

Surgeon Techniques in Non-Femtosecond Laser-Assisted Cataract Surgery (TechNoFLACS) Questionnaire: Face and Content Validation

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Introduction

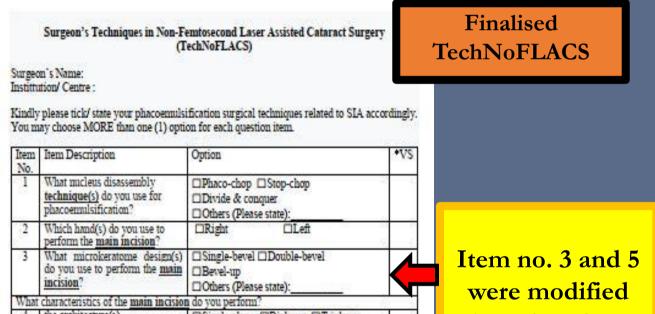
BACKGROUND

- A qualified measuring tool is defined by the reliability and validity of its measures.
- Validation process is crucial to minimise measurement error of a tool.¹
- Surgically induced astigmatism (SIA) in post nonfemtosecond laser-assisted cataract surgery (NoFLACS) is influenced by surgeon techniques.²
- Surgeon technique information related to SIA is not properly documented in surgical notes.

OBJECTIVE

 To validate the Surgeon Techniques in Non-Femtosecond Laser-Assisted Cataract Surgery questionnaire (TechNoFLACS).

Results & Discussion



TOOL DEVELOPMENT

Methodology

 Initial tool developed based on peer-reviewed literatures on several domains: i) incision, ii) sideport, iii) NoFLACS techniques, iv) surgeon position, and v) surgeon experience.

FACE AND CONTENT VALIDATION

 Subject matter experts (SMEs): 10 refractive surgeons (5 SMEs for face validation and the other 5 SMEs for content validation) from Ministry of Health, Malaysia.

Face Validation

A self-administered survey was conducted among 5 SMEs. They were required to:

- Rate each item based on style and format consistency, language clarity, readability, sentence syntax and practicality, and suitability of terminology used.
- To provide feedbacks on difficulty and ambiguity of each item in the
- 'comment/suggestion' section.

Content Validation

It was conducted using Lawshe's method.³

- SMEs rated each item as 'Essential', 'Essential but not necessary' or 'Not necessary'.
- Each rated item was given CVR value.

 $CVR = \frac{n_e - N/2}{N/2}$

me activectore(s)	Others (Please state):
the type(s)	Clear comeal Scleral Limbus Near clear comeal (mm from limbus) Others (Please state):
the size(s)	□1.8mm □2.2mm □2.4mm □2.75mm □3.2mm □Others (Please state):
the location(s)	□ 70° □ 90° □ 110° □ 0/180° □ Others (Please state):
t characteristics of the sideport	incision do you perform?
the number (s)	□One □Two □Others (Please state):
the location(s) ~in relation to the main incision~	□<90° □90-110° □>110°
	the type(s) the size(s) the location(s) t characteristics of the <u>sideport</u> the number (s) the location(s)

*Leave blank, for investigator use only.

VS - variation score. TVS - total variation score

Face validation: enables SMEs to provide their expert opinion for the questionnaire improvement.



based on face validation outcomes.

- Initial TechNoFLACS consisted of 15 items with CVI 0.61.
- 6 items (CVR < 1) were removed.
- Hence, finalised TechNoFLACS comprised of 9 items with (CVI=1)

After modification, the <u>content validity</u> proved that all the SMEs achieved consensus in their

assessment.

 n_e = number of SMEs rating a measurement item as "essential". N = the total number of SMEs who were involved in the content validity process.

- Items with CVR value less than 1 were excluded.⁴
- Content validity index (CVI) was determined as mean of CVR values of all items.
- CVI value > 0.80 indicates good content validity of overall questionnaire.⁵

Conclusion

- The TechNoFLACS has gone through proper face and content validation
- Therefore, the TechNoFLACS is a valid tool to be used for research related to surgeon techniques.

References

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