

Plain Language Summary of Study Results

Astellas is grateful to the people who took part in this clinical study. Thank you.

What was the Study Called?

Long Term Follow-Up to a Phase I/II, Open-Label, Multi-Center, Prospective Study to Determine the Safety and Tolerability of Sub-retinal Transplantation of Human Embryonic Stem Cell Derived Retinal Pigmented Epithelial (MA09-hRPE) Cells in Patients with Stargardt's Macular Dystrophy (SMD).

Why was this Study Needed?

Stargardt's Macular Dystrophy, also known as SMD, is an eye condition passed down in families. It affects the macula which is a small central part of the retina, the light-sensitive part at the back of the eye. Stargardt's Macular Dystrophy affects people's vision when they look directly at something. It doesn't usually affect their side or peripheral vision.

There is no standard treatment for people with advanced Stargardt's Macular Dystrophy. One possible new treatment is to transplant healthy cells into the retina. This is called cell therapy. Stem cells are cells that can be turned into specialized cells. Astellas has developed stem cells into specialized cells found in the retina. These cells are also known as ASP7316. In an earlier study, ASP7316 was transplanted into the retina of people with advanced Stargardt's Macular Dystrophy. During that study, these people were followed for 1 year after their transplant.

Cell therapy is a new type of treatment. Researchers do not know if this treatment causes medical problems over time. Researchers have been asked to follow people who have had cell therapy for longer. This will help them better understand the condition and its treatment.

In this study, the people from that earlier study were followed for longer to check if they had any long-term medical problems after their ASP7316 transplant. Medical problems are also known as adverse events. The people in this study were followed for up to 5 years after their transplant.

The study started in January 2013 and ended in June 2019. The sponsor of this study (Astellas Institute for Regenerative Medicine) reviewed all the study information and created a report of the results. This is a summary of that report.

What Kind of Study was this and Who Took Part in It?

This study was a long-term follow-up study. It followed people from an earlier study in which they had 1 eye treated with ASP7316. That study ended 1 year after treatment. This study continued to follow these people from 1 year up to 5 years.

Only people with advanced Stargardt's Macular Dystrophy who had an ASP7316 transplant in the earlier study could take part in this study. People in the earlier study received different dose levels of ASP7316.

This study took place at 3 clinics in the United States. 13 people were in the study.

	Number of People
Age Group	
Aged less than 65 years	11
Aged 65 up to 85 years	2
Sex	
Men	7
Women	6

What Were the Study Results?

A lot of research is needed to know whether a medicine causes a medical problem. So when new medicines are being studied, researchers keep track of all medical problems that patients have while they are in the study. These problems are called “adverse events” and are recorded whether or not they might be caused by the treatment taken.

The study was mainly aimed to check for any adverse events that were considered serious. It was also aimed to check for other important adverse events. In this study, important adverse events were adverse events of particular interest to the researchers. Studies also routinely report adverse events that were possibly related to treatment.

***Did people have any adverse events that were serious during this study?

An adverse event is considered “serious” when it is life-threatening, causes lasting problems or needs hospital care.

One person had a serious adverse event that involved the untreated eye. This person had fluid building up in the clear part at the front of the eye (cornea), which causes swelling. The study doctor judged that this event was not caused by ASP7316.

3 people (23.1%, or 3 out of 13 people) had serious adverse events that did not involve the eyes. None of the events were in more than 1 person each. None of them were judged by the study doctor to be possibly caused by ASP7316.

***Did people have any adverse reactions during this study?

An “adverse reaction” is any medical problem or “adverse event” that is judged by the study doctor to be possibly caused by a medicine or treatment used in the study.

1 person (7.7%, or 1 out of 13 people) had an adverse reaction that involved both eyes. This was seeing spots before the eyes (floaters).

No one had adverse reactions that did not involve the eyes.

*****What other important adverse events did people have during this study?**

Some adverse events were considered important as they were of particular interest to the researchers. Some of the important adverse events in this study involved the eye treated with ASP7316. Other important adverse events did not involve the eyes.

7 people (53.8%, or 7 out of 13 people) had important adverse events that involved the eye treated with ASP7316.

The most common important adverse events that involved the eye treated with ASP7316 are shown in the table below:

Important Adverse Event	Eye Treated with ASP7316 (out of 13 people)
Clouding of the center of the lens in the eye	5 (38.5%)
Blurred vision	3 (23.1%)
Eye pain	2 (15.4%)
Feels like something is in the eye	2 (15.4%)
The back of the lens capsule is cloudy or wrinkled, causing blurred vision. The lens capsule is the membrane around the lens.	2 (15.4%)

3 people (23.1%, or 3 out of 13 people) had important adverse events that did not involve the eyes. None of these adverse events happened in more than 1 person. None of them were judged by the study doctor to be possibly caused by ASP7316.

There were no signs of failure or rejection of the ASP7316 transplant during this study. Also there were no signs of an immune response to the ASP7316 transplant. The immune response is how the body fights foreign objects or infections.

Where Can I Learn More About This Study?

This document is a short summary of the main results from this study. You can find this summary and more information about this study online at <http://www.astellasclinicalstudyresults.com>.

Please remember that researchers look at the results of many studies to find out how well medicines work and which adverse reactions they might cause. This summary only shows the results of this 1 study. Your doctor may help you understand more about the results of this study.

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