

TNT progression analysis in OCULUS perimeters OCULUS embraces **Threshold Noiseless Trend**

Threshold Noiseless Trend (TNT), a new software module for objective glaucoma progression analysis has been recently integrated in all OCULUS perimeters. In the absence of a gold standard for progression in the visual field, **TNT** relies on multiple statistical criteria in order to establish significant modifications. Changes in the threshold values of the individual visual field locations, in the mean deviation (MD) and in the cumulative defect curve are subjected to independent statistical evaluation. In support of the diagnosis, a concise report of the combined assessment is presented including all relevant numerical parameters. The statistical analysis is performed independent of the threshold strategy used in the individual examinations; however, best results are expected in the case of averaged threshold strategies, like the OCULUS **SPARK threshold strategy**.

At the beginning, the **TNT** program loads all available visual field examinations performed in similar conditions during the whole follow-up period. The software automatically recognizes findings influenced by learning effects and removes these from the analysis. The examiner can override this resolution or manually discard individual examinations. The built-in threshold stabilization filter enables **TNT** to confirm progression after a relatively small number of tests. The implementation of regression analysis offers clear advantages in the sensitivity of the method compared to event based algorithms. **TNT** can distinguish between diffuse (generalized) and focal (localized) changes in the visual field, giving it the ability to detect progression in early stages of glaucoma.



TNT – Main window