## SUPPLEMENTARY MATERIALS

**TITLE:** The Combined Impact of Intense Pulsed Light Combined and 3% Diquafosol Ophthalmic Solution on Evaporative Dry Eye: A Randomized Control Study

Authors: Jiayan Chen<sup>1</sup>, Guanghao Qin<sup>1</sup>, Liangzhe Li<sup>1</sup>, Yifan Qi<sup>1</sup>, Yang Xia<sup>1</sup>, Qing Zhang<sup>2</sup>, Yi Wu<sup>3</sup>, Yue You<sup>4</sup>, Lanting Yang<sup>5</sup>, Naici Guo<sup>6</sup>, Salissou Moutari<sup>7</sup>, Jonathan E Moore<sup>8</sup>, Shaochong Bu<sup>2</sup>, Ling Xu<sup>1</sup>, Wei He<sup>1</sup>, Sile Yu<sup>1</sup>, Emmanuel Eric Pazo<sup>1\*</sup>, Xingru He<sup>1\*</sup>

<sup>1</sup>He Eye Specialist Hospital, Shenyang, China

<sup>2</sup> Tianjin Medical University, Tianjin, China

<sup>3</sup> China Medical University, Shenyang, China

- <sup>4</sup> Sinqi Eye Hospital, Shenyang, China
- <sup>5</sup> Wenzhou Medical University, Wenzhou, China
- <sup>6</sup> University of St Andrews, St Andrews, United Kingdom
- <sup>7</sup> Queens University Belfast, Belfast, United Kingdom
- <sup>8</sup> Cathedral Eye Clinic, Belfast, United Kingdom

## \* Correspondence:

- 1. Emmanuel Eric Pazo, Department of Ophthalmology, He Eye Specialist Hospital, Shenyang, China.110034. ericpazo@hsyk.com.cn
- 2. Xingru He, School of Public Health, He University, Shenyang, China.110034. hexingru@hsyk.com.cn



## **CONSORT 2010 checklist of information to include when reporting a randomised trial\***

Section/Topic	ltem No	Checklist Item	Reported on page No
Title and abstract			
	1a	Identification as a randomised trial in the title	1
	1b	Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts)	2
Introduction			
Background and	2a	Scientific background and explanation of rationale	4
objectives	2b	Specific objectives or hypotheses	5
Methods			
Trial docian	3a	Description of trial design (such as parallel, factorial) including allocation ratio	6
Trial design	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	6
Participants	4a	Eligibility criteria for participants	6
1 anicipants	4b Settings and locations where the data were collected	6	
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered	7
Outcomes	6a	Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed	8
	6b	Any changes to trial outcomes after the trial commenced, with reasons	N/A
Sample size	7a	How sample size was determined	N/A
	7b	When applicable, explanation of any interim analyses and stopping guidelines	N/A
Randomisation:			
Sequence	8a	Method used to generate the random allocation sequence	7
generation	8b	Type of randomisation; details of any restriction (such as blocking and block size)	N/A
Allocation		Mechanism used to implement the random allocation sequence (such as sequentially numbered	
concealment mechanism	9	containers), describing any steps taken to conceal the sequence until interventions were assigned	7
Implementation	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions	7

Blinding	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how	7
	11b	If relevant, description of the similarity of interventions	7
Statistical	12a	Statistical methods used to compare groups for primary and secondary outcomes	9
methods	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	N/A
Results			
Participant flow (a	13a	For each group, the numbers of participants who were randomly assigned, received intended	10
diagram is strongly	138	treatment, and were analysed for the primary outcome	10
recommended)	13b	For each group, losses and exclusions after randomisation, together with reasons	N/A
Recruitment	14a	Dates defining the periods of recruitment and follow-up	5
	14b	Why the trial ended or was stopped	N/A
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group	23
Numbers	16	For each group, number of participants (denominator) included in each analysis and whether the	23
analysed	10	analysis was by original assigned groups	
Outcomes and	17a	For each primary and secondary outcome, results for each group, and the estimated effect size and its	23
estimation	Πa	precision (such as 95% confidence interval)	
Connation	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	N/A
Ancillary analyses	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses,	N/A
		distinguishing pre-specified from exploratory	
Harms	19	All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	12
Discussion			
Limitations	20	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of	15
		analyses	10
Generalisability	21	Generalisability (external validity, applicability) of the trial findings	16
Interpretation	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant	16
······	·	evidence	-
Other information			
Registration	23	Registration number and name of trial registry	18
Protocol	24	Where the full trial protocol can be accessed, if available	18
Funding	25	Sources of funding and other support (such as supply of drugs), role of funders	17

\*We strongly recommend reading this statement in conjunction with the CONSORT 2010 Explanation and Elaboration for important clarifications on all the items. If relevant, we also recommend reading CONSORT extensions for cluster randomised trials, non-inferiority and equivalence trials, non-pharmacological treatments, herbal interventions, and pragmatic trials. Additional extensions are forthcoming: for those and for up to date references relevant to this checklist, see <u>www.consort-statement.org</u>.