Update on the phase 2 NHANES III study and prevalence of latex-specific IgE antibodies

On January 3, 1997, the FDA and Diagnostics Products Corporation signed a Cooperative Research and Development Agreement (CRADA), "Testing Human Sera for Total and Specific IgE for Detection and Survey of Allergenic Diseases." The CRADA was an effort to increase the understanding of the distribution of latex-specific IgE antibodies in the general population, as well as common allergens, such as ragweed. The study was conducted by the FDA's Dallas District Laboratory. An internal audit, completed June 28, 2000, of the Dallas District Laboratory study includes the following key points:

- State of the art methodology was used for all phases of the CRADA study. Newer methodology was put in place as it was available during the conduct of the testing. CRADA protocols were followed.
- Based on the prescribed protocol, the laboratory conducted a final "fitness for use" check using pre-CRADA samples. Submission and subsequent review of these pre-CRADA data did not identify any quality concerns related to the methodology, instrumentation, application, or conduct of the analysis.
- The CRADA was not designed to evaluate the instrument manufacturer's methodology, hardware, or software. No study information was generated to suggest that there are any problems with products made by Diagnostic Products Corporation.
- During conduct of this CRADA, events occurred that impacted negatively on the project:
 - The Dallas laboratory was identified for closure.
 - The principal investigator transferred to another laboratory.
 - The replacement analysts were not knowledgeable on all aspects of the method and equipment operation.
 - The QA data and records for the study were inadvertently discarded during the closure of the Dallas laboratory.

- Post-analysis data review uncovered numerous potential errors and faults. Dallas personnel endeavored to correct many of the errors. The subsequent audit uncovered additional errors. The nature of these errors indicates potential problems with instrument calibration and real time data production review.
- It is not possible to separate the truly valid data from questionable data in any meaningful manner. That is, the various data sets (pre-CRADA, CRADA, duplicate run data, latex re-run data) can not be separated into qualitative vs. quantitative, early runs vs. later runs, or any subdivision, which would guarantee entirely valid (scientifically defensible) data.

In the final analysis, the final CRADA data are unsuitable for scientific purposes.

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