

# Scleral Lens Experience in Patients with Keratoconus (SCOPE Study)

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## PURPOSE

Scleral lenses are often used to treat corneal irregularity, with keratoconus a common indication for scleral lens wear<sup>1</sup>. We asked keratoconus patients their experiences with treatments for their keratoconus. This analysis focuses on their reported experiences with scleral lenses.

## METHODS

An electronic survey was developed by the SCOPE (Scleral Lenses in Current Ophthalmic Practice an Evaluation) group.

Distributed by the National Keratoconus Foundation.

Links to the survey were shared among keratoconus support groups.

The survey was open between October 2016 and March 2017.

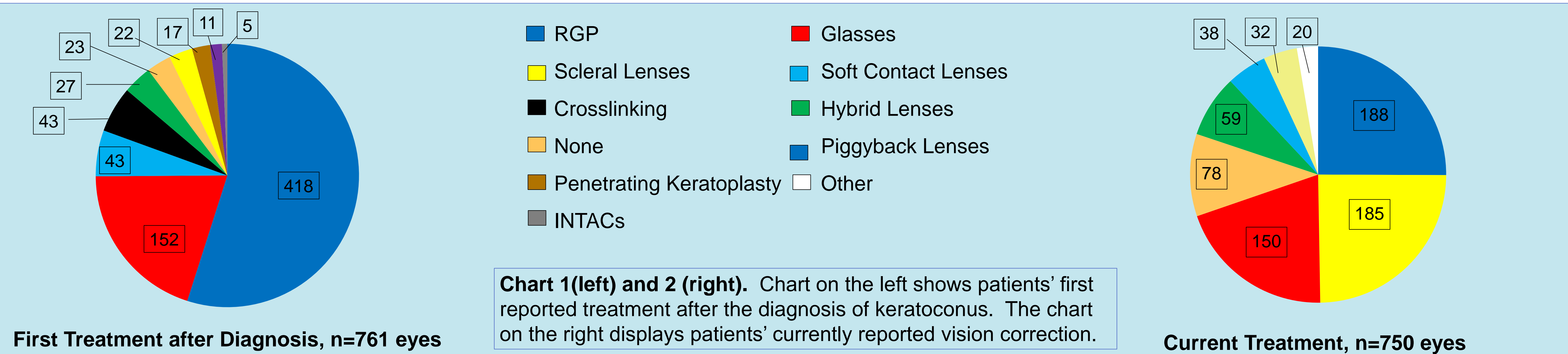
### Respondents:

- 422 patients responded to the survey.
- Average age : 47 ± 15 years
- Average time since diagnosis: 26 ± 11 years

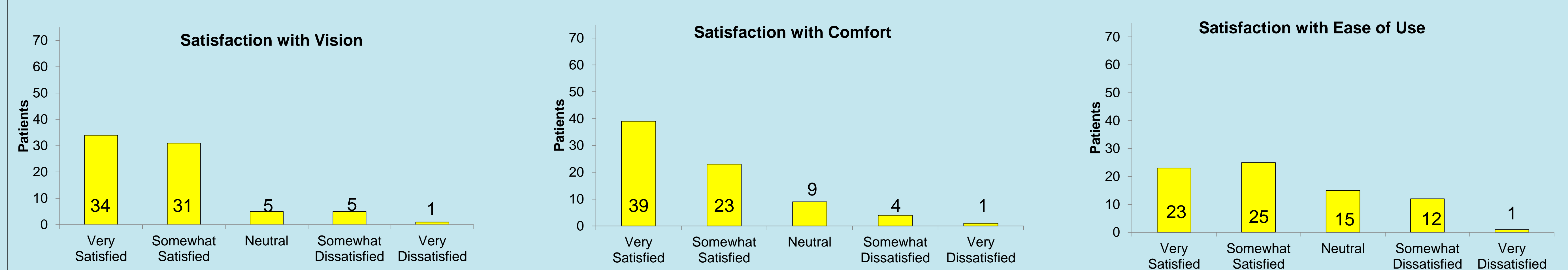
### Questions:

- Treatments:
  - First treatment
  - Current treatment
- Satisfaction with current treatment: (5 point scale)
  - Vision
  - Comfort
  - Ease of use
- Over the past two years have you experienced:
  - Clouding/fogging of vision
  - Halos or starburst
  - Discomfort with treatment

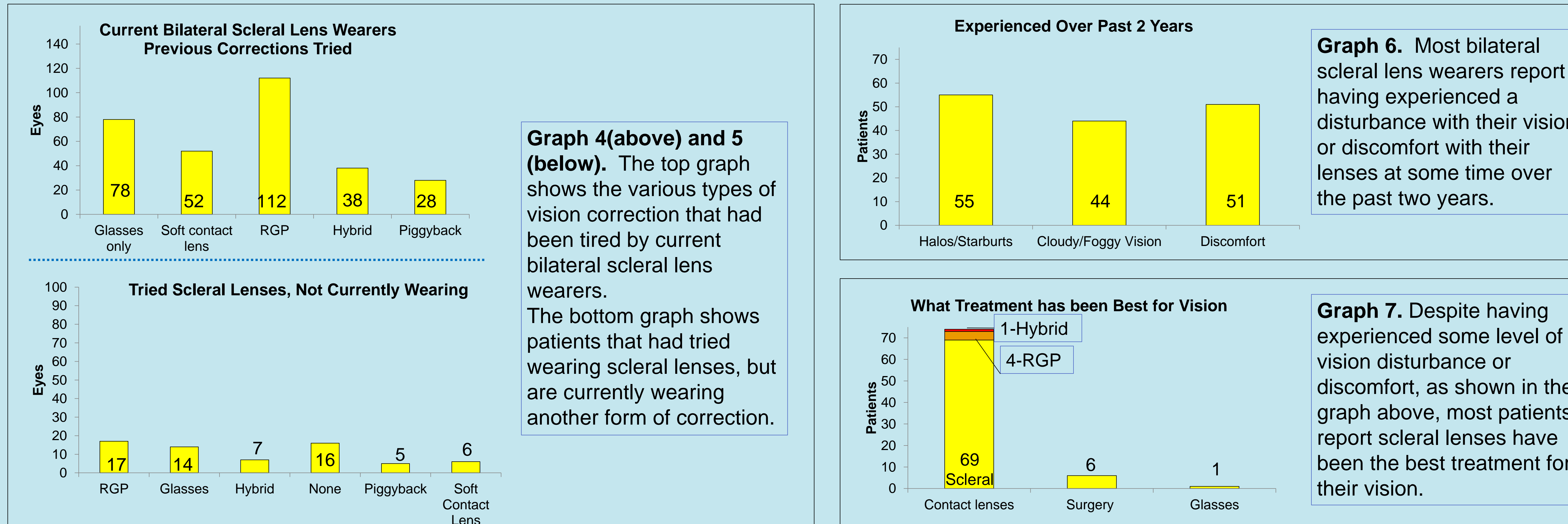
## RESULTS



### Bilateral Scleral Lens Wearers



**Graph 1(left), 2 (middle), 3 (right).** Keratoconus patients with binocular scleral lens wear were asked satisfaction with vision, comfort, and ease of use with their current optical correction. The majority of bilateral scleral lens wearers are very or somewhat satisfied with vision, comfort, and ease of use.



**Graph 4(above) and 5 (below).** The top graph shows the various types of vision correction that had been tried by current bilateral scleral lens wearers. The bottom graph shows patients that had tried wearing scleral lenses, but are currently wearing another form of correction.

**Graph 6.** Most bilateral scleral lens wearers report having experienced a disturbance with their vision or discomfort with their lenses at some time over the past two years.

**Graph 7.** Despite having experienced some level of vision disturbance or discomfort, as shown in the graph above, most patients report scleral lenses have been the best treatment for their vision.

## CONCLUSIONS

- The number of patients with keratoconus who wear scleral lenses is nearly equal to those who wear GP lenses for vision correction in this study.
- Most keratoconus patients wearing scleral lenses are satisfied with vision, comfort, and ease of use with scleral lenses.
- Although some disruption to vision and comfort with scleral lenses have been experienced, keratoconus patients still find the lenses to be the best treatment for their vision.
- Not all keratoconus patients are successful with scleral lenses.

## REFERENCES

1. Shorter E, Harthan J, Nau CB, Nau A, Barr JT, Hodge DO, and Schornack MM. Scleral lenses in the management of corneal irregularity and ocular surface disease. Eye & Contact Lens 2017;0:1-7.

## SUPPORT

