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| NHS Greater Glasgow & Clyde Immunology and Neuroimmunology | | |
| QF_59 | Uncertainty of Measurement Summary Table for Complement Function Assays | Version: 2 |
| Author: Lauren Hennessy | Authoriser: Sylvia Arthur / Moira Thomas | Date of Issue: 17/06/22 |

Uncertainty of Measurement: Summary table for complement function assays

Uncertainty of measurement (UoM) is calculated using internal quality control (IQC)

The raw data and calculations can be found at the following location: <Y:\COMMON\1IMM&NI\Quality\Uncertainty of Measurement>

| Analyte | C1 inhibitor function |
|---|---------------------------------|
| | C1EFN IQC |
| Mean (x) | 46.3 |
| Number of measurements (n) | 11 |
| Estimated Standard Deviation (s) | 7.83 |
| Coefficient of Variance (%CV) | 16.92% |
| Coverage factor (k) to define a confidence level of 95% | 2 |
| | |
| Relative standard expanded uncertainty (U) | ± 33.8% |
| | |
| Uncertainty of measurement example (using IQC) | 46.3 ± 15.65% (30.6 – 61.9%) |
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| Analyte | Classical complement function |
|---|---|
| | CMPFNA04 IQC |
| Mean (x) | 640.1 |
| Number of measurements (n) | 21 |
| Estimated Standard Deviation (s) | 71.83 |
| Coefficient of Variance (%CV) | 11.22% |
| Coverage factor (k) to define a confidence level of 95% | 2 |
| | |
| Relative standard expanded uncertainty (U) | ± 22.4% |
| | |
| Uncertainty of measurement example (using IQC) | 640.1 ± 143.65 CH100U/mL (496.5 – 783.8 CH100U/mL) |
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| Analyte | Alternative complement function |
|---|---------------------------------|
| | CMPFNC04 IQC |
| Mean (x) | 96.5 |
| Number of measurements (n) | 22 |
| Estimated Standard Deviation (s) | 8.82 |
| Coefficient of Variance (%CV) | 9.14% |
| Coverage factor (k) to define a confidence level of 95% | 2 |
| | |
| Relative standard expanded uncertainty (U) | ± 18.3% |
| | |
| Uncertainty of measurement example (using IQC) | 96.5 ± 17.64% (78.9- 114.2%) |
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For the details of the calculation and UoM protocol please refer to document QP_5: Uncertainty of Measurement Protocol.