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**Committee Actions**

The Committee was involved in the critical review and editing of the statistical content of "Estimates of Measurement Uncertainty from Method Validation Data." The Committee was also involved in the design and review of most precollaborative and collaborative protocols and collaborative study reports for the methods committees. In addition, several working groups were formed to address statistical issues proposed by the Official Methods Board that are associated with

the statistical validity of procedures used in method validation initiatives.

Since the software for analyzing collaborative study data was currently being revised, the Committee agreed that the outlier procedure and critical values for the so-called Grubbs test, that forms the basis for aberrant data removal, should be reviewed and if necessary alternatives should be offered to replace those currently used in the software. The outlier procedure used in the software, though not the Grubbs test, does appear to remove a single outlying value from data at a significance level similar to that used for the Grubbs test. Since these tests are so different in application and critical values, a formal comparative evaluation on data of various degrees of variability is proposed for a future project.

The task to develop more statistically rigorous alternative procedures that may be used to replace indefinite values (e.g., results below the method's limit of quantitation) that are reported as data values for statistical analysis is ongoing. Currently, the indefinite sign is simply being ignored and method performance values are estimated using the results that include the data with the indefinite sign removed or as missing values. Because these actions may have an adverse impact on the method performance statistics, this task was proposed to become an action item in the coming year. This task was not undertaken and remained tabled until a later date.

The Committee was offered the task to develop a procedure to validly compare reproducibility variances for 2 methods arising from the same collaborative study. This task is still ongoing.

Jung K. Lee and Foster McClure are currently developing formulas that may be used to determine the uncertainty of the uncertainty statistics that are used to characterize method performance that are obtained from collaborative studies. It is hoped that a paper on this subject, which is being prepared for publication, will enter AOAC's publication stream within a couple of months.

At the last Committee meeting, the members were informed that there was a need to develop statistical procedures to compare methods in qualitative studies in terms of their performance indicators. Currently, McNemar's test is used to compare the proportions positive for 2 methods, which is not applicable for comparing 2 methods in terms of their sensitivity, specificity, false positive and false negative rates. Since this was not an assigned task, no progress is reported.

The Committee was informed of the need to tutor incoming Statistical Advisors on AOAC requirements in the design and analysis of collaborative studies. The members were invited to give suggestions on how this may be achieved without significantly involving the advisors to the methods committees. One prime suggestion was that a formal class setting, using the Study Director's Manual as a reference, not to exceed 4 h, should be sufficient to achieve the goal. In that way, the Study Director and the advisor would be aware of the same techniques and policy.

