**Damato Testvision validation - An internet-based test for the detection of visual field loss**

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**Purpose:** The aim of the present study was to determine if the internet-based program Damato Testvision (DT), www.testvision.org, adequately detects visual field loss from glaucoma.

**Methods:** DT is available in three versions and was tested on 97 patients. The procedure was performed with a laptop connected to a computer monitor and a mouse placed on a height adjustable table. To determine sensitivity and specificity DT was compared to HFA printouts classified according to the gold standard: the glaucoma staging system (GSS).

**Results:** A total of 342 DT Standard tests were performed on 115 eyes, each performing a maximum of three tests. Median DT completion time was significantly (p < 0.0001) faster for the control group, 86 sec, compared to the DT completion for the glaucoma group, 125 sec. Three different algorithms, combining test number 1, 2 and 3, were designed to interpret DT’s performance and compared to GSS. Overall, DT Standard achieved a high agreement with GSS; AUC ranging from 0.875-0.900. DT Standard 1+2 compared to GSS achieved sensitivity and specificity of 64.2% (49.80%-76.9%) and 98.1% (89.90%-99.95%) respectively, when comparing no disease to glaucomatous loss (AUC: 0.900).

**Conclusions:** Our study indicates that DT may be a promising tool to detect visual field defects in a pre-selected population. The test is successful without prior training of the test person but minimal computer knowledge is advisable. The authors believe that Internet based visual field examination may play a role as an easy accessible and affordable test. With further development, DT could be a tool for glaucoma screening in the home setting. Future studies need to evaluate DTs performance in the general population without prior selection.