

## EQA round: CD341/24 - Population of CD34+ Cells

Deadline: 13.5.2024

Setup: groups - R (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>(692) CD 34+ (absolute count)</b> | [count/μL]            |       |       |           | 20               |                  |               |                              |                  |     |       |       | 20               | 16               | 80                      |
| <b>Sample A</b>                      |                       | 9,63  | 1,4   | 14        | 20               |                  | CVP           | 9,63                         | 0,76             | 25% | 7,22  | 12,1  | 20               | 19               | 95                      |
| (12) Beckman Coulter                 |                       | 9,77  | 1,1   | 11        | 10               | 0                |               |                              |                  |     |       |       | 10               |                  |                         |
| (88) Becton Dickinson                |                       | 8,28  | 0,76  | 9,1       | 5                | 0                |               |                              |                  |     |       |       | 5                |                  |                         |
| Other                                |                       |       |       |           | 5                | 0                |               |                              |                  |     |       |       | 5                |                  |                         |
|                                      |                       |       |       |           |                  |                  |               | 2x 0, 1x 63, 2x 190          |                  |     |       |       |                  |                  |                         |
| <b>Sample B</b>                      |                       | 3,96  | 1     | 26        | 20               |                  | CVP           | 3,96                         | 0,58             | 50% | 1,98  | 5,94  | 20               | 17               | 85                      |
| (12) Beckman Coulter                 |                       | 4,55  | 1,8   | 39        | 10               | 0                |               |                              |                  |     |       |       | 10               |                  |                         |
| (88) Becton Dickinson                |                       | 3,46  | 0,65  | 19        | 5                | 0                |               |                              |                  |     |       |       | 5                |                  |                         |
| Other                                |                       |       |       |           | 5                | 1                |               |                              |                  |     |       |       | 5                |                  |                         |
|                                      |                       |       |       |           |                  |                  |               | 2x 0, 1x 63, 2x 190          |                  |     |       |       |                  |                  |                         |
| <b>(691) CD 34+ (relative count)</b> | [%]                   |       |       |           | 20               |                  |               |                              |                  |     |       |       | 20               | 16               | 80                      |
| <b>Sample A</b>                      |                       | 0,624 | 0,093 | 15        | 20               |                  | CVP           | 0,624                        | 0,051            | 25% | 0,468 | 0,78  | 20               | 18               | 90                      |
| (12) Beckman Coulter                 |                       | 0,65  | 0,086 | 13        | 11               | 0                |               |                              |                  |     |       |       | 11               |                  |                         |
| (88) Becton Dickinson                |                       | 0,603 | 0,12  | 20        | 7                | 0                |               |                              |                  |     |       |       | 7                |                  |                         |
| Other                                |                       |       |       |           | 2                | 0                |               |                              |                  |     |       |       | 2                |                  |                         |
|                                      |                       |       |       |           |                  |                  |               | 2x 190                       |                  |     |       |       |                  |                  |                         |
| <b>Sample B</b>                      |                       | 0,034 | 0,009 | 27        | 20               |                  | CVP           | 0,034                        | 0,005            | 50% | 0,017 | 0,051 | 20               | 17               | 85                      |
| (12) Beckman Coulter                 |                       | 0,036 | 0,02  | 55        | 11               | 0                |               |                              |                  |     |       |       | 11               |                  |                         |
| (88) Becton Dickinson                |                       | 0,034 | 0,006 | 17        | 7                | 0                |               |                              |                  |     |       |       | 7                |                  |                         |
| Other                                |                       |       |       |           | 2                | 0                |               |                              |                  |     |       |       | 2                |                  |                         |
|                                      |                       |       |       |           |                  |                  |               | 2x 190                       |                  |     |       |       |                  |                  |                         |
| <b>(690) WBC</b>                     | [·10 <sup>9</sup> /L] |       |       |           | 20               |                  |               |                              |                  |     |       |       | 20               | 19               | 95                      |
| <b>Sample A</b>                      |                       | 1,53  | 0,062 | 4         | 20               |                  | CVP           | 1,53                         | 0,034            | 15% | 1,3   | 1,76  | 20               | 19               | 95                      |
| (63) Sysmex                          |                       | 1,56  | 0,062 | 3,9       | 12               | 0                |               |                              |                  |     |       |       | 12               |                  |                         |
| Other                                |                       |       |       |           | 8                | 0                |               |                              |                  |     |       |       | 8                |                  |                         |
|                                      |                       |       |       |           |                  |                  |               | 4x 12, 2x 88, 1x 177, 1x 190 |                  |     |       |       |                  |                  |                         |
| <b>Sample B</b>                      |                       | 11,6  | 0,28  | 2,4       | 20               |                  | CVP           | 11,6                         | 0,15             | 15% | 9,86  | 13,4  | 20               | 19               | 95                      |
| (63) Sysmex                          |                       | 11,7  | 0,22  | 1,9       | 12               | 0                |               |                              |                  |     |       |       | 12               |                  |                         |
| Other                                |                       |       |       |           | 8                | 0                |               |                              |                  |     |       |       | 8                |                  |                         |
|                                      |                       |       |       |           |                  |                  |               | 4x 12, 2x 88, 1x 177, 1x 190 |                  |     |       |       |                  |                  |                         |