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Post-blink tear film dynamics in healthy and dry eyes during spontaneous blinking

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Original Research

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FOOTNOTES

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ABSTRACT

Purpose: The aim was to investigate the dynamics of post-blink tear film leveling in natural blinking conditions (NBC) for healthy subjects and those diagnosed with dry eye syndrome (DES) and to relate this phase to the tear film surface quality (TFSQ) before the following blink.

Methods: The study included 19 healthy persons and 10 with dry eye, grouped according to symptoms and signs observed during examination. Lateral shearing interferometry was used to examine TFSQ. Post-blink tear film dynamics was modeled by an exponential function, characterized by the decay parameter *b*, and a constant, describing the level of the stabilized TFSQ. Pre-next-natural-blink TFSQ dynamics was modeled with a linear trend, described by a parameter *A*.