



Clinical Studies: Are They Right For You?

Clinical studies offer people with ALS and related disorders the chance to help find treatments and a cure for these diseases. In this article, we discuss the different types of clinical research studies, the important considerations when joining one, and how to find a study that is appropriate for you.

Types of Clinical Research Studies

A clinical research study is a scientific approach that is designed to answer a scientific question or to improve treatment of a disease. Some studies are **interventional** (also called **clinical trials**) meaning they are testing a treatment directly, such as a drug, a device, or a type of surgery. Other studies are **observational**, meaning they are trying to answer a question about the disease by making careful observations, such as whether the blood of people with ALS contains one or more substances that can be used to track disease (called a biomarker).

While observational studies do not test new treatments, they are essential for making future clinical trials faster, more informative, and more likely to succeed. For this reason, participating in an observational study may be just as important, if not more important, for finding new treatments as participating in a clinical trial. Studies that document the progression of a disease without treatment are often called **natural history** studies.

Some clinical trials are **open-label**, meaning both the patient and doctor know that the patient is receiving treatment. Others are **double-blind, placebo-controlled**, meaning a proportion of patients receive an identical placebo, or inert substance, instead of the active treatment. Neither patient nor physician knows which treatment the patient is receiving until the end of the study, to avoid biasing the evaluation of benefit. Placebo-controlled trials are essential for determining the true benefit (or harm) of a new treatment, and are required for approval of a new treatment by the United States Food and Drug Administration (FDA).

Is a Particular Study Right for Me?

The decision to join a study is a personal one, and should not be made lightly. Your physician and the coordinator of the study can answer questions you may have about a study you are considering, including:

- What are the risks? What are the potential benefits to me?
- Will I have any out-of-pocket expenses? Most clinical trials provide the study drug for free, and some will reimburse you for travel to the study site for scheduled visits.
- How long will the study last?
- What are my chances of receiving a placebo?
- Can I continue taking the study drug (or switch to it, if I get the placebo) after the trial is over?
- If I am in an observational study, can I join an interventional study at the same time? Some studies, though not all, will allow this.



- Can I drop out? You can always drop out of any study, but it is important to fully understand what you are signing up for ahead of time, in order to reduce the likelihood of dropping out later.

How Can I Find Studies?

All clinical trials (and most other research studies) in the United States, and many in other countries, are registered with the FDA, and are available for searching at www.clinicaltrials.gov. On the site, there is a simple search engine that will show you all studies that are being conducted for any disease you search on. For instance, typing “amyotrophic lateral sclerosis” or “ALS” into the search box returns over 300 studies. You can then click on a box to show only “open” studies, meaning those accepting new patients (the others are ongoing but closed, or have been completed). Clicking on a study will show the details, including intervention, sites that are recruiting patients, and the eligibility criteria.

A Selection of Open Studies in ALS and Related Disorders

Below are some of the current open studies in ALS and related disorders.

Primary Lateral Sclerosis

Screening and Natural History: Primary Lateral Sclerosis and Related Disorders

<https://clinicaltrials.gov/ct2/show/NCT00015444?term=primary+lateral+sclerosis&recr=Open&rank=1>

This observational study aims to characterize the natural history of PLS, and investigate etiologies, risk factors, and biomarkers.

Phenotype, Genotype & Biomarkers in ALS and Related Disorders

<https://clinicaltrials.gov/ct2/show/NCT02327845?term=hereditary+spastic+paraplegia&rank=4>

This observational study aims to better understand the relationship between the clinical characteristics (phenotype) and genes (genotype), and to develop biomarkers that might be useful in aiding therapy development for this group of disorders.

More PLS studies:

<https://clinicaltrials.gov/ct2/results?term=primary+lateral+sclerosis&Search=Search>

Hereditary Spastic Paraplegia

Phenotype, Genotype & Biomarkers in ALS and Related Disorders

<https://clinicaltrials.gov/ct2/show/NCT02327845?term=hereditary+spastic+paraplegia&rank=4>

This observational study aims to better understand the relationship between the clinical characteristics (phenotype) and genes (genotype), and to develop biomarkers that might be useful in aiding therapy development for this group of disorders.

Genetic and Physical Study of Childhood Nerve and Muscle Disorders



<https://clinicaltrials.gov/ct2/show/NCT01568658?term=hereditary+spastic+paraplegia&rank=3>



This observational study is designed to collect diagnostic and longitudinal data on people with HSP to better understand disease progression, ultimately leading to better outcome measures for future clinical trials.

More HSP studies:

<https://clinicaltrials.gov/ct2/results?term=hereditary+spastic+paraplegia&Search=Search>

Amyotrophic Lateral Sclerosis and Frontotemporal Dementia

Interventional

Ibutilast (MN-166) in Subjects With Amyotrophic Lateral Sclerosis (ALS) (IBU-ALS-1201)

<https://clinicaltrials.gov/ct2/show/NCT02238626?term=ibutilast&rank=9>

This double-blind trial is testing the safety and clinical effectiveness of an anti-inflammatory drug, ibutilast.

ALS Reversals - Lunasin Regimen

https://clinicaltrials.gov/ct2/show/NCT02709330?term=als&recr=Open&no_unk=Y&rank=36

This open-label trial is testing the safety and efficacy of lunasin, a plant derivative, based on anecdotal reports of benefit. After an initial clinical visit, patients will record data at home over the 12-month trial.

A Trial of Tocilizumab in ALS Subjects (TCZALS-001)

https://clinicaltrials.gov/ct2/show/NCT02469896?term=als&recr=Open&no_unk=Y&rank=17

This double-blind trial is testing the safety and efficacy of tocilizumab, a drug approved for rheumatoid arthritis that may slow the neuroinflammation that contributes to ALS disease progression.

Ventilatory Investigation of Tirasemtiv and Assessment of Longitudinal Indices After Treatment for a Year (VITALITY-ALS)

https://clinicaltrials.gov/ct2/show/NCT02496767?term=als&recr=Open&no_unk=Y&rank=43

This double-blind trial is testing the efficacy of tirasemtiv, a drug that improves muscle strength and that has shown some promise in early trials in ALS. There is no evidence that treatment slows disease progression, but may improve respiratory function and daily activities.

Clinical Trial of Ezogabine (Retigabine) in ALS Subjects

https://clinicaltrials.gov/ct2/show/NCT02450552?term=als&recr=Open&no_unk=Y&rank=44

This trial will test the safety and efficacy of retigabine, an epilepsy drug that reduces neuronal overexcitation, potentially slowing the loss of motor neurons in ALS.

Single and Multiple Dose Study of BIIB067 (Isis-SOD1Rx) in Adults With Amyotrophic Lateral Sclerosis (ALS)



https://clinicaltrials.gov/ct2/show/NCT02623699?term=als&recr=Open&no_unk=Y&rank=48



This trial will test the safety and efficacy of an “antisense” compound against the product of the mutant SOD1 gene, a cause of ALS. This trial is open to those whose disease is caused by this gene mutation.

Observational

Phenotype, Genotype & Biomarkers in ALS and Related Disorders

<https://clinicaltrials.gov/ct2/show/NCT02327845?term=hereditary+spastic+paraplegia&rank=4>

This observational study aims to better understand the relationship between the clinical characteristics (phenotype) and genes (genotype), and to develop biomarkers that might be useful in aiding therapy development for this group of disorders.

Imaging and BioFluid Biomarkers in Amyotrophic Lateral Sclerosis (TRACK-ALS)

https://clinicaltrials.gov/ct2/show/study/NCT02559869?term=als&recr=Open&no_unk=Y&rank=2

This study will search for imaging and biofluid biomarkers to expand the understanding of ALS pathology, treatment targets, disease progression, and anatomical differences between different disease phenotypes.

A Longitudinal Study of Amyotrophic Lateral Sclerosis (ALS) Biomarkers

https://clinicaltrials.gov/ct2/show/NCT01495390?term=als&recr=Open&no_unk=Y&rank=6

This study is collecting biofluids (blood and cerebrospinal fluid) at multiple time points to allow researchers to find changes that track with disease progression.

PRE-Symptomatic Studies in ALS (PRESS-ALS)

https://clinicaltrials.gov/ct2/show/NCT01508962?term=als&recr=Open&no_unk=Y&rank=8

This study will look at clinical characteristics in people with very early disease, in order to find clues about disease progression.

Understanding Clinical Phenotype and Collecting Biomarker Samples in C9ORF72 ALS

https://clinicaltrials.gov/ct2/show/NCT02686268?term=als&recr=Open&no_unk=Y&rank=10

The National Amyotrophic Lateral Sclerosis Registry

https://clinicaltrials.gov/ct2/show/NCT01772602?term=als&recr=Open&no_unk=Y&rank=30

The Registry is an attempt to collect nationwide data on the incidence (total number of cases) and prevalence (annual new cases) of ALS, as well as risk factors such as environmental exposures. Enrolling in the Registry allows a person with ALS to receive information on clinical trials, if they choose.

The Pre-Symptomatic Familial Amyotrophic Lateral Sclerosis (Pre-fALS) Study

https://clinicaltrials.gov/ct2/show/NCT00317616?term=als&recr=Open&no_unk=Y&rank=31

Pre-fALS is a prospective natural history and biomarker study of people not yet affected with



ALS, but who are at genetic risk for developing ALS, in order to discover predictors of incipient disease.



Methodology Study of Novel Outcome Measures to Assess Progression of ALS

https://clinicaltrials.gov/ct2/show/NCT02611674?term=als&recr=Open&no_unk=Y&rank=57

This study will assess clinical progression of disease with multiple different measures, in order to find those measures that change most reliably and quickly. Such measures can then be used to speed clinical trials.

Answer ALS: Individualized Initiative for ALS Discovery (AnswerALS)

https://clinicaltrials.gov/ct2/show/NCT02574390?term=als&recr=Open&no_unk=Y&rank=21

This study will look at clinical characteristics and collect biosamples (skin and blood) in people whose ALS or frontotemporal dementia is due to mutation in the C9orf72 gene.

Natural History and Biomarkers of Amyotrophic Lateral Sclerosis and Frontotemporal Dementia Caused by the C9ORF72 Gene Mutation

https://clinicaltrials.gov/ct2/show/NCT01925196?term=als&recr=Open&no_unk=Y&rank=64

This study will document the details of disease progression in people with ALS or FTD due to mutations in the C9orf72 gene.

Advancing Research and Treatment for Frontotemporal Lobar Degeneration (ARTFL)

https://clinicaltrials.gov/ct2/show/NCT02365922?term=als&recr=Open&no_unk=Y&rank=91

This study will collect natural history data on people with FTD, including those with mutations in the C9orf72 gene.