

# **Allegretto Wave FAQs**

## **What is the Allegretto Laser?**

The Allegretto Laser is an FDA-approved laser system used to perform laser vision correction with the most advanced technology currently available. It is the first laser approved by the FDA to treat a wide range of nearsightedness and farsightedness, with or without astigmatism. This system corrects vision through a fast, accurate and safe procedure that leaves patients with vision that is 20/20 or better. Most patients who undergo LASIK using the Allegretto Laser do not experience night glare or halos, symptoms commonly associated with the LASIK procedure.

This laser system uses a 0.9mm small-spot laser beam that transmits 200 pulses per second, more than any other laser currently available for the LASIK procedure. Correcting one diopter of vision takes just four seconds of treatment. The laser can also extend to treat an 8.0mm area, with a blend zone of 9.0mm, making it an ideal choice for patients with large pupils.

## **Can the Allegretto Laser be used to treat astigmatism?**

Yes, this procedure can be used to treat nearsighted patients with astigmatism of  $-0.50$  to  $-6.00$ , and farsighted patients with astigmatism of  $+0.50$  to  $+3.00$ .

## **What are the benefits of using the Allegretto Laser for your LASIK procedure?**

The Allegretto Wave Excimer Laser offers patients many benefits over other laser systems during the LASIK procedure, including increased speed, accuracy and safety.

Some of the benefits offered by this laser system include:

- Maintain prolate shape of the cornea
- Does not induce higher order aberration
- More accurate eye tracker
- Wavefront Technology
- Perfect Pulse Technology
- Faster pulse rate than any other laser
- Larger treatment areas

## **What is the difference between prolate and oblate cornea curvatures?**

The Allegretto Laser takes a different approach to reshaping the cornea. While the normal shape of the cornea is higher in the center (prolate), most lasers flatten the cornea and make it oblate, which can lead to spherical aberration and a lower quality of vision, especially at night. Many patients experience glares or halos after their LASIK procedure.

The Allegretto Laser maintains a prolate curvature while treating the cornea both centrally and peripherally. This offers patients improved vision quality during day and night.

## **What is Wavefront Technology?**

Wavefront technology compensates for the curvature of the cornea and increases the size and location of the corrected area, effectively reducing side effects such as poor night vision, glare and halos. Earlier laser vision correction techniques focused only on the centered front of the cornea, resulting in a flattened circular area that ended abruptly and created spherical aberrations that could lead to unwanted side effects.

## **What is Perfect Pulse Technology?**

Perfect Pulse Technology allows for complete control over nearly every aspect of the procedure, to ensure the most accurate level of correction possible. These controls maintain the energy stability during the procedure so that each laser pulse creates the same result. Perfect Pulse Technology maintains energy levels without being affected by room temperature or humidity, as some other lasers often are.