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**Take-home message**

Short-term wear of a non-coaxial ring-focus myopia control soft lens did not significantly alter blink dynamics, tear film stability, or ocular surface protection in myopic children.

**Background**

- Myopia control soft lenses must balance optical efficacy with ocular surface comfort.
- Acute changes in blinking or tear stability may influence early tolerance in children.
- Objective, non-invasive assessment helps quantify the short-term ocular surface response.

**Aim**

To evaluate the acute effects of a non-coaxial ring-focus soft myopia control lens on blink behavior, tear film stability, and ocular surface protection in myopic children.

**Methods**

- Lens-free baseline was followed by short-term wear of a non-coaxial ring-focus soft contact lens.
- All measurements were obtained with the MYAH non-invasive ocular surface analysis system.
- Lens-free and lens-on conditions were compared within the same participant.

**Outcome Measures**

- Blink rate
- Mean blink duration
- Inter-blink interval
- Non-invasive tear break-up time (NI-TBUT)
- Tear meniscus height (TMH)
- Ocular protection index (OPI)

**Results**

- Blink rate, mean blink duration, and inter-blink interval did not differ significantly between lens-free and lens-on conditions (all  $p > 0.05$ ).
- NI-TBUT and TMH remained unchanged after short-term lens wear.
- OPI showed no significant difference between conditions ( $p = 0.58$ ).
- Mean OPI values remained above the threshold for adequate ocular surface protection.

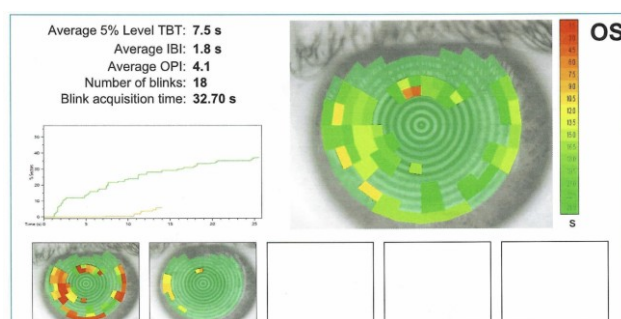
**Conclusion**

Short-term wear of this non-coaxial ring-focus myopia control lens did not induce clinically meaningful changes in blink dynamics, tear film stability, or ocular surface protection in myopic children.

**Participants and Design**

<b>n = 28</b>	<b>8–13</b>	<b>10.5 ± 1.5</b>
children	years	mean age
		Prospective within-subject study
		Right eye analyzed in each participant
<b>-2.55 ± 0.85</b>		
mean spherical equivalent (D)		

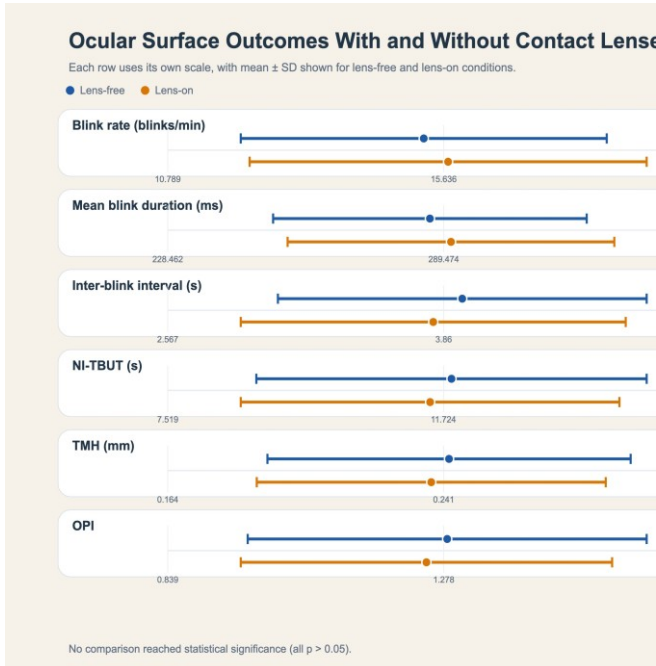
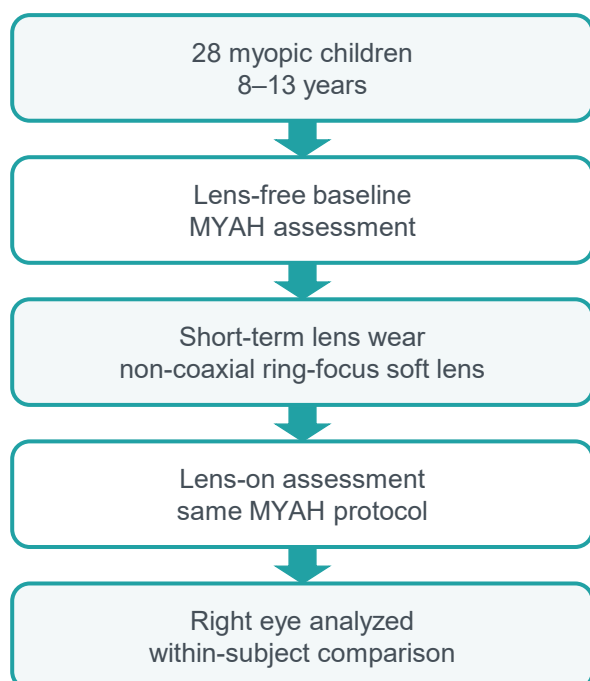
**Lens comparison (MYAH system)**



**Clinical relevance**

Acute wear appears well tolerated from an ocular surface and blink behavior perspective.

**Study workflow**



**Outcome summary**

Outcome	Lens-free, mean ± SD	Lens-on, mean ± SD	p value
Blink rate (blinks/min)	15.286 ± 3.214	15.714 ± 3.487	0.412
Mean blink duration (ms)	286.421 ± 34.672	291.083 ± 36.115	0.338
Inter-blink interval (s)	3.947 ± 0.864	3.811 ± 0.902	0.295
NI-TBUT (s)	11.842 ± 2.973	11.516 ± 2.884	0.441
TMH (mm)	0.243 ± 0.051	0.238 ± 0.049	0.367
OPI	1.284 ± 0.318	1.251 ± 0.296	0.580

All measurements were non-invasive.