

# Injectable Bag Intraocular Lens System

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## Technology description

#### Unmet Need

The National Eye Institute in the United States showed 20 million cases of cataracts in the United States in 2000, and the prevalence of cataracts in the United States has continuously increased since then, and is predicted to rise in the coming years. It is projected that in 2050 there will be approximately 50 million cases of cataracts in the United States. Even with the advances in cataract surgery and a 98% success rate of the surgery, according to the World Health Organization (WHO), globally 47.9% of the cases of blindness are due to cataracts.

An artificial intraocular lens (IOL) replaces the cataract lens, and many IOL designs moved away from the initial hard PMMA lens and developed flexible and foldable IOLs. These allowed for a smaller incision and faster healing. Seamless integration of the method of implantation of the IOL with standard technology is an important step that must be taken to speed up the surgical procedure and overall simplify the steps involved in the surgery.

### Technology Overview

This IOL is a flexible bag with the ability to adjust the lens power after implanting, and the methodology presented is a total implantation system that seamlessly integrates the IOL with standard tools and combines the implantation step and the inflation step into one seamless operation. This system reduces the number of steps of IOL implantation.

### Institution

### Johns Hopkins University

#### Inventors

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