

A study of the conditions of measurement required to evaluate bias in analytical results illustrated by the use of data from a multi-round, blind-duplicated, proficiency test

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Supplementary information

Raw data

See Excel spreadsheet ODonnell Supplementary Info.xlsx

Youden two-sample plots

For completeness all plots are given below, including those found in the main paper.

Two-sample plots from each round (different samples)

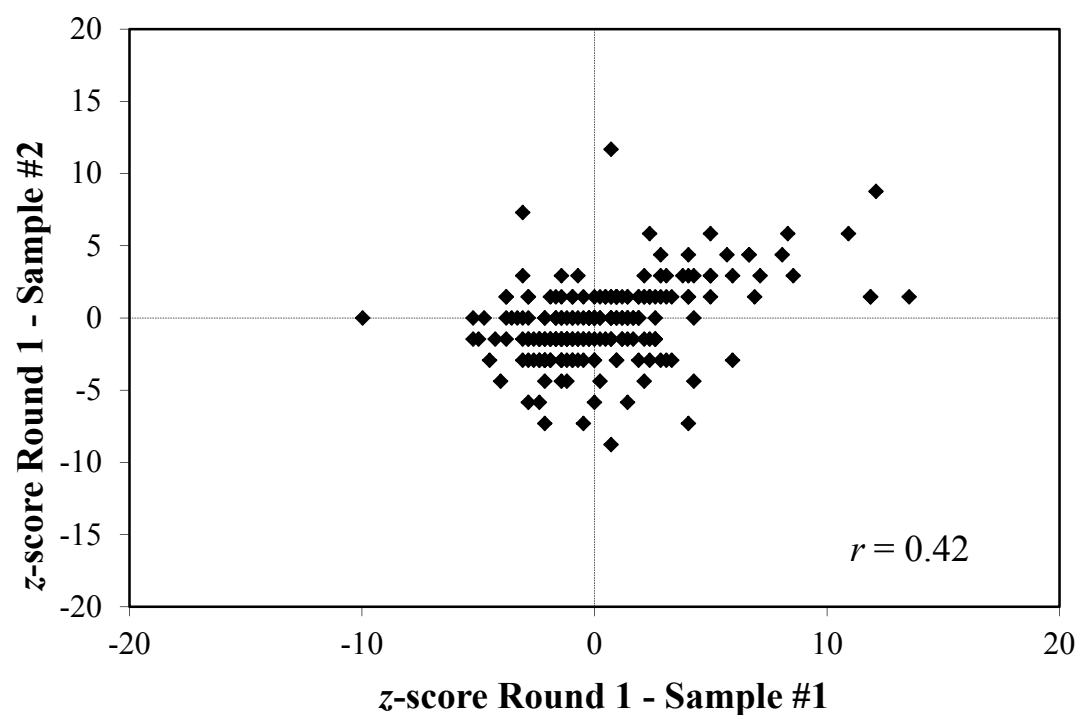


Figure S1. Youden two-sample plot of z-scores (Eq 2) for Round 1 of the proficiency program U39 conducted by the RCPA Pty Ltd for creatinine in urine.

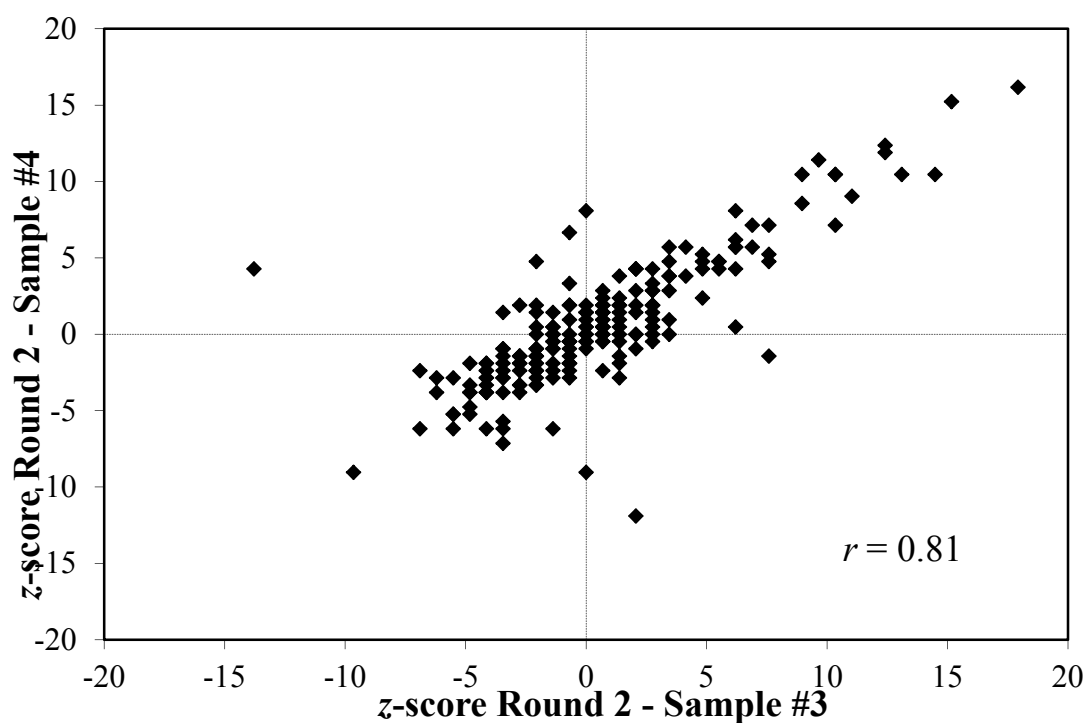


Figure S2. Youden two-sample plot of z-scores (Eq 2) for Round 2 of the proficiency program U39 conducted by the RCPA Pty Ltd for creatinine in urine.

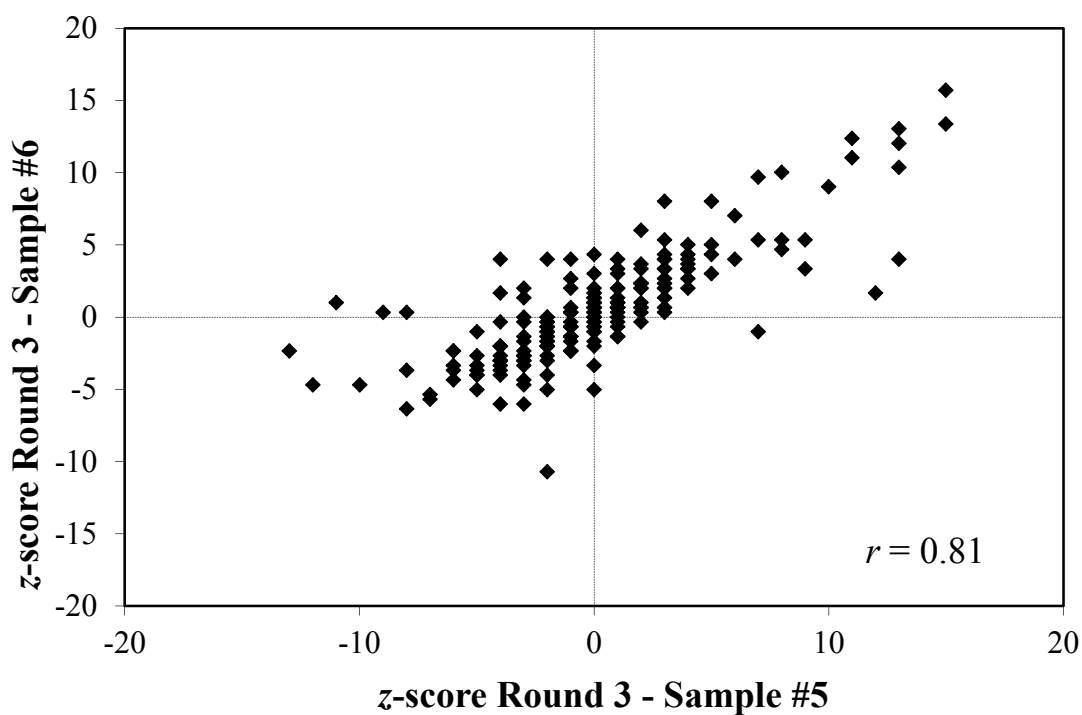


Figure S3. Youden two-sample plot of z-scores (Eq 2) for Round 3 of the proficiency program U39 conducted by the RCPA Pty Ltd for creatinine in urine.

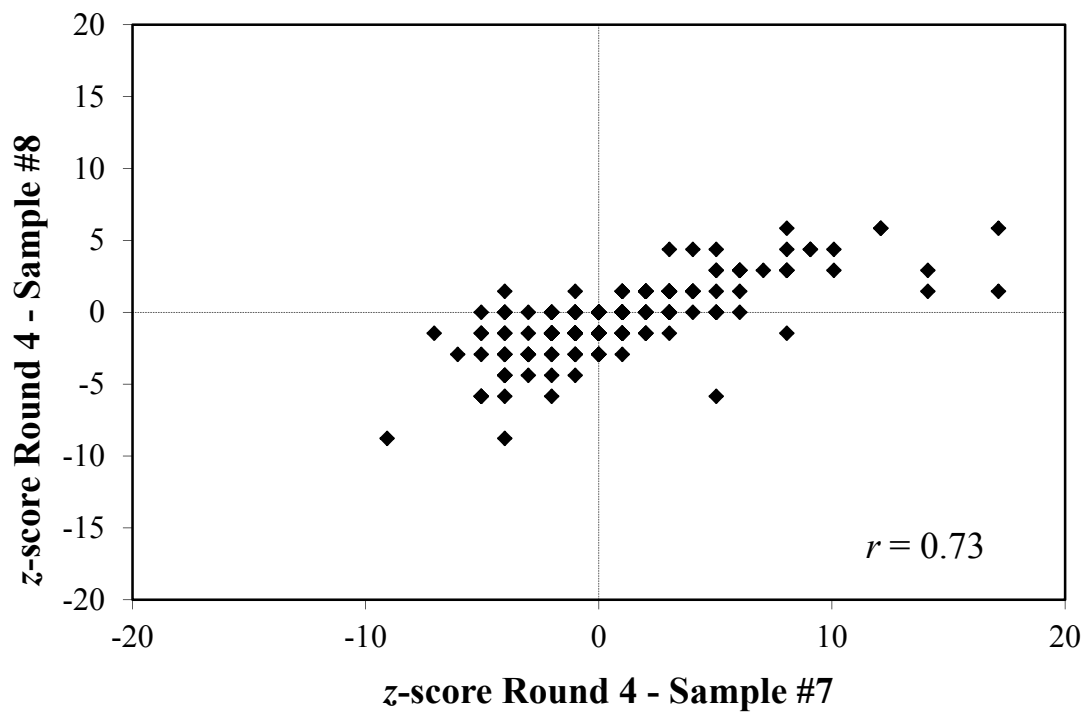


Figure S4. Youden two-sample plot of z-scores (Eq 2) for Round 4 of the proficiency program U39 conducted by the RCPA Pty Ltd for creatinine in urine.

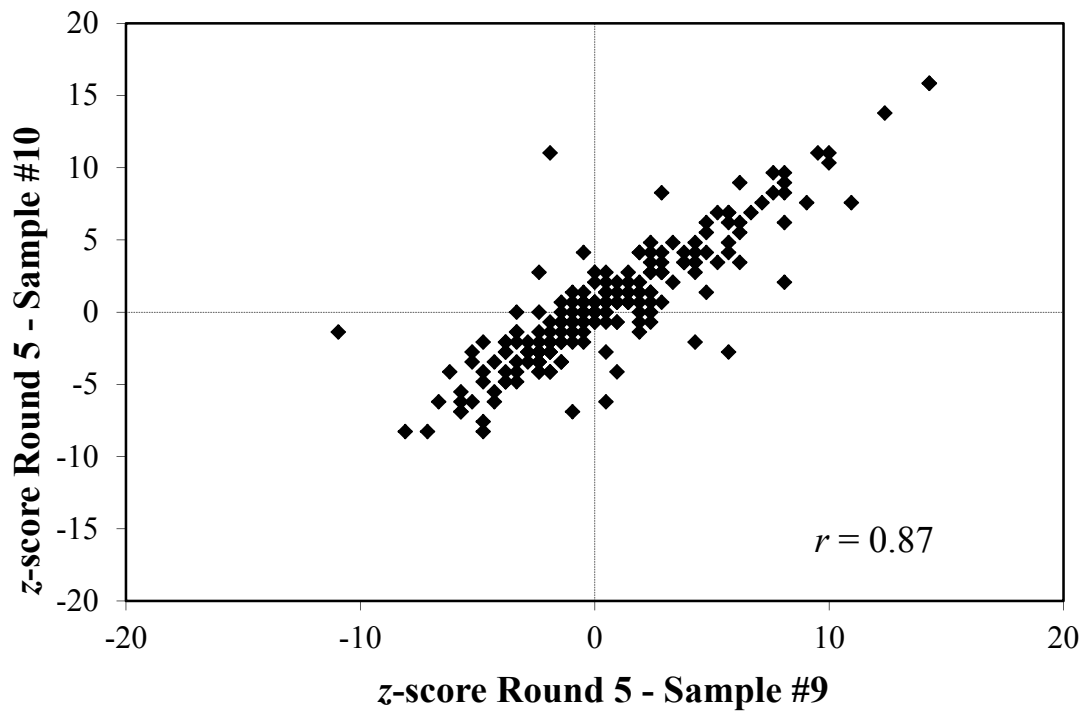


Figure S5. Youden two-sample plot of z-scores (Eq 2) for Round 5 of the proficiency program U39 conducted by the RCPA Pty Ltd for creatinine in urine.

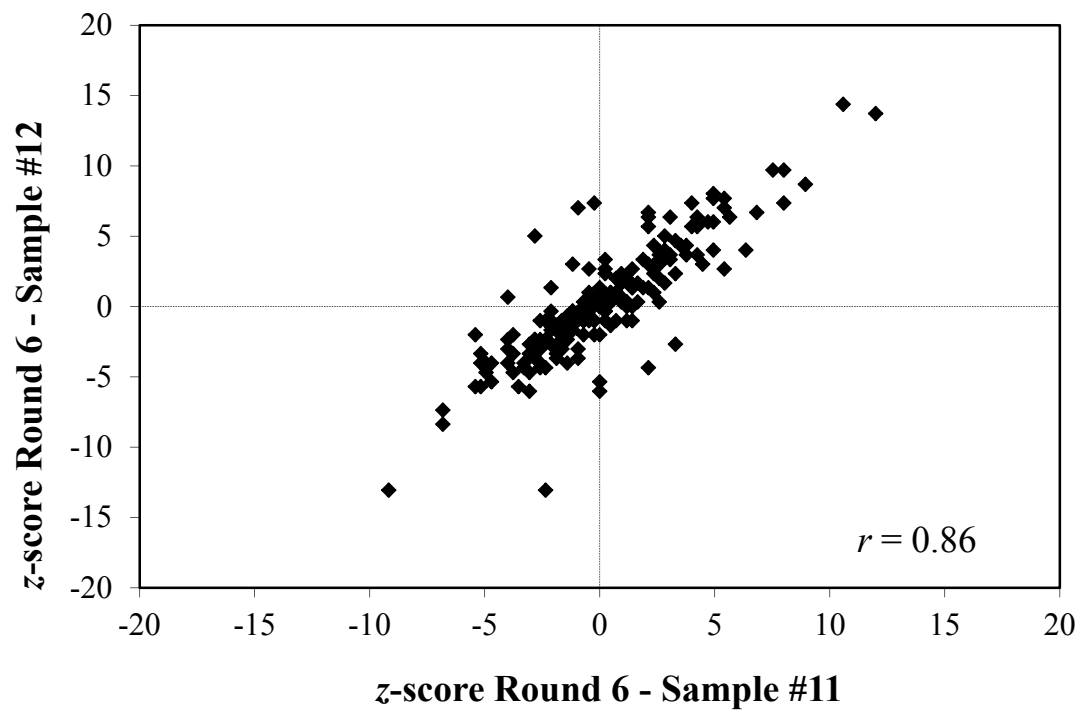


Figure S6. Youden two-sample plot of z-scores (Eq 2) for Round 6 of the proficiency program U39 conducted by the RCPA Pty Ltd for creatinine in urine.

Two-sample plots for the same sample used in different rounds

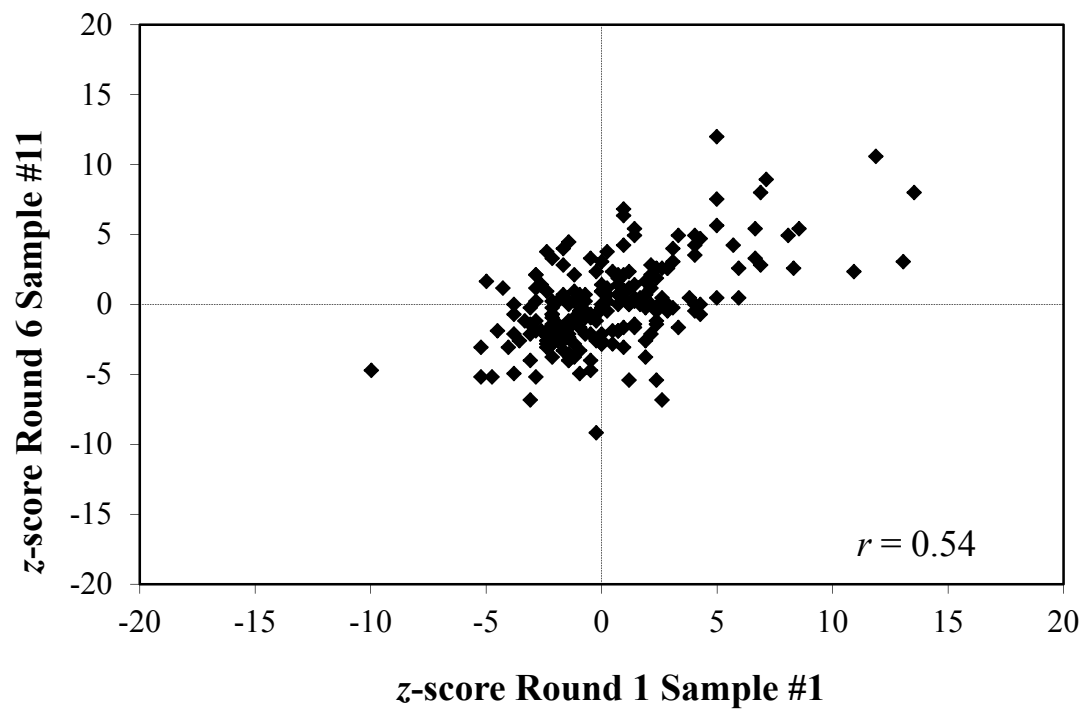


Figure S7. Youden two-sample plots for identical samples repeated across rounds: Sample #1 Round 1, Sample #11 Round 6.

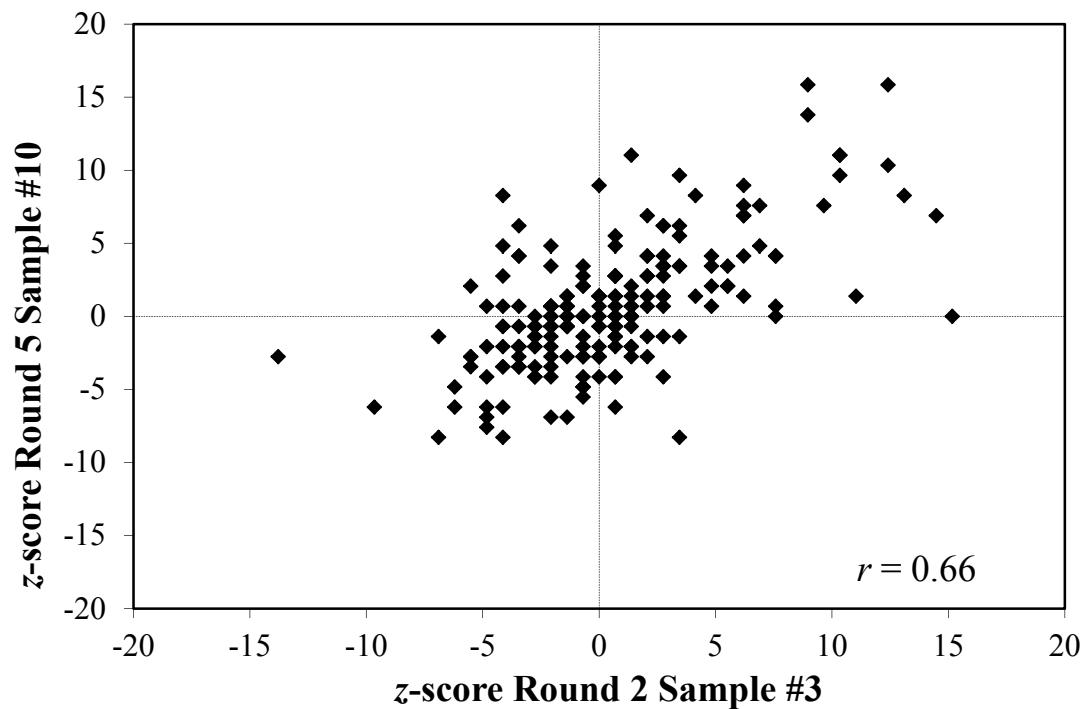


Figure S8. Youden two-sample plots for identical samples repeated across rounds: Sample #3 Round 2, Sample #10 Round 5.

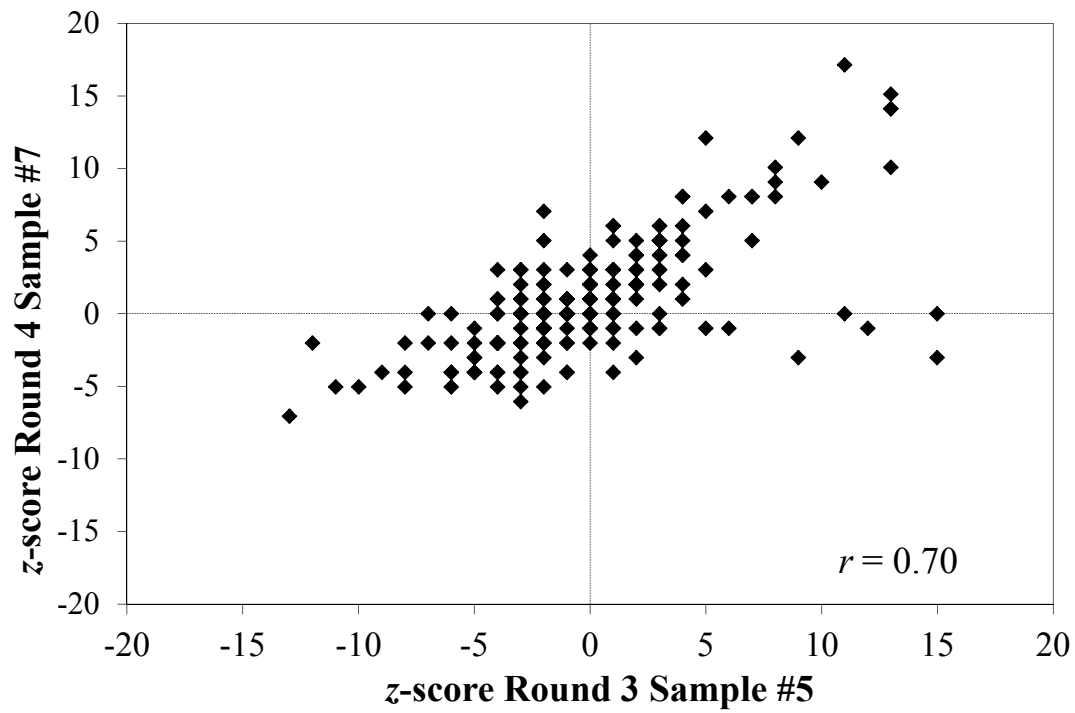


Figure S9. Youden two-sample plots for identical samples repeated across rounds: Sample #5 Round 3, Sample #7 Round 4.

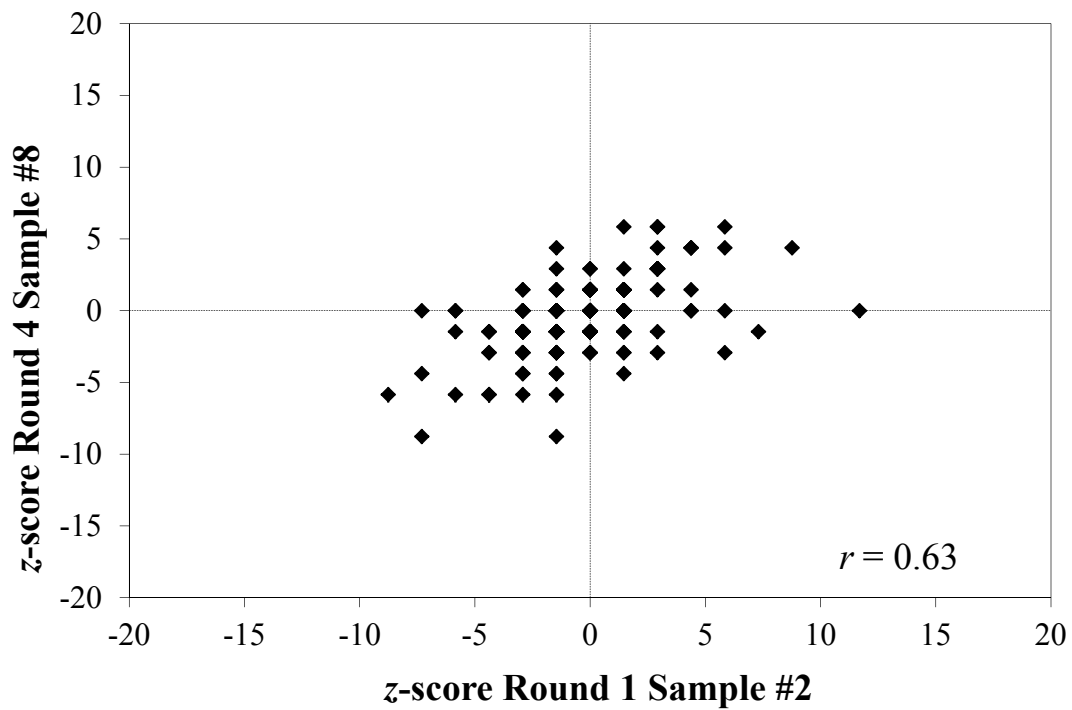


Figure S10. Youden two-sample plots for identical samples repeated across rounds: Sample #2 Round 1, Sample #8 Round 4.

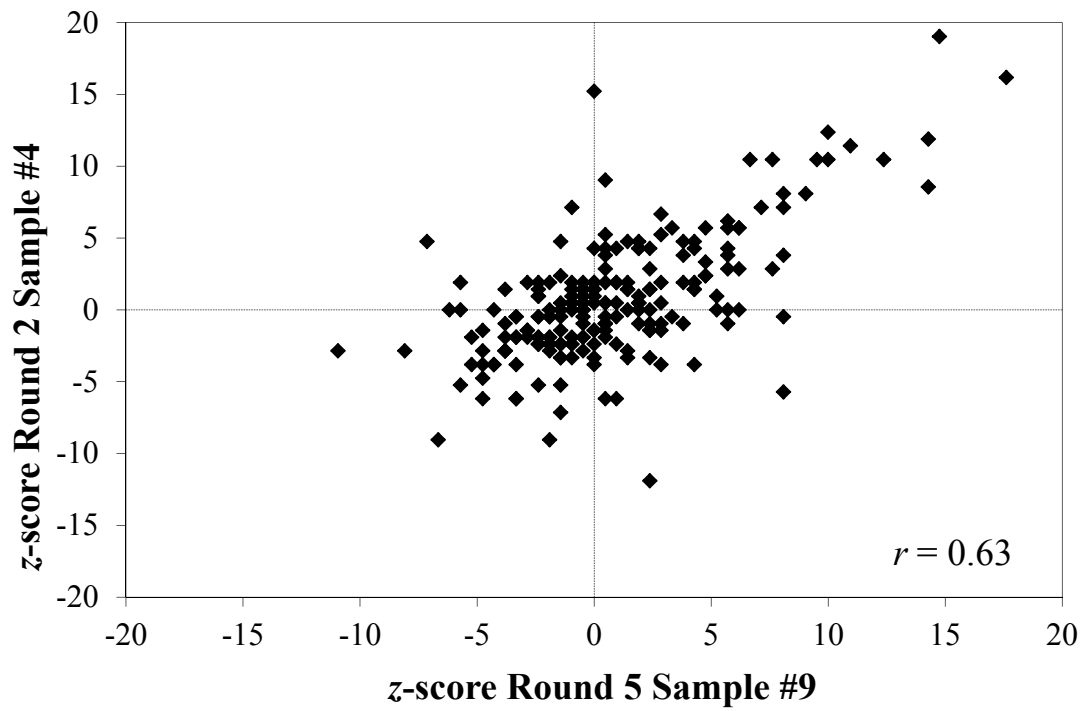


Figure S11. Youden two-sample plots for identical samples repeated across rounds: Sample #4 Round 2, Sample #9 Round 5.

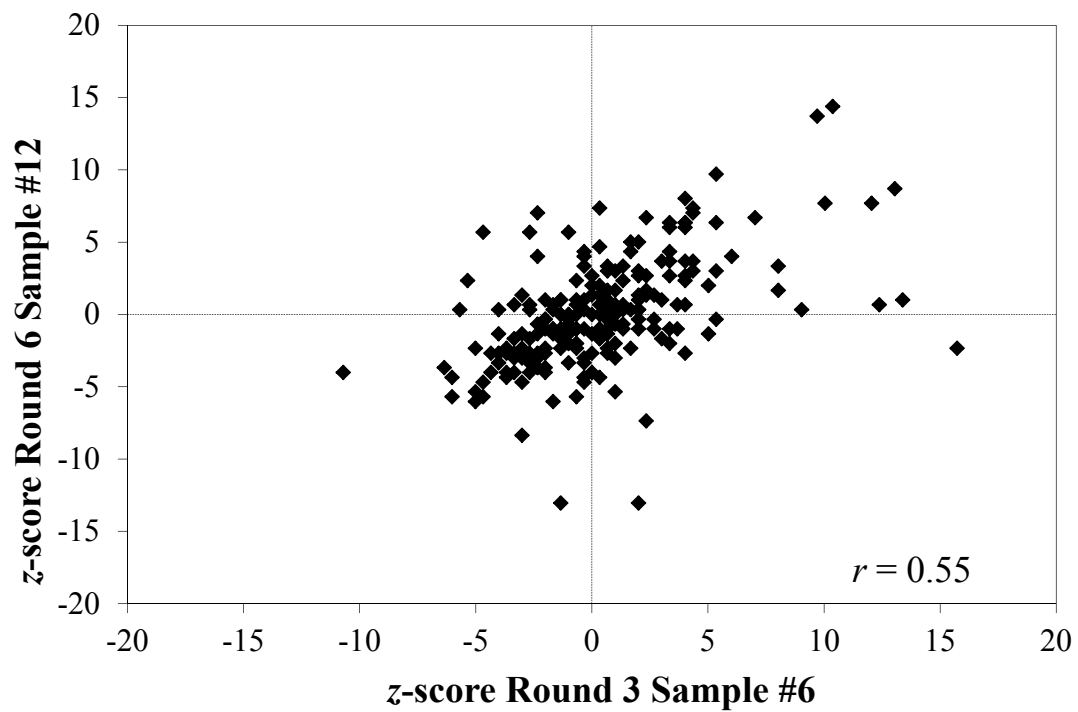


Figure S12. Youden two-sample plots for identical samples repeated across rounds: Sample #6 Round 3, Sample #12 Round 6.

Other plots

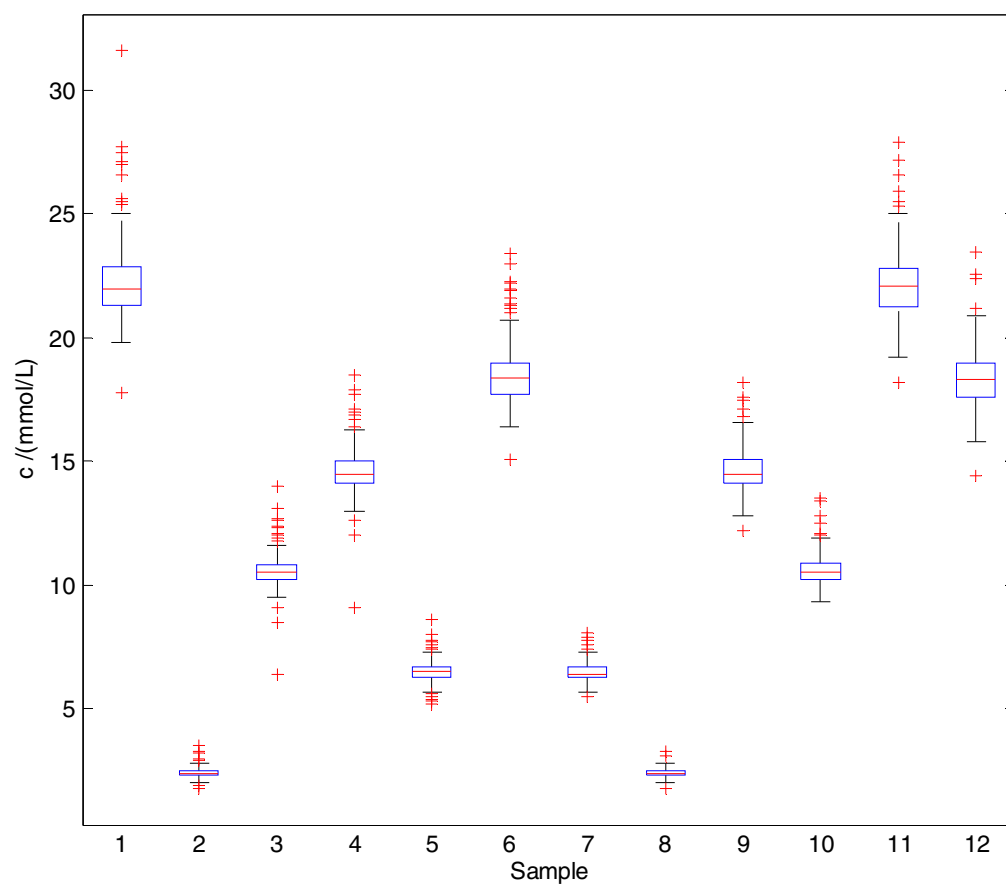


Figure S13. Box and whisker plots of the raw data.

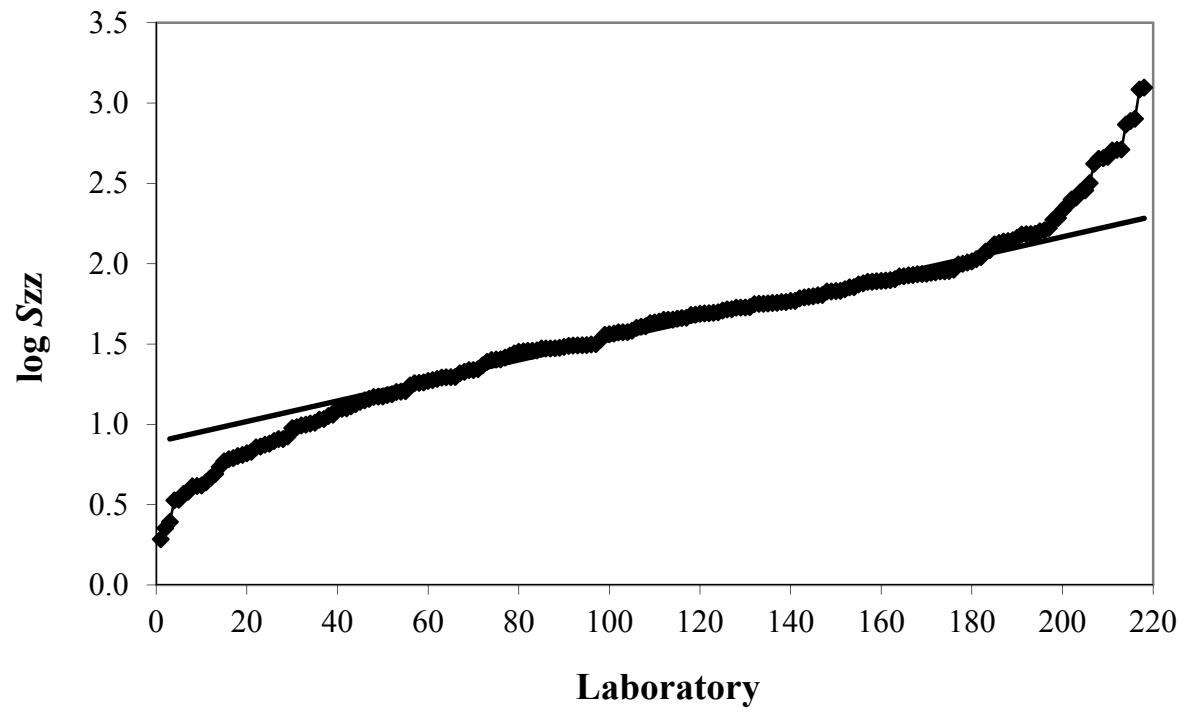


Figure S14. Ordered $\log(S_{zz})$ showing deviation from a χ^2 distribution at the extremes.