

Summary of Clinical Trial Results

For Laypersons



A study to learn how safe and effective a medicine containing tilavonemab is compared to placebo to treat adult patients with Progressive Supranuclear Palsy (PSP)

Overall Summary

- Researchers are looking for a way to treat Progressive Supranuclear Palsy (PSP).
- Researchers in this study wanted to know whether tilavonemab, an investigational drug not yet approved by regulatory authorities, could help treat PSP.
- This study took place from December 2016 to November 2019 in 8 countries.
- A total of 377 adult patients took part in the study and either took study drug or placebo; of these, 226 patients left the study, mostly due to the study sponsor ending the study early due to lack of effectiveness of tilavonemab.
- The study was divided into 3 parts: Screening Period, Treatment Period, and Post-Treatment Follow-Up Period. Patients were randomly (by chance) assigned to treatment groups (placebo or tilavonemab treatment [lower or higher doses]).
- This study found that treatment with tilavonemab did not significantly improve symptoms of PSP compared to placebo in patients with PSP. As a result, this study was ended early.
- About the same number of patients who received treatment with tilavonemab had side effects as patients who received placebo. Side effects in this patient population were similar to side effects seen in patients with PSP.
- The results of the study may be used by researchers to further develop this medicine in other diseases or conditions.
- If you participated in this study and have questions about your individual care, contact the doctor or staff at your study site.

1. General information about the study

1.1. What was the main objective of this study?



Researchers are looking for a way to treat Progressive Supranuclear Palsy (PSP). PSP is a rare brain disease that occurs when cells in specific brain areas that control body movement, thinking, and behavior become damaged and die. This may be caused by a protein called “tau” that is naturally present in the brain but can become abnormal and build up in cells. Symptoms of PSP continue to worsen, preventing patients from completing their daily tasks and living independently.

Researchers in this study wanted to know whether tilavonemab, an investigational drug not yet approved by regulatory authorities, could help treat PSP. Tilavonemab is an antibody, which is a protein produced by the body’s immune (defense) system to fight off harmful substances. Tilavonemab is an anti-tau antibody previously studied in animals to lower the amount of tau protein in the brain. Therefore, researchers wanted to know if tilavonemab can produce the same effect in humans.

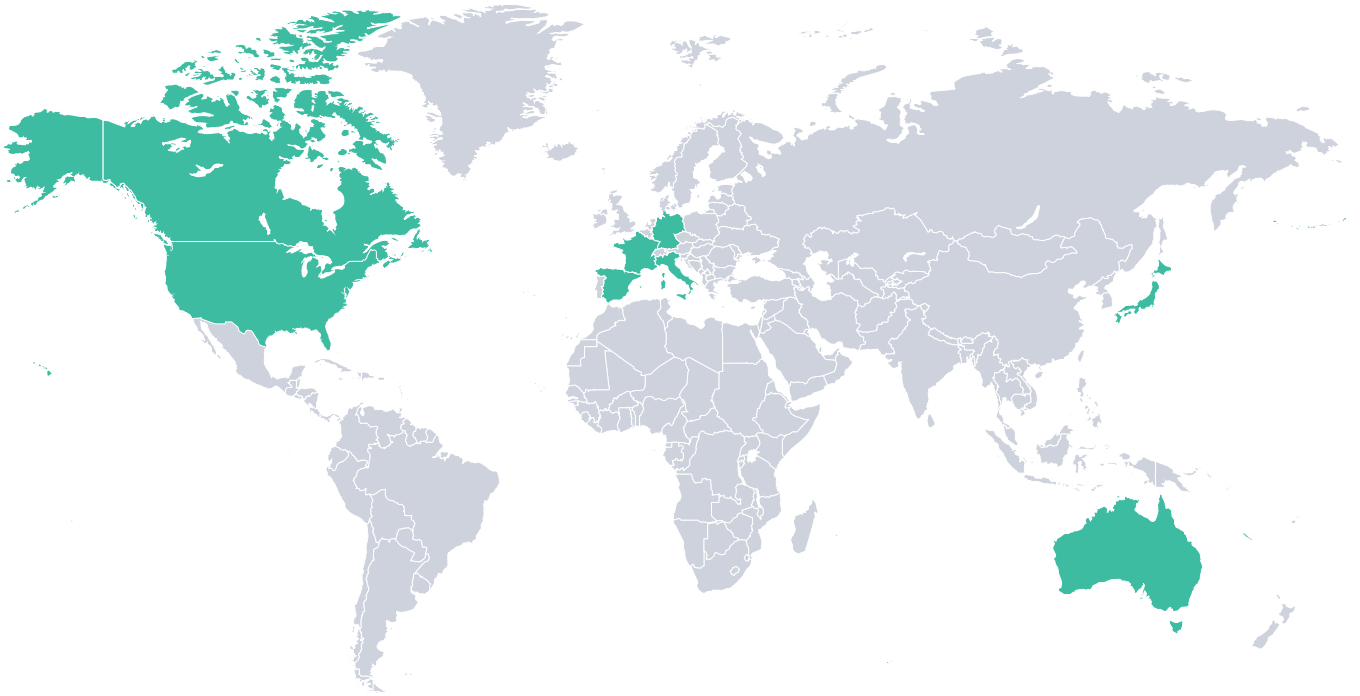
Researchers planned this study as a Phase 2, double-blind, placebo-controlled, randomized study.

- **Phase 2 studies** test potential new treatments in a small number of patients with a condition or disease. In this Phase 2 study, the study doctors looked at the benefits of tilavonemab in adult patients with PSP compared to placebo.
- A **placebo** is something that looks like the treatment being tested but contains no medicine in them.
- This study **randomized** patients, which means that patients were randomly (by chance) assigned to treatment groups.
- This study was also **“double-blinded”**, which means that neither the patients nor the study doctors knew who was given tilavonemab (higher or lower dose) or who was given placebo.

The main goal of the study was to find out whether treatment with tilavonemab improved symptoms of PSP in comparison to placebo in adult patients with PSP. The study doctors also looked for any side effects patients might have had after treatment with the study drug. This summary only includes the results of this study, which may be different from the results from other studies for PSP.

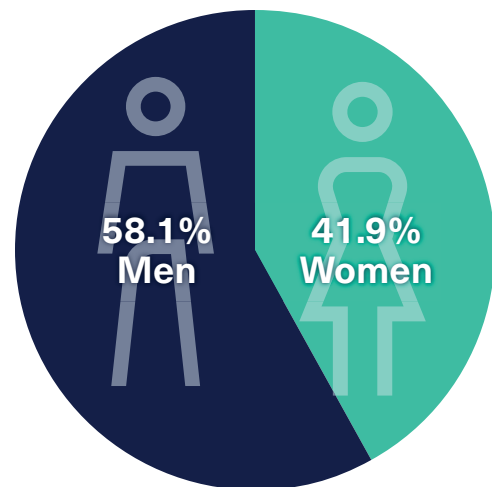
1.2. When and where was the study done?

This study took place from December 2016 to November 2019 in the following countries: Australia, Canada, Germany, France, Italy, United States, Spain, and Japan.



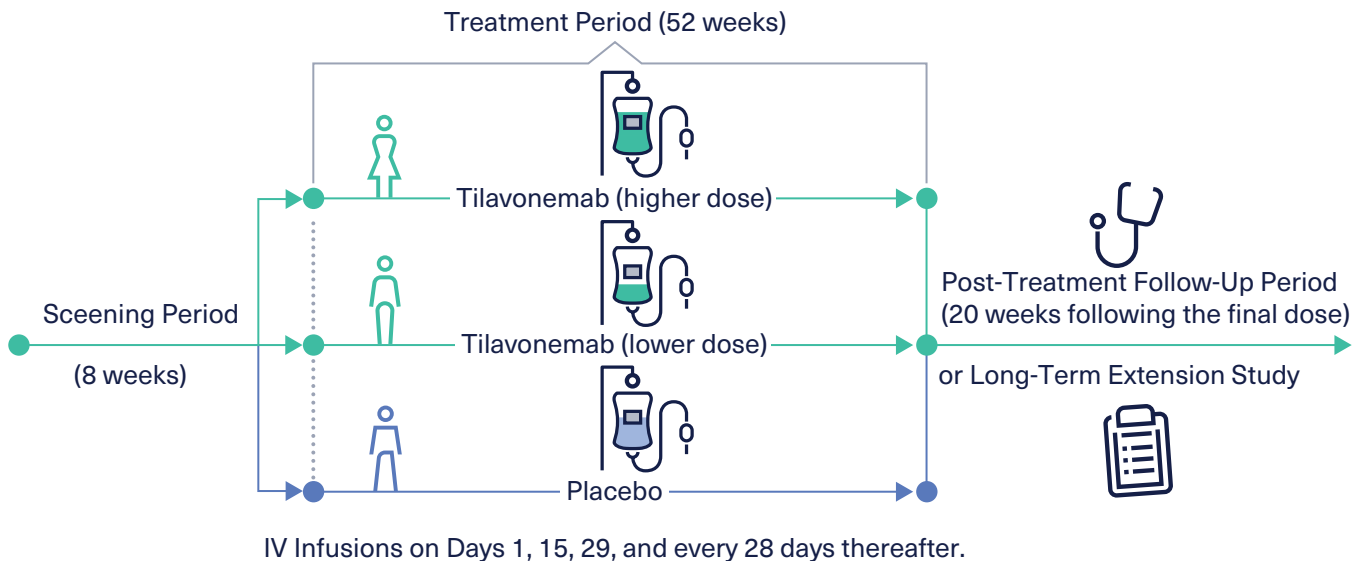
2. What patients were included in this study?

A total of 377 adult patients took part in the study and took study drug or placebo. More men (58.1%) than women (41.9%) participated in the study. Patients ranged from 49 to 86 years of age, with an average age of 68.8 years. Study doctors selected only adults 40 years of age or older to participate in this study, as this is a degenerative disease that affects mostly older people. To participate, patients must have had PSP symptoms for less than 5 years, with an onset of symptoms at 40 years of age or older.



3. Which medicines were studied?

The medicine in this study was tilavonemab. The diagram below shows how the study was organized.



The study was divided into 3 parts: Screening Period, Treatment Period, and Post-Treatment Follow-Up Period. Before the study started, the Screening Period took place to check if patients met the entry criteria so they could join the study. Once patients were screened, they were randomly (by chance) assigned to one of three treatment groups:

- Tilavonemab (higher dose)
- Tilavonemab (lower dose)
- Placebo (no medicine)

Neither the patients nor study doctors knew which treatment patients were assigned to. The total time of participation from Screening to Follow-Up was approximately 1.5 years.

In the Treatment Period, patients in the tilavonemab groups received tilavonemab as an IV infusion into the vein. Patients in the placebo group received placebo as an IV infusion into the vein.

Patients who completed the Treatment Period for 52 weeks and wished to continue tilavonemab treatment went on to a separate Long-Term Extension Study which continued to look at the safety and effectiveness of tilavonemab in PSP patients. Patients who received treatment but did not complete the Treatment Period, or completed the study but chose not to transition to the extension study, or did not qualify for the extension study continued on to the Post-Treatment Follow-Up Period.

4. What were the side effects?

Side effects are unwanted medical events that happen during a study. They may or may not be caused by the treatment in the study, and they may or may not be related to the disease.

A side effect is serious if it leads to death, is life-threatening, puts a patient in the hospital, keeps a patient in the hospital for a long time, or causes a disability that lasts a long time.

Related side effects are side effects that were considered by the study doctor to be at least possibly related to the study treatment.

- About 25.5% of patients (96 patients) had serious side effects during the study. The total number of patients that had serious side effects considered possibly related to the study treatment was 1.1% of patients (4 patients).
- About 6.9% of patients (26 patients) stopped treatment because of side effects during the study. The total number of patients that stopped taking treatment because of side effects considered possibly related to the study treatment was 0.8% of patients (3 patients).
- A total of 26 patients (6.9% of patients) died during the study. None were considered related to study treatment.

The table below shows information about the related serious side effects patients had during the study, as well as related side effects patients had that led to the patient stopping the study drug, and related side effects leading to death.

Overall Study			
	Placebo (N=126 patients)	Tilavonemab Lower Dose (N=126 patients)	Tilavonemab Higher Dose (N=125 patients)
Number of patients with related serious side effects	2 (1.6% of patients)	1 (0.8% of patients)	1 (0.8% of patients)
Related Serious Side Effects	Prostate cancer, interstitial lung disease (lung disease which causes scarring of the lungs)	Fractured wrist	Hypersensitivity to study drug, eye swelling, ocular hyperemia (eye redness)
Number of patients who stopped taking study drug because of related side effects	2 (1.6% of patients)	0 (0.0% of patients)	1 (0.8% of patients)
Reasons for stopping	Asthenia (weakness), interstitial lung disease	–	Dysfunction of motor skills
Number of related side effects leading to death	0 (0.0% of patients)	0 (0.0% of patients)	0 (0.0% of patients)

About 87.5% of patients (330 patients) had side effects during the study. The total number of patients that had side effects considered possibly related to the study treatment was 108 patients (28.6% of patients).

The table below shows information about the common related side effects (in at least 8 or more patients overall) in this study. The most common related side effect was asthenia (weakness).

Overall Study			
	Placebo (N=126 patients)	Tilavonemab Lower Dose (N=126 patients)	Tilavonemab Higher Dose (N=125 patients)
Number of patients with at least 1 related side effect	38 (30.2% of patients)	34 (27.0% of patients)	36 (28.8% of patients)
Asthenia (weakness)	3 (2.4% of patients)	3 (2.4% of patients)	5 (4.0% of patients)
Fatigue (tiredness)	2 (1.6% of patients)	5 (4.0% of patients)	3 (2.4% of patients)
Fall	2 (1.6% of patients)	5 (4.0% of patients)	3 (2.4% of patients)
Weight decreased	3 (2.4% of patients)	3 (2.4% of patients)	2 (1.6% of patients)
Headache	5 (4.0% of patients)	2 (1.6% of patients)	2 (1.6% of patients)

About the same number of patients had side effects in the tilavonemab treatment groups as the placebo group.

5. What were the overall results of the study?

This study found that treatment with tilavonemab did not significantly improve symptoms of PSP compared to placebo in patients with PSP. As a result, this study was ended early. The effect of the study drug on symptoms was measured using a specific rating scale known as the Progressive Supranuclear Palsy Rating Scale (PSPRS), which measured changes in PSP symptoms from before study treatment through Week 52. This scale measures the impact of treatment on criteria such as daily activities, motor skills, and balance. No improvement in symptoms of PSP was shown in patients who received tilavonemab (lower or higher dose) compared to placebo.

About the same number of patients who received treatment with tilavonemab had side effects as patients who received placebo. Side effects in this patient population were similar to side effects seen in patients with PSP.



6. How has the study helped patients and researchers?

This study found that patients treated with tilavonemab did not have improved symptoms of PSP when compared to patients treated with placebo. This study also found that tilavonemab is generally well tolerated. Results from this study may be used in other studies to learn whether patients with other diseases are helped by tilavonemab.

This summary only shows the results of this study, which may be different from the results of other similar studies. Patients should consult their physicians and/or study doctors with further questions about their individual care and should not make changes in their treatment based on the results of a single study.

7. Are there any plans for future studies?

No future studies of tilavonemab for the treatment of PSP are planned at this time.

8. Who sponsored this study?

This study was sponsored by AbbVie Inc. This summary was reviewed for readability by a patient advocacy group.

9. Where can I find out more information about this study?

Title of Study	A Randomized, Double-Blind, Placebo-Controlled Multiple Dose Study to Assess Efficacy, Safety, Tolerability, and Pharmacokinetics of ABBV-8E12 in Progressive Supranuclear Palsy
Protocol Number	M15-562
Clinicaltrials.gov	NCT02985879 https://clinicaltrials.gov/ct2/show/NCT02985879
EudraCT	2016-001635-12 https://www.clinicaltrialsregister.eu/ctr-search/search?query=2016-001635-12
Study Sponsor	AbbVie Phone: (800) 633-9110 Email: abbvieclinicaltrials@abbvie.com

Thank You

AbbVie wants to thank all the participants for their time and effort that went into making this study possible.

Clinical study participants help advance science!

