

## EQA round: CRP3/23 - C-Reactive Protein

Deadline: 25.8.2023

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

RoM = robust average

SD = standard deviation

CV = coefficient of variation

N<sub>tot</sub> = total number of the resultsN<sub>out</sub> = number of the results removed before calculation

AV = assigned value

CVP = consensus of all participants

U<sub>AV</sub> = expanded uncertainty of the assigned value (k = 2)D<sub>max</sub> = acceptable difference

LL = lower limit

UL = upper limit

N<sub>eva</sub> = number of the results assessedN<sub>suc</sub> = number of successful resultsS<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>(100) C-reactive protein</b>     | [mg/L] |      |      |           | 251              |                  |               |                 |                  |     |      |      | 251              | 249              | 99  |
| <b>Sample A</b>                     |        | 17,3 | 1,4  | 8,2       | 251              |                  | CVP           | 17,3            | 0,22             | 24% | 13,1 | 21,5 | 251              | 249              | 99  |
| (1) Abbott                          |        | 18,4 | 0,55 | 3         | 55               | 0                |               |                 |                  |     |      |      | 55               |                  |   |
| (12) Beckman Coulter                |        | 17,6 | 1,6  | 8,9       | 7                | 0                |               |                 |                  |     |      |      | 7                |                  |   |
| (58) Beckman Coulter (AU)           |        | 17   | 0,5  | 3         | 32               | 0                |               |                 |                  |     |      |      | 32               |                  |   |
| (60) Roche                          |        | 16,2 | 0,67 | 4,1       | 101              | 0                |               |                 |                  |     |      |      | 101              |                  |   |
| (149) Siemens (Dade, BN, Dimension) |        | 17,4 | 0,37 | 2,1       | 9                | 0                |               |                 |                  |     |      |      | 9                |                  |   |
| (162) Siemens (Atellica)            |        | 19,8 | 0,88 | 4,4       | 14               | 0                |               |                 |                  |     |      |      | 14               |                  |   |
| (177) Mindray                       |        | 17   | 2,8  | 17        | 6                | 0                |               |                 |                  |     |      |      | 6                |                  |   |
| (178) DiaSys                        |        | 17   | 1,1  | 6,5       | 5                | 0                |               |                 |                  |     |      |      | 5                |                  |   |
| (179) Siemens                       |        | 19,6 | 1,3  | 6,4       | 8                | 0                |               |                 |                  |     |      |      | 8                |                  |   |
| Other                               |        |      |      |           | 14               | 0                |               |                 |                  |     |      |      | 14               |                  |   |
|                                     |        |      |      |           |                  |                  |               |                 |                  |     |      |      |                  |                  | 1x 36, 2x 46, 1x 49, 1x 61, 2x 70, 1x 75, 2x 91, 2x 116, 1x 152, 1x 158 |
| <b>Sample B</b>                     |        | 48,2 | 3,6  | 7,4       | 251              |                  | CVP           | 48,2            | 0,55             | 24% | 36,6 | 59,8 | 251              | 250              | 100   |
| (1) Abbott                          |        | 50   | 1,5  | 3         | 55               | 0                |               |                 |                  |     |      |      | 55               |                  |   |
| (12) Beckman Coulter                |        | 54,3 | 2,6  | 4,8       | 7                | 0                |               |                 |                  |     |      |      | 7                |                  |   |
| (58) Beckman Coulter (AU)           |        | 53,1 | 1,9  | 3,6       | 32               | 0                |               |                 |                  |     |      |      | 32               |                  |   |
| (60) Roche                          |        | 45,5 | 1,8  | 3,9       | 101              | 0                |               |                 |                  |     |      |      | 101              |                  |   |
| (149) Siemens (Dade, BN, Dimension) |        | 47,4 | 5,3  | 11        | 9                | 0                |               |                 |                  |     |      |      | 9                |                  |   |
| (162) Siemens (Atellica)            |        | 47,8 | 1,3  | 2,7       | 14               | 0                |               |                 |                  |     |      |      | 14               |                  |   |
| (177) Mindray                       |        | 47,5 | 3,4  | 7,2       | 6                | 0                |               |                 |                  |     |      |      | 6                |                  |   |
| (178) DiaSys                        |        | 50,1 | 2    | 3,9       | 5                | 0                |               |                 |                  |     |      |      | 5                |                  |   |
| (179) Siemens                       |        | 47,9 | 1,3  | 2,8       | 8                | 0                |               |                 |                  |     |      |      | 8                |                  |   |
| Other                               |        |      |      |           | 14               | 0                |               |                 |                  |     |      |      | 14               |                  |   |
|                                     |        |      |      |           |                  |                  |               |                 |                  |     |      |      |                  |                  | 1x 36, 2x 46, 1x 49, 1x 61, 2x 70, 1x 75, 2x 91, 2x 116, 1x 152, 1x 158 |