Summary of Results for Laypersons

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

What was the Study Called?

A Phase IIIb/IV Randomized, Controlled, Double-blind, Double-dummy, Parallel Group Study to Compare the Efficacy of Fidaxomicin to Vancomycin in the Sustained Clinical Cure of *Clostridium Difficile* Infection in Adults Receiving Immunosuppressive Therapy. This is also known as the FREEDOM study.

Why was this Study Needed?

Clostridium difficile bacteria can overgrow in the colon or large bowel and cause an infection. The disease is called *Clostridium difficile* infection (or CDI for short). Patients on immunosuppressive therapy are at risk of CDI. Such therapies can reduce the strength of the immune system. Fidaxomicin and vancomycin are oral (taken by mouth) prescription medicines used to treat adults with CDI. At the time of this study it was not known if fidaxomicin works in patients on immunosuppressive therapy. Therefore, there was a need to study fidaxomicin as a treatment for CDI in these patients.

This study was conducted in patients on immunosuppressive therapy who had CDI. They took either fidaxomicin and placebo or vancomycin. (The section below describes what placebo capsules are.) The main question this study was meant to answer was if fidaxomicin cures CDI in more patients than did vancomycin. It was also important to find out what unwanted effects these patients had from the study medicines.

The study started in November 2012. The sponsor (Astellas) stopped the study in April 2013. The reason was that not enough patients joined the study. When the study was stopped, 12 patients had taken study medicine. Astellas 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 was a "double-blinded" study. That means that the patients and the study doctors did not know who took which of the study medicines (fidaxomicin and placebo or vancomycin). A "placebo" is a dummy treatment such as a capsule that looks like a medicine, but does not have any medicine in it. Using a placebo helps make study results fair and unbiased, because all patients in this study take the same number of capsules each day. Thus, study doctors and patients cannot tell who is taking the control medicine and who is taking the test medicine.

This study included adult women and men aged 18 years or older who were on immunosuppressive therapy. Patients were diagnosed with CDI. They had not been treated with medication or other therapy for CDI within the last 10 days before joining the study.

During the study, the study doctor did a check-up of the patients at several study visits. At the first visit, patients were checked to see if they could be in the study. Patients who could

be in the study were picked for a treatment (fidaxomicin and placebo or vancomycin) by chance alone.

- Fidaxomicin and placebo: Patients took 2 capsules containing fidaxomicin tablets (400 mg total) and 2 placebo capsules each day.
- Vancomycin: Patients took 4 vancomycin capsules (500 mg total) each day.

Patients took study medicine for 10 days.

In addition, patients continued to receive their immunosuppressive therapy throughout the study.

This study took place at 8 clinics in several countries. Twelve patients were in the study and took at least 1 dose of study medicine.

	Number of Patients
Age Group	
Aged between 37 and 73 years	12
Sex	
Men	7
Women	5
Clinic Location	
European Union Countries (*at the time of the study*)	12
Austria	1
Denmark	1
France	3
Germany	5
Greece	1
Spain	1
Outside European Union	0

What Were the Study Results?

The main question this study in patients on immunosuppressive therapy meant to answer was if fidaxomicin cured CDI in more patients than did vancomycin. Cure of CDI means that the symptoms stopped 2 days after 10 days of treatment with study medicine. And it also means that the CDI did not return within the following 14 days.

When this study was stopped, there were not enough patients in the study to answer the study's main question. Two out of 4 patients (50%) who took fidaxomicin were cured. And 4 out of 8 patients (50%) who took vancomycin were cured.

What Adverse Reactions did Patients Have?

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 medical problems are called "adverse events" and are recorded whether or not they might be caused by the treatment taken. 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.

The table below shows the adverse reactions experienced by patients who took at least 1 dose of study medicine in this study.

Adverse Reaction	Fidaxomicin (out of 4 patients)	Vancomycin (out of 8 patients)
Any adverse reaction	1 (25.0%)	0
Low levels of a type of white blood cell (neutrophils)	1 (25.0%)	0

An adverse reaction is considered "serious" when it is life-threatening, causes lasting problems or needs hospital care.

One patient (8.3%, or 1 out of 12 patients) experienced a serious adverse reaction in this study. The patient took fidaxomicin.

Where Can I Learn More About This Study?

This document is a short summary of the main results from this study and reflects the information available as of December 2013. 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.

Sponsor contact details:

Astellas Pharma Europe Ltd.
2000 Hillswood Drive
Chertsey
Surrey KT16 0RS
United Kingdom