

DIFFERENCES IN ELECTROPHEROGRAM PEAK HEIGHTS REPORTED BY DIFFERENT VERSIONS OF THE GENESCAN® SOFTWARE

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DNA profiling using STRs on the 310 and 3100 Genetic Analyzers routinely generates electropherograms that are analyzed with the GeneScan® software available from the instrument’s manufacturer, Applied Biosystems. Users have been able to choose from three different smoothing options that have been known to result in significant differences in the peak heights that are reported. Improvements in the underlying algorithm of the most recent version of the software also result in significant and somewhat predictable differences in peak height values. Laboratories that have performed validation studies using older versions of GeneScan® should either reanalyze the data generated in those validation studies with the newest version of the software or otherwise take into consideration the systematically higher peak height values obtained as they begin following the recommendation of the manufacturer and use the new algorithm.