

Advancing research: a physician's guide to clinical trials

Recruiting and retaining trial participants is one of the greatest obstacles to developing the next generation of Alzheimer's treatments



Alzheimer's Disease International supports Alzheimer's disease clinical trials, as we recognize that research is the engine that powers medical progress. Clinical trials provide opportunities for you and your patients to advance medical research and to contribute to finding improved treatments for Alzheimer's disease for future generations.¹

How can you benefit from having your patients participate in clinical trials?

You can:

- Work towards the greater good of advancing the science of Alzheimer's disease and the development of new medicines
- Be part of the collaborative clinical trial community
- Provide your patients an opportunity to access new, potentially promising treatment options before they become widely available

Recruiting and retaining trial participants is one of the greatest obstacles to developing the next generation of Alzheimer's treatments.²

Worldwide, research is currently being carried out into the pathophysiology of Alzheimer's disease as well as advancing diagnostic modalities and treatment strategies. Alzheimer's research can only progress if patients are willing and able to volunteer to participate in clinical trials.

The importance of clinical trials

New medicines in Alzheimer's disease depend on clinical trials ... and you are a critical link

78% of the public say their physician is the most trusted source of health related information.³

- While 38% of patients find out about clinical trials through the media, 51% indicated that they would prefer to learn about clinical trials from their regular physician⁴
- Only 7% of patients said that their doctors have ever suggested that they enroll in a clinical study⁵
- 40% of physicians reported that they had not referred patients into clinical trials, citing the lack of information available about the treatments as the primary reason³

Get your patients involved!

Help new medicines become available to the Alzheimer's community by encouraging your patients to participate in clinical trials



Of 2261 research participants surveyed, 84% said they would join a clinical trial again.⁴ Harris Interactive, 2005

"My message to others would be, have an open mind to being a clinical trial subject. Learn all you can about the trial's purpose and requirements and go for it!"

Barbara Holtz, clinical trial participant CISRP Patient Perspective ⁶

Encourage your patients to participate in clinical trials

Discuss clinical trial participation in a clear, concise manner

 Volunteers' willingness to participate and remain in a clinical trial depends on their understanding of the study protocol and their potential participatory role⁷

Ensure that your patients are aware of the reduction of risk and the safety of research protocols⁸

 Inform your patients that safety is a primary emphasis of the clinical trial process. Most trials have a separate, independent Data Safety and Monitoring Committee with access to on-going study information⁹

Speak to your patients about the benefits of participating

- Your patients can help others, including future family generations, who may be at risk for Alzheimer's disease¹
- Patients can play a more active role in their own health care
- Participants receive a high standard of care.
 All participants receive regular care related to the study and opportunities to speak with study staff⁹
- Patients can gain access to potential treatments before they are widely available¹

How new medicines are developed

The importance of clinical trials

It can take an average of 13 years to develop a new medicine, from identifying a new compound to testing it in clinical trials, to making it available to the public.¹⁰

Clinical trials are conducted in phases. At each phase, researchers try to answer different questions about the experimental medicine they are researching. Progression from one phase to the next generally requires success in the prior phase.

Preclinical

An experimental medicine first goes through rigorous testing in the laboratory. If the experimental medicine has the potential to treat an illness, it can move on to clinical testing in people.¹¹

Phase 1–3 trials

Testing in people is done in three phases of clinical trials.

The goal of **Phase 1** is to test safety.

Phase 2 tests how well an experimental medicine will work to treat Alzheimer's disease.

In **Phase 3** the experimental medicine is tested in large numbers of people to confirm how well it works. Phase 3 trials may compare the experimental medicine to another commonly used medicine for Alzheimer's disease treatment, such as a cholinesterase inhibitor.^{1,11,12}

Registration

Results from all phases of the clinical trials are provided to the health regulatory authorities to evaluate the risks and benefits of the experimental medicine and determine whether to approve the medicine for broad use. If the regulatory authorities approve the new medicine, it can then be prescribed by physicians to their patients.¹¹

Phase 4 clinical trials

Phase 4 trials are conducted after a treatment has already been approved. In Phase 4 trials, researchers collect additional valuable information, such as the long-term risks or other benefits of the medicine.^{11,12}

The clinical trial process

AVERAGE LENGTH OF PROCESS 13 YEARS .



Tips for alleviating patients' concerns about clinical trials

Potential concern	Suggestions for addressing these concerns
There may be unpleasant or serious side effects related to the experimental treatment being studied.	The experimental medicine has already undergone a lot of testing to understand safety and reduce side effects. Throughout the clinical trial, the patient is assessed carefully for any adverse events and treated accordingly. As with any clinical trial, the participant/ caregiver must evaluate potential benefits as well as potential risks. A telephone number will be provided so that you can speak with the research center at any time day or night to discuss any concerns or issues that you may have.
The experimental treatment may not be effective.	While the experimental medicine may not be effective, your patient will still receive your regular medical care, including treatment. Every study has the potential to advance knowledge on the disease, which could improve treatment.
Patients may fear that enrolling in a trial will prevent them from receiving treatment from their current physicians	Your patient will receive medical care at the study site, and can continue to see you while participating in the research.
In many Alzheimer's trials, the person with the disease may not be able to make decisions about participating in a clinical trial	When appropriate, these decisions are made by the person with power of attorney or medical proxy, such as a caregiver, family member, attorney, or friend. As with many decisions regarding Alzheimer's disease, it is important to have caregivers involved in the process.
Participants are not permitted to know whether they are getting experimental medicine or a placebo during the study	It is important to maintain the integrity of the clinical trial by using a blind study design. On request, the pharmaceutical company will provide any investigator with the randomization code for his/her study patients after the completion of the study at all study sites. In addition, most long-term Alzheimer's trials patients are permitted to add the experimental treatment to their current treatment.
Clinical trials last days to years and may require multiple visits to study sites	Most studies require multiple visits to the study sites. It is important to set expectations with your patients about the potential barriers to participating in a clinical trial, but note that many clinical trial sites are very open and willing to accommodate to patient needs.

What are the steps when participating in a clinical trial?



After an initial telephone screening, trial participants go to the study site where the staff members explain the trial and gather further information. Then the patient and/or caregiver signs an informed consent, which includes details about the study, such as its purpose, duration, required procedures, as well as the risks and potential benefits. Informed consent is not a contract, and the patient may withdraw from the trial at any time. Interested persons will undergo a screening process that will determine whether they are eligible to participate in the trial.¹³

If eligible, a baseline visit is scheduled, in which cognitive and/or physical tests may be administered. Then the patient will be randomly assigned to a study group. The patient and family members are given key contact information for reporting any issues or concerns to researchers.¹³

The patient may be asked to visit the research site for additional cognitive, physical, or other evaluations and for discussions with staff over the course of the study period. Investigators collect information on effects of the potential treatment, disease progression, and the safety and wellbeing of the patient and his or her caregiver. The patient will continue to see you, his or her regular physician, for usual health care.¹³ You can ensure the study integrity by reporting any adverse events that you may be aware of to the study.

Ethical considerations and informed consent

For clinical studies, the consent procedure is a medical and legal requirement covered by laws and codes of medical ethics. Depending on the country in which the research is being carried out, there may be additional specific laws that apply. People with limited mental capacity or who lack the capacity to consent may still participate in research under certain conditions. For those patients, involving a family member or caregiver can be helpful, provided that the individual with dementia agrees to it. In cases where research is being carried out in patients with fairly advanced stages of dementia, the ethical issue arises of the individual no longer being capable of providing fully informed consent. In many countries there are laws that allow for consent to be given on behalf of a person who lacks the capacity to consent. This could be a legal representative or body, or anyone who has the authority to do so. Nevertheless, the person with incapacity should be involved in the consent process as much as possible. A research ethics committee must approve all clinical studies. These committees have been set up to ensure the following criteria are met:

- 1 Medical value enhancements of health or knowledge must be derived from the research⁹
- 2 Scientific validity the research must be methodologically rigorous ⁹
- 3 Fair subject selection scientific objectives, not vulnerability or privilege, and the potential for and distribution of risks and benefits, should determine communities selected as study sites and the inclusion criteria for individual subjects⁹
- 4 Favorable risk-benefit ratio within the context of standard clinical practice and the research protocol, risks must be minimized, potential benefits enhanced, and the potential benefits to individuals and knowledge gained for society must outweigh the risks⁹
- 5 Independent review unaffiliated individuals must review the research and approve, amend, or terminate it⁹
- 6 Informed consent individuals should be informed about the research and provide their voluntary consent⁹
- 7 Respect for enrolled subjects subjects should have their privacy protected, the opportunity to withdraw, and their well-being monitored⁹

Clinical trials move medicine forward, helping researchers make advances in Alzheimer's disease treatment.

Without clinical trials, there can be no new treatments or cures.

For more information

Alzheimer's Disease International provides general information on Alzheimer's disease at www.alz.co.uk. Please contact your national Alzheimer's association or visit the following websites:

- List of national Alzheimer's associations: www.alz.co.uk/associations
- EU Clinical Trials Register: www.clinicaltrialsregister.eu
- Listing of trials being conducted in the United States and around the world: ClinicalTrials.gov
- The US-based Alzheimer's Association: www.alz.org

References

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- 12 CenterWatch. Overview of Clinical Trials. http://www.centerwatch.com/clinical-trials/overview.aspx
- 13 Alzheimer's Disease Education & Referral (ADEAR) Center. Participating in Alzheimer's Disease Clinical Trials and Studies Fact Sheet.

http://www.nia.nih.gov/NR/rdonlyres/9E86CB05-C609-455F-BB49-163759CD157F/13270/84206ADEARFactsheetClinical Trials09SEP04ty.pdf



This content has been reviewed by an Alzheimer's Disease International steering committee and developed with support from Pfizer Inc. Alzheimer's Disease International: The International Federation of Alzheimer's Disease and Related Disorders Societies, Inc. is incorporated in Illinois, USA, and is a 501(c)(3) not-for-profit organization



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