# CICLOSPORIN
## International Proficiency Testing Scheme

**PT SAMPLES:**

368A — Was an aliquot of a pool of blood samples from patients who had received ciclosporin.

368B — Was an aliquot of ciclosporin-free blood.

368C — Was an aliquot of ciclosporin-free blood to which ciclosporin was added to produce a final concentration of 800ng/mL.

**RESULTS:**
Results given as less than a specific concentration, e.g. <25, are not included in the statistics. Centres with results greater than ±3Z from the method mean have been omitted from the statistics due to their grossly abnormal results.
CL = clotted, TF = technical failure, NS = no sample, NR = no result, ND = none detected, ILL = illegible result.

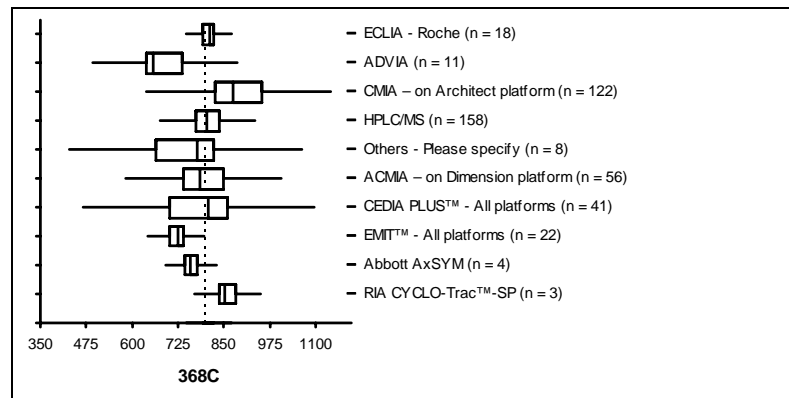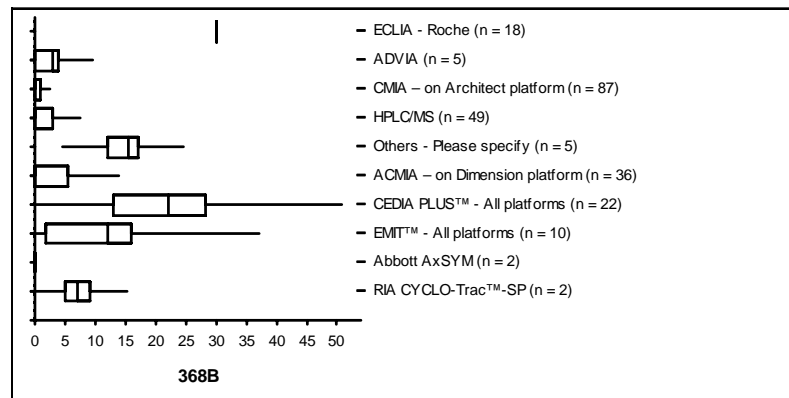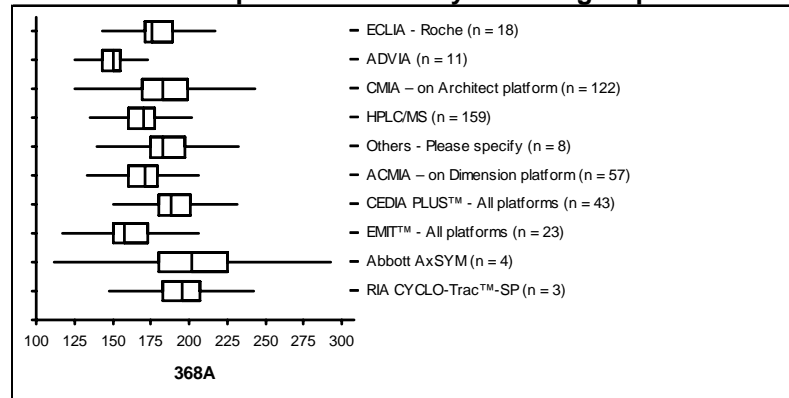| Method No. | Method | Method group |
|---|---|---|
| 1 | HPLC/UV | HPLC/MS |
| 2 | RIA CYCLO-Trac™-SP | RIA CYCLO-Trac |
| 3 | FPIA - on AxSYM™ platform (Monoclonal) | Abbott AxSYM |
| 4 | FPIA - on TDx™ platform (Monoclonal) | FPIA Abbott TDx |
| 5 | EMIT ® Siemens - All platforms | EMIT |
| 6 | CEDIA PLUS™ - All platforms | CEDIA |
| 7 | ACMIA Siemens – on Dimension platform | ACMIA |
| 9 | CMIA – on Architect platform | CMIA |
| 10 | HPLC/MS or HPLC/MS/MS | HPLC/MS |
| 11 | ADVIA - on Siemens Centaur™ | ADVIA |
| 50 | All other methods | Others |

**HISTOGRAM PLOT**
This displays the frequency of a value in the data set. The x axis spans mean – 3Z to mean +3Z. The Z Value is the number of standard deviations your result is from the method mean.
Each bar of the histogram plot presents the number of results falling within each section. Your result is included as a vertical line in the histogram. If the result for a sample is not a discrete number (e.g. <25, or "not detected") it cannot be plotted.

**BOX & WHISKER PLOT**
The results for each sample circulated are summarised as a Box and Whisker plot for each analytical method. *Note*: if the result for a sample is not a discrete number (e.g. <25, or "not detected") it cannot be included in the calculation. The default boxplot consists of a box, whiskers and outliers. A line drawn across the box is the median. The lower edge of the box is drawn at the first quartile (Q1, the 25th percentile) and the upper edge at the third quartile (Q3, the 75th percentile). The whiskers, the lines extending from the top and bottom of the box, join the highest and lowest values that occur in the regions 1.5 x the interquartile range (Q3 - Q1) above and below the third and first quartiles. All values that fall outside these extremes are outliers.

## Box and Whisker plots of results by method group



**368A**

Legend: ECLIA - Roche (n = 18); ADVIA (n = 11); CMIA - on Architect platform (n = 122); HPLC/MS (n = 159); Others - Please specify (n = 8); ACMIA – on Dimension platform (n = 57); CEDIA PLUS™ - All platforms (n = 43); EMIT™ - All platforms (n = 23); Abbott AxSYM (n = 4); RIA CYCLO-Trac™-SP (n = 3)

**368B**

Legend: ECLIA - Roche (n = 18); ADVIA (n = 5); CMIA – on Architect platform (n = 87); HPLC/MS (n = 49); Others - Please specify (n = 5); ACMIA – on Dimension platform (n = 36); CEDIA PLUS™ - All platforms (n = 22); EMIT™ - All platforms (n = 10); Abbott AxSYM (n = 2); RIA CYCLO-Trac™-SP (n = 2)

**368C**

Legend: ECLIA - Roche (n = 18); ADVIA (n = 11); CMIA – on Architect platform (n = 122); HPLC/MS (n = 158); Others - Please specify (n = 8); ACMIA – on Dimension platform (n = 56); CEDIA PLUS™ - All platforms (n = 41); EMIT™ - All platforms (n = 22); Abbott AxSYM (n = 4); RIA CYCLO-Trac™-SP (n = 3)

## Summary data by method group

**RIA CYCLO-Trac™-SP**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 194.8 | 7.1 | 862.7 |
| SD | 23.7 | 5.8 | 46.2 |
| CV | 12.2% | 81.7% | 5.4% |

**Abbott AxSYM**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 202.6 | 0.0 | 765.5 |
| SD | 28.6 | 0.1 | 49.5 |
| CV | 14.1% | 10.0% | 6.5% |

**EMIT™ - All platforms**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 160.1 | 10.1 | 723.1 |
| SD | 16.4 | 7.9 | 60.5 |
| CV | 10.2% | 78.2% | 8.4% |

**CEDIA PLUS™ - All platforms**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 188.8 | 20.8 | 789.3 |
| SD | 15.7 | 10.2 | 98.5 |
| CV | 8.3% | 49.0% | 12.5% |

**ACMIA – on Dimension platform**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 168.9 | 3.4 | 795.2 |
| SD | 13.7 | 5.5 | 98.7 |
| CV | 8.1% | 161.8% | 12.4% |

**Others**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 186.0 | 20.7 | 712.9 |
| SD | 49.7 | 19.2 | 249.8 |
| CV | 26.7% | 92.8% | 35.0% |

**HPLC/MS**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 168.8 | 1.2 | 806.0 |
| SD | 13.9 | 2.2 | 51.7 |
| CV | 8.2% | 183.3% | 6.4% |

**CMIA – on Architect platform**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 183.9 | 0.4 | 889.6 |
| SD | 22.3 | 0.6 | 98.1 |
| CV | 12.1% | 150.0% | 11.0% |

**ADVIA**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 153.6 | 3.5 | 704.7 |
| SD | 16.4 | 4.5 | 95.2 |
| CV | 10.7% | 128.6% | 13.5% |

**ECLIA - Roche**

| Method | PT A | PT B | PT C |
|---|---|---|---|
| Mean | 178.6 | 30.0 | 813.6 |
| SD | 12.6 | 0.0 | 41.5 |
| CV | 7.1% | 0.0% | 5.1% |