Terminology

The epidemiological cut-off values calculated by the software should be referred to by the acronym $CO_{WT.}$

The acronyms ECOFF and ECV are reserved for epidemiological cut-off values that have been set by international agencies such as EUCAST or CLSI.

Significance of the standard deviation check

The standard deviation (SD) that appears in cell E 21 is that of the normalized distribution of wild type zones and represents a measure of the precision of the distribution being analysed. Accurate epidemiological cutoff values cannot be derived from excessively imprecise data.

The inherent precision of distributions produced by disc diffusion assays are dependent on the temperature at which the assays were performed. In this software separate limits for SD are suggested for distributions obtained at different temperatures.

It should be noted that these suggested upper limits were calculated from distributions generated by single laboratories. Therefore, they should only be applied to distributions that have been generated by individual laboratories. **Currently no suggested limit have been developed for distributions generated for aggregations of data obtained by multiple laboratories.**

It should also be noted that, as these suggested upper limits were calculated from analyses of a limited number of single laboratory distributions, therefore, they should be treated as provisional. As more distributions become available the provisional limits may be modified.

Temperature	Provisional upper limit for S D
35°C	< 3.4mm
28°C	< 4.6mm
22°C	< 6.5mm
<22°C	no suggested limit

An automatic warning will appear if the SD for the distribution being analysed exceeds the provisional limit for the temperature employed.

Any CO_{WT} values calculated from a distribution for which the SD values exceeds the relevant provisional limit should be treated as suspect and should be referred to only as a **tentative estimate**.

It is recommended that any single laboratory distribution for which the SD exceeds the relevant provisional limit should **be excluded** from any multi-laboratory aggregation being used to calculate an epidemiological cut-off value.

In situations where analysis of a distribution results in an SD value that exceeds or is close to this limit the data shared said should be examined for the most probable source of impression. The most commonly encountered sources are those derived from imprecision in the performance of susceptibility tests or from an excessive taxonomic heterogeneity in the strain set of being analysed.