Understanding Stem Cell Therapy for Alzheimer's Disease

A Patient Guide from Auragens

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Advancing Regenerative Medicine:
Treatments & Empathy Amplified by Science and Technology

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Welcome

Receiving a diagnosis of Alzheimer's disease — for yourself or for someone you love — is one of the most profound challenges a family can face. The gradual changes in memory, reasoning, language, and daily independence that characterize this condition touch every part of life, and the journey ahead often brings as many questions as it does uncertainties.

At Auragens, we believe that every patient deserves access to honest, thoughtful, and scientifically grounded information. This guide has been prepared to help you and your family understand what mesenchymal stem cell therapy is, how it may relate to Alzheimer's disease, what the current research shows, and what you can realistically expect if you choose to explore a consultation with our team.

This is not a promise of a cure. Stem cell therapy for Alzheimer's disease remains **investigational** — that is, it is being studied in clinical trials but has not yet been approved as a standard treatment by regulatory agencies. What we offer is a transparent, evidence-based conversation rooted in the best available science, delivered with the empathy and clinical rigor that every patient deserves.

We encourage you to read this guide carefully, share it with your neurologist or specialist, and come prepared with questions. Informed patients make better decisions — and at Auragens, your informed decision-making is our priority.

1. Understanding Alzheimer's Disease and Current Treatment Limitations

What is Alzheimer's Disease?

Alzheimer's disease (AD) is a progressive neurodegenerative disorder and the most common cause of dementia worldwide, accounting for an estimated 60–80% of all dementia cases. It is characterized by the gradual and irreversible loss of neurons and synaptic connections in the brain, leading to a steady decline in memory, thinking, language, behavior, and the ability to carry out everyday activities.

The disease primarily affects the hippocampus — the brain's memory center — and the cerebral cortex, before spreading to involve broader regions of the brain. At the cellular level, two hallmark pathological changes define Alzheimer's disease: the abnormal accumulation of **amyloid-beta (Aβ) plaques** between neurons, and the formation of **neurofibrillary tangles** composed of hyperphosphorylated tau protein inside neurons. These changes disrupt neuronal communication, trigger chronic inflammation in the brain (neuroinflammation), impair the clearance of cellular waste, and ultimately drive widespread neuronal death [8].

How Does Alzheimer's Disease Progress?

Alzheimer's disease progresses through recognized stages:

- **Preclinical stage:** Biological changes — including amyloid accumulation — occur in the brain years or even decades before symptoms appear. This stage is detectable only through biomarker testing and imaging.
- **Mild cognitive impairment (MCI) due to Alzheimer's:** Subtle memory lapses and cognitive changes emerge that are noticeable to the individual or close family members but do not yet significantly impair daily functioning.
- **Mild Alzheimer's disease:** Memory loss becomes more pronounced. Individuals may repeat questions, struggle to recall recent events, have difficulty with planning or problem-solving, and begin to need assistance with complex tasks.
- **Moderate Alzheimer's disease:** Cognitive and functional decline accelerates. Language difficulties, disorientation, changes in personality and behavior, and increasing dependence on caregivers become prominent.
- **Severe Alzheimer's disease:** Individuals lose the ability to communicate verbally, recognize family members, or perform basic self-care. Full-time care is required, and complications such as infections become life-threatening.

The pace of progression varies considerably between individuals, but the disease is invariably progressive and ultimately fatal.

Who Is Affected?

Alzheimer's disease affects an estimated 55 million people worldwide, with projections suggesting this number will rise to 139 million by 2050 as global populations age. In the United States alone, more than 6.7 million people aged 65 and older are living with Alzheimer's. The disease disproportionately affects women and individuals of certain racial and ethnic backgrounds. The emotional, physical, and financial burden on families and caregivers is immense.

Current Standard Treatments and Their Limitations

Despite decades of research, the treatment landscape for Alzheimer's disease remains limited. Current approved therapies fall into two broad categories:

1. Symptomatic medications: - *Cholinesterase inhibitors* (donepezil, rivastigmine, galantamine) modestly improve cognitive symptoms by increasing levels of acetylcholine in the brain. They do not slow the underlying disease process and their benefits are typically modest and temporary. - *Memantine*, an NMDA receptor antagonist, is used in moderate to severe stages and may help with symptoms but again does not modify disease course.

2. Anti-amyloid immunotherapy: - A new class of monoclonal antibodies targeting amyloid-beta has received regulatory approval or accelerated approval in recent years. While some agents have demonstrated reductions in amyloid burden and modest slowing of clinical decline in specific patient populations, their real-world benefit remains a subject of ongoing debate. These therapies also carry a risk of amyloid-related imaging abnormalities (ARIA) — brain swelling or microbleeds detectable on MRI — which require careful monitoring and can limit eligibility for many patients [13].

The central limitation of all current approved therapies is that none reliably halts or reverses the neurodegenerative process. They address single targets in a disease that is biologically complex, multifactorial, and driven by intersecting pathways — neuroinflammation, oxidative stress, impaired waste clearance, synaptic loss, and vascular dysfunction — that single-target drugs cannot fully address [8, 13].

This complexity is precisely why researchers have turned their attention to **pleiotropic** (multi-mechanism) approaches, including cell-based therapies, that may be capable of acting on several disease pathways simultaneously.

Why Is Regenerative Medicine Being Explored?

Mesenchymal stem cells are of particular interest in Alzheimer's disease research because of their unique capacity to modulate inflammation, support neuronal survival, promote clearance of toxic proteins, and deliver therapeutic cargo to the brain — all through natural biological signaling. Rather than targeting a single pathway, these cells appear to communicate with the brain's environment through multiple mechanisms at once. This broad biological activity has made them a compelling subject of investigation for a disease as multifactorial as Alzheimer's [8].

2. What Are hUC-MSCs from Wharton's Jelly?

Understanding Mesenchymal Stem Cells

Mesenchymal stem cells (MSCs) are specialized cells with remarkable healing and regenerative properties. Unlike embryonic stem cells, MSCs are adult stem cells that can be safely obtained from various tissues without ethical concerns.

What Makes Wharton's Jelly Special?

Wharton's Jelly is the soft, gelatinous tissue that surrounds the blood vessels inside the umbilical cord. After a healthy baby is born, this tissue — which would otherwise be discarded — can be collected and used as an exceptionally rich source of mesenchymal stem cells.

hUC-MSCs from Wharton's Jelly offer several unique advantages:

- **Young and potent:** These cells come from newborn tissue, making them more vigorous and capable of robust regenerative activity compared to cells from adult tissues.
- **Immunologically privileged:** They have low immunogenicity, meaning they're less likely to be rejected by your immune system, even though they come from a donor [5].
- **Abundant growth factors:** They naturally produce high levels of healing and protective molecules.
- **Ethical and safe:** Collection is non-invasive, painless, and poses no risk to mother or baby.

How Are the Cells Prepared?

At Auragens, we use only pharmaceutical-grade hUC-MSCs that are:

1. **Sourced ethically:** Collected from healthy, screened donors after normal, full-term births with informed consent, that we personally oversee from 2nd trimester of pregnancy with our OBGYN and maintain chain of custody throughout.
2. **Expanded in certified laboratories:** Grown under strict Good Manufacturing Practice (GMP) and Good Clinical Practice (GCP) standards to ensure purity, potency, and safety in our on-site AABB accredited, ISO certified lab [1], [6].
3. **Rigorously tested:** Each batch undergoes extensive quality control testing for sterility, viability, and therapeutic potential internally and externally through 3rd party labs and government health institute.
4. **Cryopreserved:** Carefully frozen to maintain cell viability until the moment of your treatment.

The cells are then thawed, prepared, and administered fresh on the day of your treatment to ensure maximum therapeutic benefit.

🏆 Why Auragens: AABB Accreditation — The Gold Standard in Cellular Therapy

Auragens Stem Cell Center is proud to be AABB accredited — a critical distinction that sets us apart from unaccredited clinics.

What is AABB Accreditation?

AABB (Association for Advancement of Blood and Biotechnologies) is the internationally recognized leader in setting quality and safety standards for cellular therapies. AABB is a deemed status organization by the FDA and AABB accreditation represents the gold standard in the field — the most rigorous, comprehensive certification available for facilities that process and administer cellular products.

What Does AABB Accreditation Mean for You?

When you choose an AABB-accredited center like Auragens, you can trust that we meet the highest international standards in:

- **Cell Processing Excellence:** Our laboratory protocols follow strict, validated procedures ensuring every cell product meets pharmaceutical-grade quality specifications.
- **Donor Screening & Safety:** Comprehensive screening protocols ensure all donor tissue is thoroughly tested and meets stringent safety criteria.
- **Laboratory Practices:** Our facilities, equipment, and processes undergo regular inspection and must meet exacting standards for sterility, environmental control, and quality assurance.
- **Patient Safety:** From cell arrival through administration and follow-up, every step is designed and monitored to protect your safety.
- **Staff Expertise:** Our team maintains specialized training and competency requirements specific to cellular therapy.
- **Traceability & Documentation:** Complete tracking and documentation of every cell product ensures full accountability.
- **Continuous Quality Improvement:** Regular audits, proficiency testing, and quality reviews.

Why This Matters

The field of stem cell therapy is rapidly growing, but not all clinics meet the same standards. Many facilities operate without independent accreditation or oversight. AABB accreditation means an external, U.S., FDA, expert organization has thoroughly inspected and validated our practices — giving you independent verification, proven quality systems, and genuine peace of mind. When you choose Auragens, you're choosing a center that has been independently verified to meet the most stringent international standards for cellular therapy quality and safety.

AABB accreditation is not easy to achieve or maintain — it requires significant investment in infrastructure, training, quality systems, and ongoing compliance. We've made this commitment because you deserve nothing less than the highest standard of care.

3. How hUC-MSCs May Help in Alzheimer's Disease

The biology of Alzheimer's disease involves multiple intersecting pathways — amyloid accumulation, tau pathology, neuroinflammation, oxidative stress, synaptic loss, and impaired cellular waste clearance. No single drug has successfully addressed all of these pathways simultaneously. Mesenchymal stem cells, however, exert their effects through several complementary mechanisms that may be relevant to multiple aspects of the disease simultaneously.

The following subsections describe the key biological mechanisms by which hUC-MSCs and their secreted products are being investigated in the context of Alzheimer's disease. These are mechanisms supported by published preclinical and translational research; they represent biological plausibility and investigational rationale, not established clinical proof.

4.1 Immunomodulation and Neuroinflammation Control

Neuroinflammation — chronic, dysregulated activation of the brain's immune cells (microglia and astrocytes) — is a central and self-perpetuating feature of Alzheimer's disease. Activated microglia release pro-inflammatory cytokines that damage neurons, impair synaptic function, and accelerate amyloid and tau pathology. This inflammatory environment creates a destructive cycle that current anti-amyloid therapies do not directly address.

MSCs are powerful immunomodulators. They can suppress excessive microglial activation, reduce levels of pro-inflammatory cytokines such as TNF-α and IL-1β, and promote a shift toward anti-inflammatory, neuroprotective immune states. In early clinical trials with intravenously administered MSCs in Alzheimer's patients, favorable changes in serum biomarkers consistent with anti-inflammatory and pro-vascular activity were observed [3, 4]. Preclinical work has also demonstrated that MSC-derived exosomes can promote the polarization of microglia toward an anti-inflammatory (M2) phenotype, reducing neuroinflammatory burden in model systems [14].

4.2 Neuroprotection and Trophic Factor Support

Neurons in the Alzheimer's brain are under chronic stress. They face toxic amyloid oligomers, tau tangles, oxidative damage, and an inflammatory microenvironment that progressively overwhelms their survival mechanisms.

MSCs secrete a rich array of **neurotrophic factors** — including brain-derived neurotrophic factor (BDNF), nerve growth factor (NGF), and insulin-like growth factor-1 (IGF-1) — that support neuronal survival, promote synaptic plasticity, and activate cell survival pathways including AKT/IAP signaling. In animal models of Alzheimer's disease, MSC treatment has been associated with increased expression of neuroprotective markers such as NeuN and BDNF, reduced apoptosis (programmed cell death), and preservation of hippocampal neuronal populations [9, 10]. These trophic effects may help protect surviving neurons from further deterioration.

4.3 Amyloid-Beta Clearance and Modulation

The accumulation of amyloid-beta peptides into plaques is one of the earliest and most characteristic features of Alzheimer's disease. Impaired clearance of Aβ — rather than simply overproduction — is increasingly recognized as a key driver of plaque accumulation.

MSCs and their extracellular vesicles have been shown to influence amyloid clearance through several mechanisms. Notably, extracellular vesicles derived from hUC-MSCs engineered to overexpress **neprilysin (NEP)** — a key enzyme responsible for degrading amyloid-beta — were able to deliver functional neprilysin to the hippocampus in an Alzheimer's animal model, resulting in significant reductions in Aβ pathology [9]. Even without genetic modification, MSC treatment has been associated with reductions in BACE1 (the enzyme that generates Aβ) and decreases in amyloid plaque burden in preclinical studies [9]. These findings suggest that MSCs may support the brain's natural mechanisms for managing amyloid accumulation.

4.4 Tau Pathology Modulation

Tau tangles — formed when tau protein becomes abnormally phosphorylated and aggregates inside neurons — are the second hallmark of Alzheimer's disease and are closely correlated with neuronal loss and clinical severity. Current approved therapies do not directly target tau pathology.

Preclinical evidence suggests that MSC-derived extracellular vesicles may reduce tau hyperphosphorylation in model systems, potentially through modulation of kinase activity and cellular stress pathways [11]. While this evidence is early and largely preclinical, it points to an additional mechanism by which MSC-based approaches may address aspects of Alzheimer's pathology that remain unaddressed by current drugs.

4.5 Exosome and Extracellular Vesicle Signaling

Exosomes are nanoscale vesicles naturally secreted by cells — including MSCs — that carry a cargo of proteins, microRNAs, lipids, and other bioactive molecules. They function as long-range biological

messengers, capable of crossing the blood-brain barrier and delivering therapeutic signals to neurons, microglia, and astrocytes deep within the brain.

In the context of Alzheimer's disease, MSC-derived exosomes have been investigated as both therapeutic agents and delivery vehicles. They have been shown to restore neuronal morphology and function in APP/PS1 mouse models of Alzheimer's disease following intravenous injection — effects mediated in part through activation of the Nrf2 pathway, which regulates cellular defense against oxidative stress [12]. The ability of exosomes to traverse the blood-brain barrier makes them particularly compelling as a mechanism by which intravenously administered hUC-MSCs may exert effects in the brain without requiring direct intracerebral delivery [9, 12].

4.6 Oxidative Stress Reduction

Oxidative stress — an imbalance between the production of reactive oxygen species and the cell's ability to neutralize them — is a significant contributor to neuronal damage in Alzheimer's disease. MSC-derived exosomes have been shown to activate the Nrf2 antioxidant pathway in neurons, enhancing cellular defenses against oxidative injury and supporting neuronal resilience [12]. This mechanism may complement the anti-inflammatory and trophic effects described above.

4.7 Pro-Vascular and Microenvironment Support

Cerebrovascular dysfunction — impaired blood flow and blood-brain barrier integrity — contributes to Alzheimer's pathology by reducing the brain's ability to clear metabolic waste (including amyloid) and deliver oxygen and nutrients to neurons. MSC secretome components, including VEGF and other pro-vascular factors, may support vascular health and blood-brain barrier integrity. In clinical biomarker analyses from the Lomecel-B phase 2a trial, MSC-treated patients showed changes in serum biomarkers consistent with pro-vascular activity [4], suggesting that vascular support may be one of the clinically observable effects of MSC therapy in Alzheimer's patients.

4. Clinical Evidence and Research Findings

The Current State of the Evidence

Research into stem cell therapy for Alzheimer's disease is progressing from early-phase safety studies toward controlled efficacy trials. The field has advanced considerably in recent years, with several landmark studies providing important — if still preliminary — insights. It is essential to understand that the evidence base remains early-stage: trials have been small, designs have varied, and definitive proof of clinical efficacy has not yet been established. The following is a fair and transparent summary of what the published research shows.

Phase 1 Clinical Trials: Establishing Safety and Feasibility

Kim et al. (2015) — Stereotactic hUCB-MSC Injection One of the earliest human trials of umbilical cord blood-derived MSCs in Alzheimer's disease involved stereotactic (surgically guided) direct injection of cells into the hippocampus and precuneus — regions critically affected in AD. Nine patients with mild-to-moderate Alzheimer's disease participated. The study demonstrated that the procedure was feasible and that no dose-limiting toxicity was observed over 24 months of follow-up. Common adverse events

were procedure-related: wound pain, headache, dizziness, and transient postoperative delirium. No serious unexpected safety signals emerged [1].

Kim et al. (2021) — Intracerebroventricular hUCB-MSC Injections A subsequent phase 1 trial investigated repeated intracerebroventricular (ICV) injections — delivery of MSCs directly into the cerebrospinal fluid via an Ommaya reservoir implanted under the skull — in nine Alzheimer's patients at two dose levels. The study reported that the most common acute adverse event was transient fever, occurring in all participants. Three serious adverse events in two participants were judged related to the investigational product but resolved. No dose-limiting toxicity was identified. Extended follow-up at 36 months revealed no additional serious adverse events in the monitored cohort. This study established the feasibility and acceptable short-term safety profile of repeated ICV MSC delivery in Alzheimer's patients [2].

Niu et al. (2016) — hUC-MSC Safety Protocol An open-label self-control trial protocol for intravenous hUC-MSC administration in Alzheimer's patients was published, establishing a framework for evaluating safety and preliminary efficacy of the intravenous route — the approach most aligned with Auragens' practice [4].

Randomized Controlled Trials: Emerging Efficacy Signals

Oliva et al. — Lomecel-B Phase 1 RCT (Double-Blind, Placebo-Controlled) The Lomecel-B program (Longeveron Inc.) investigated intravenously administered allogeneic bone marrow-derived MSCs in patients with mild Alzheimer's disease in a double-blind, randomized, placebo-controlled phase 1 trial. The study met its primary safety endpoint. Notably, patients in the 20 million cell dose group showed smaller early decline on the Mini-Mental State Examination (MMSE) compared to placebo, and favorable changes in several serum biomarkers consistent with anti-inflammatory and pro-vascular activity were observed. These are early signals only and must be interpreted with caution given the phase 1 design and small sample size [3].

Ramdas et al. (2024) — Lomecel-B Phase 2a Proof-of-Concept Trial The phase 2a randomized, double-blind, placebo-controlled trial of Lomecel-B in mild Alzheimer's dementia, reported at 45 weeks, met its primary safety and tolerability endpoints — no infusion-related reactions, no amyloid-related imaging abnormalities (ARIA), and no deaths were observed. Secondary endpoint analyses produced important signals: pooled Lomecel-B treatment groups showed slowing of whole brain atrophy and left hippocampal atrophy compared to placebo, and some cognitive and activities of daily living measures showed trends or statistically significant improvements in select analyses. The investigators acknowledged the small sample size as a limitation and called for larger confirmatory trials [4].

Rash et al. (2025) — Laromestrocel Phase 2a RCT (Nature Medicine) In a landmark publication in *Nature Medicine*, Rash and colleagues reported results from a randomized controlled phase 2a trial of laromestrocel — an allogeneic MSC product — in patients with mild Alzheimer's disease. This trial met its primary safety endpoint, with treatment-emergent serious adverse event rates similar across active and placebo arms and no infusion reactions or ARIA. Secondary analyses indicated improved composite clinical scores and reduced whole-brain and hippocampal atrophy at 39 weeks in the MSC-treated group

compared to placebo. These results represent some of the most rigorous controlled evidence to date suggesting that intravenously administered allogeneic MSCs may exert biologically meaningful effects in Alzheimer's disease — while still remaining investigational and requiring replication in larger trials [5].

What the Evidence Shows — and What It Does Not

Taken together, the published clinical literature supports the following conclusions:

- Intravenous allogeneic MSC infusion in Alzheimer's patients has demonstrated **acceptable short-term safety** across multiple trials, with no dose-limiting toxicities and no ARIA in the intravenous programs studied.
- Early randomized trials have produced **signals of biological activity** — including reduced brain atrophy, favorable biomarker changes, and trends toward slowed cognitive decline — that are consistent with the proposed mechanisms of action.
- These signals are **preliminary and require confirmation** in larger, longer, and more definitive trials. No trial has yet established MSC therapy as a proven, effective treatment for Alzheimer's disease.
- **Response variability** is observed across patients, and the factors that predict who may benefit most are not yet well characterized.
- The evidence base is growing: multiple clinical trials are ongoing worldwide, and the field is advancing rapidly.

Ongoing and Future Research

Research programs investigating MSC therapy for Alzheimer's disease are actively ongoing. ClinicalTrials.gov lists multiple registered trials evaluating MSC products, delivery routes, dosing strategies, and patient populations. The coming years are expected to yield more definitive data on both safety and efficacy from larger phase 2 and phase 3 studies.

5. Safety Profile: What the Research Shows

General Safety Observations

The safety of mesenchymal stem cell therapy — and specifically intravenous allogeneic MSC infusion — has been evaluated across multiple early-phase trials in Alzheimer's disease and across a broader body of MSC literature in other conditions. The following summarizes what the published research shows for Alzheimer's-specific trials.

Intravenous Administration

In the randomized controlled trials of intravenously administered allogeneic MSCs in Alzheimer's disease (Lomecel-B phase 1, Lomecel-B phase 2a, and laromestrocel phase 2a), the following safety observations were reported:

- **No infusion-related reactions** were reported in the Lomecel-B or laromestrocel intravenous programs [3, 4, 5].
- **No amyloid-related imaging abnormalities (ARIA)** — a known risk of anti-amyloid antibody therapies — were observed in MSC-treated patients, which is a notable safety advantage relative to some competing approaches [3, 4, 5].
- **No dose-limiting toxicities** were identified in the dose ranges studied [3].
- **Serious adverse event rates** were similar between MSC-treated and placebo groups in the randomized trials, with no clear excess of SAEs attributable to the investigational product [3, 4, 5].
- Individual serious adverse events did occur in some participants, consistent with the background rate expected in an elderly Alzheimer's population, but these were not judged to represent a safety signal attributable to MSC therapy.

Intracerebral and Intracerebroventricular Administration

For trials using more invasive delivery routes (stereotactic injection and ICV delivery):

- **Procedure-related adverse events** — including wound pain, headache, dizziness, and transient postoperative delirium — were common after stereotactic implantation and are expected with any neurosurgical procedure [1].
- **Transient fever, nausea, vomiting, and headache** were commonly reported after ICV MSC injections and were typically short-lived [2].
- **Three serious adverse events** in two participants were reported in the ICV trial and judged related to the investigational product; all resolved, and extended 36-month follow-up identified no additional SAEs [2].

Important Caveats

The safety data reviewed here come from early-phase trials with relatively small numbers of participants and limited follow-up durations. **Long-term safety data for MSC therapy in Alzheimer's disease are limited**, and the full risk profile — particularly over years of observation — has not yet been established. As with any investigational therapy, patients should understand that unknown risks may emerge as the evidence base matures.

At Auragens, patient safety is the foundation of everything we do. Our AABB-accredited processes, rigorous donor screening, cell quality testing, and clinical monitoring protocols are designed to minimize risk and ensure that every patient receives the highest standard of care throughout their treatment experience.

6. What to Expect Next at Auragens

At Auragens, we've designed a comprehensive, patient-centered treatment experience that prioritizes your safety, comfort, and optimal outcomes.

Step 1: Comprehensive Consultation

Your journey begins with an in-depth consultation where we review your complete medical history, discuss your current symptoms and treatment goals, explain the science behind hUC-MSC therapy in detail, and develop a personalized treatment plan tailored to your needs. We encourage you to bring family members or caregivers and to come prepared with questions.

Step 2: Treatment Review

Following your medical consultation with our team, we will review the customized treatment plan, full schedule in Panama and answer any questions that you have, to provide full transparency and clarity into whether the decision to receive treatment at Auragens is right for you.

Our Commitment to Excellence

- **Evidence-based practice:** Using only protocols supported by scientific research.
- **Pharmaceutical-grade cells:** Producing the highest quality hUC-MSCs from certified, GMP-compliant laboratory.
- **AABB Accredited:** Meeting the gold standard for cellular therapy quality and safety.
- **Transparent communication:** Providing honest, realistic information about potential benefits and limitations.
- **Personalized care:** Treating you as an individual, not a protocol.
- **Ongoing education:** Staying current with the latest research and continuously improving our protocols.

7. Next Steps

Is hUC-MSC Therapy Right for You?

Who May Want to Explore a Consultation?

You may wish to consider scheduling a consultation with Auragens if you or your loved one:

- Has been diagnosed with mild to moderate Alzheimer's disease and is seeking to explore investigational therapeutic options beyond currently approved treatments
- Has concerns about the side effect profile of anti-amyloid therapies and is interested in alternatives
- Is interested in understanding the current state of MSC research and whether it may be relevant to your situation
- Is motivated to be proactive about brain health and neuroinflammation management
- Has already discussed regenerative medicine with a neurologist and wishes to learn more

Questions to Consider Before Your Consultation

Preparing thoughtful questions before your consultation will help you make the most of your time with our team. Consider asking:

- What evidence supports the use of MSC therapy for someone at my stage of Alzheimer's disease?
- What outcomes have been observed in patients similar to me in the published trials?
- What are the realistic risks and benefits given my specific health profile?
- How does MSC therapy interact with my current medications, including any anti-amyloid therapy?
- What monitoring will be in place during and after treatment?
- How will we know if the therapy is having an effect?
- What does the follow-up process look like, and what should I watch for?

The Importance of Your Specialist's Input

We strongly encourage every patient considering MSC therapy to discuss this option with their neurologist or Alzheimer's specialist before proceeding. Your specialist knows your medical history in depth and can help you weigh the potential benefits and risks in the context of your overall care plan. Informed, collaborative decision-making — between you, your family, your specialist, and our team — is the foundation of responsible care.

How to Reach Us

To schedule a consultation or to request additional information, please visit **auragens.com** or contact our patient services team directly. Our team is available to answer your questions and guide you through the process of determining whether a consultation is right for you.

A Message of Hope

Living with Alzheimer's disease — or watching someone you love navigate its challenges — is one of the most demanding experiences a family can face. The uncertainty, the grief, the relentless effort of caregiving: these are real, and they deserve to be acknowledged.

At Auragens, we hold a deep respect for everyone who comes to us in search of answers. We believe that hope and honesty are not in conflict — that it is possible to be genuinely hopeful about the direction of science while being completely transparent about what is and is not yet known.

The science of regenerative medicine is advancing. Where Alzheimer's disease once seemed entirely beyond the reach of biological intervention, researchers are now conducting randomized controlled trials, publishing results in *Nature Medicine*, and observing real biological signals — reduced brain atrophy, favorable biomarker shifts, trends toward preserved cognition — in patients receiving MSC therapy. These are not promises. They are early signals that deserve serious scientific attention and rigorous follow-up. And at Auragens, we are committed to being part of that serious, rigorous work.

We do not offer cures. We offer our best scientific understanding, our highest standards of cell quality and patient safety, and our genuine commitment to your wellbeing. We offer a partnership in the process of informed, thoughtful decision-making — one that respects your intelligence, your autonomy, and your hope.

The path forward for Alzheimer's disease will be built by researchers, clinicians, and patients working together. We are honored to be part of that path with you.

The Auragens Patient Care Team

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Informational Disclaimer

This educational document is provided for informational purposes only and does not constitute medical advice, diagnosis, or treatment. The information contained herein is intended to support patient education and consultation readiness and should not be used as a substitute for professional medical advice from a qualified physician, neurologist, or other licensed healthcare provider.

Investigational Therapy Notice: Mesenchymal stem cell (MSC) therapy for Alzheimer's disease is investigational as of the date of this publication. It has not been approved by the U.S. Food and Drug Administration (FDA) or other major regulatory agencies as a standard treatment for Alzheimer's disease. The clinical evidence summarized in this guide is derived from early-phase trials; definitive proof of efficacy has not yet been established.

Individual Results May Vary: Outcomes described in this guide reflect findings from published research in specific patient populations. Individual responses to MSC therapy vary. No specific outcome, benefit, or rate of progression can be guaranteed for any individual patient.

Not a Replacement for Standard Care: MSC therapy is intended to complement, not replace, established Alzheimer's treatments and the care of your existing medical team. Patients should continue all prescribed medications and therapies unless advised otherwise by their healthcare provider.

Consultation Required: All prospective patients must undergo a comprehensive medical evaluation before any treatment decision is made. Auragens reserves the right to decline treatment if MSC therapy is not medically appropriate for a given individual.

Please consult with your physician, neurologist, or the Auragens medical team to determine whether UC-MSC therapy is appropriate for your specific situation.