CONSORT 2010

Corneal Tissue Consumption per Diopter Decreases with Increasing Correction in Customized Femtosecond LASIK: A Prospective Randomized Double-Blind Contralateral-Eye Study

Section/Topic	Item No	Checklist item	Reported on page/line No
Title and abstract	1a	Identification as a randomized trial in the title	Title
	1b	Structured summary of trial design, methods, results, and conclusions	Abstract
Introduction – Background and objectives	2a	Scientific background and explanation of rationale	Introduction
	2b	Specific objectives or hypotheses	Last paragraph of the Introduction
Methods – Trial design	3a	Description of trial design (parallel, factorial) including allocation ratio	Methods, Patients and Study Design
	3b	Important changes to methods after trial commencement, with reasons	Not applicable — the protocol was not modified after the trial began
Participants	4a	Eligibility criteria for participants	Methods, Patients and Study Design
	4b	Settings and locations where the data were collected	Abstract, Setting; Methods, Patients and Study Design
Interventions	5	The interventions for each group with sufficient details to allow replication	Methods, Randomization and Surgical Technique
Outcomes	6a	Completely defined pre-specified primary and secondary outcome measures	Methods, Patients and Study Design and Outcome Measures
	6b	Any changes to trial outcomes after the trial commenced, with reasons	Not applicable — the primary and secondary endpoints did not change
Sample size	7a	How sample size was determined	Methods, Sample Size
	7b	Explanation of any interim analyses and stopping guidelines	Not applicable — no interim analyses were planned
Randomization – Sequence generation	8a	Method used to generate the random allocation sequence	Methods, Randomization and Surgical Technique
	8b	Type of randomization; details of any restriction	Methods, Randomization and Surgical Technique
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence, and whether concealed until interventions assigned	Methods, Randomization and Surgical Technique
Implementation	10	Who generated the allocation sequence, who enrolled participants, and who assigned participants to interventions	Methods, Randomization and Surgical Technique

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Blinding	11a	If done, who was blinded after assignment to interventions and how	Methods, Randomization and Surgical Technique
	11b	If relevant, description of the similarity of interventions	Methods, Randomization and Surgical Technique
Statistical methods	12a	Statistical methods used to compare groups for primary and secondary outcomes	Methods, Statistical Analysis
	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	Methods, Statistical Analysis
Results – Participant flow	13a	For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analyzed for the primary outcome	Results; CONSORT flow diagram
	13b	For each group, losses and exclusions after randomization, together with reasons	Methods, Patients and Study Design; CONSORT flow diagram
Recruitment	14a	Dates defining the periods of recruitment and follow-up	Methods, Patients and Study Design — patients were enrolled between November 2022 and February 2023
	14b	Why the trial ended or was stopped	Not applicable — the trial ran to completion as planned
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group	Results; Table 1
Numbers analyzed	16	For each group, number of participants included in each analysis and whether the analysis was by original assigned groups	Results
Outcomes and estimation	17a	For each primary and secondary outcome, results for each group, and the estimated effect size and its precision	Results; Tables 2 and 3
	17b	For binary outcomes, presentation of both absolute and relative effect sizes	Not applicable — the outcome is a continuous measure (μm/D), not a binary one
Ancillary analyses	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses	Results, post hoc comparisons between myopia subgroups
Harms	19	All important harms or unintended effects in each group	Methods, exclusion criteria; no intraoperative complications occurred in this cohort
Discussion – Limitations	20	Trial limitations, addressing sources of potential bias, imprecision, and multiplicity of analyses	Discussion, limitations paragraph
Generalizability	21	Generalizability (external validity, applicability) of the trial findings	Discussion, limitations paragraph
Interpretation	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	Discussion and Conclusions

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Other information – Registration	23	Registration number and name of trial registry	Abstract, Trial Registration
Protocol	24	Where the full trial protocol can be accessed, if available	Publicly available at the ISRCTN registry (isrctn.com/ISRCTN78153726)
Funding	25	Sources of funding and other support; role of funders	Declarations, Funding