AV</sub> | D <sub>max</sub> | LL  | UL    |                  |                  |                         |     |
| <b>(426) IgG total</b>              | [g/L]  |       |       |           | 34               |                  |                                             |                 |                  |     |       | 34               | 34               | 100                     |     |
| <b>Sample A</b>                     |        | 9,98  | 0,52  | 5,2       | 34               |                  | CVP                                         | 9,98            | 0,22             | 15% | 8,48  | 11,5             | 34               | 34                      | 100 |
| (1) Abbott                          |        | 10,5  | 0,15  | 1,4       | 5                | 0                |                                             |                 |                  |     |       |                  | 5                |                         |     |
| (91) Binding Site                   |        | 9,42  | 0,32  | 3,4       | 10               | 0                |                                             |                 |                  |     |       |                  | 10               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 10,4  | 0,22  | 2,1       | 8                | 0                |                                             |                 |                  |     |       |                  | 8                |                         |     |
| Other                               |        |       |       |           | 11               | 0                |                                             |                 |                  |     |       |                  | 11               |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 12, 1x 58, 4x 60, 2x 162, 1x 178, 1x 179 |                 |                  |     |       |                  |                  |                         |     |
| <b>Sample B</b>                     |        | 15,9  | 0,69  | 4,3       | 34               |                  | CVP                                         | 15,9            | 0,29             | 15% | 13,5  | 18,3             | 34               | 34                      | 100 |
| (1) Abbott                          |        | 16,7  | 0,48  | 2,9       | 5                | 0                |                                             |                 |                  |     |       |                  | 5                |                         |     |
| (91) Binding Site                   |        | 15,3  | 0,53  | 3,5       | 10               | 0                |                                             |                 |                  |     |       |                  | 10               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 16,2  | 0,59  | 3,7       | 8                | 0                |                                             |                 |                  |     |       |                  | 8                |                         |     |
| Other                               |        |       |       |           | 11               | 0                |                                             |                 |                  |     |       |                  | 11               |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 12, 1x 58, 4x 60, 2x 162, 1x 178, 1x 179 |                 |                  |     |       |                  |                  |                         |     |
| <b>(427) IgG1</b>                   | [g/L]  |       |       |           | 35               |                  |                                             |                 |                  |     |       | 30               | 29               | 97                      |     |
| <b>Sample A</b>                     |        | 5,49  | 0,96  | 17        | 35               |                  |                                             |                 |                  |     |       | 30               | 29               | 97                      |     |
| (91) Binding Site                   |        | 4,72  | 0,19  | 4         | 19               | 0                | CVPG                                        | 4,72            | 0,11             | 15% | 4,01  | 5,43             | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 6,47  | 0,11  | 1,8       | 11               | 0                | CVPG                                        | 6,47            | 0,084            | 15% | 5,49  | 7,45             | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |
| <b>Sample B</b>                     |        | 10,1  | 1,2   | 12        | 35               |                  |                                             |                 |                  |     |       | 30               | 29               | 97                      |     |
| (91) Binding Site                   |        | 9,19  | 0,37  | 4,1       | 19               | 0                | CVPG                                        | 9,19            | 0,21             | 15% | 7,81  | 10,6             | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 11,2  | 0,35  | 3,1       | 11               | 0                | CVPG                                        | 11,2            | 0,26             | 15% | 9,52  | 12,9             | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |
| <b>(428) IgG2</b>                   | [g/L]  |       |       |           | 35               |                  |                                             |                 |                  |     |       | 30               | 30               | 100                     |     |
| <b>Sample A</b>                     |        | 3,6   | 0,18  | 5,1       | 35               |                  |                                             |                 |                  |     |       | 30               | 30               | 100                     |     |
| (91) Binding Site                   |        | 3,64  | 0,18  | 4,8       | 19               | 0                | CVPG                                        | 3,64            | 0,099            | 15% | 3,09  | 4,19             | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 3,51  | 0,25  | 7         | 11               | 0                | CVPG                                        | 3,51            | 0,18             | 15% | 2,98  | 4,04             | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |
| <b>Sample B</b>                     |        | 3,84  | 0,28  | 7,3       | 35               |                  |                                             |                 |                  |     |       | 30               | 30               | 100                     |     |
| (91) Binding Site                   |        | 3,69  | 0,21  | 5,6       | 19               | 0                | CVPG                                        | 3,69            | 0,12             | 15% | 3,13  | 4,25             | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 4,05  | 0,21  | 5,1       | 11               | 0                | CVPG                                        | 4,05            | 0,15             | 15% | 3,44  | 4,66             | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |
| <b>(429) IgG3</b>                   | [g/L]  |       |       |           | 35               |                  |                                             |                 |                  |     |       | 30               | 29               | 97                      |     |
| <b>Sample A</b>                     |        | 0,448 | 0,14  | 31        | 35               |                  |                                             |                 |                  |     |       | 30               | 30               | 100                     |     |
| (91) Binding Site                   |        | 0,556 | 0,033 | 5,8       | 19               | 0                | CVPG                                        | 0,556           | 0,018            | 19% | 0,45  | 0,662            | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 0,318 | 0,015 | 4,6       | 11               | 0                | CVPG                                        | 0,318           | 0,011            | 19% | 0,257 | 0,379            | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |
| <b>Sample B</b>                     |        | 0,565 | 0,16  | 28        | 35               |                  |                                             |                 |                  |     |       | 30               | 29               | 97                      |     |
| (91) Binding Site                   |        | 0,689 | 0,035 | 5,1       | 19               | 0                | CVPG                                        | 0,689           | 0,02             | 19% | 0,558 | 0,82             | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 0,415 | 0,019 | 4,7       | 11               | 0                | CVPG                                        | 0,415           | 0,014            | 19% | 0,336 | 0,494            | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |
| <b>(430) IgG4</b>                   | [g/L]  |       |       |           | 35               |                  |                                             |                 |                  |     |       | 30               | 30               | 100                     |     |
| <b>Sample A</b>                     |        | 0,582 | 0,17  | 28        | 35               |                  |                                             |                 |                  |     |       | 30               | 30               | 100                     |     |
| (91) Binding Site                   |        | 0,454 | 0,027 | 6         | 19               | 0                | CVPG                                        | 0,454           | 0,015            | 21% | 0,358 | 0,55             | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 0,755 | 0,032 | 4,2       | 11               | 0                | CVPG                                        | 0,755           | 0,024            | 21% | 0,596 | 0,914            | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |
| <b>Sample B</b>                     |        | 1,42  | 0,49  | 34        | 35               |                  |                                             |                 |                  |     |       | 30               | 30               | 100                     |     |
| (91) Binding Site                   |        | 1,04  | 0,065 | 6,3       | 19               | 0                | CVPG                                        | 1,04            | 0,037            | 21% | 0,821 | 1,26             | 19               |                         |     |
| (149) Siemens (Dade, BN, Dimension) |        | 1,91  | 0,11  | 5,9       | 11               | 0                | CVPG                                        | 1,91            | 0,083            | 21% | 1,5   | 2,32             | 11               |                         |     |
| Other                               |        |       |       |           | 5                | 0                |                                             |                 |                  |     |       |                  | 0                |                         |     |
|                                     |        |       |       |           |                  |                  | 2x 162, 2x 173, 1x 179                      |                 |                  |     |       |                  |                  |                         |     |