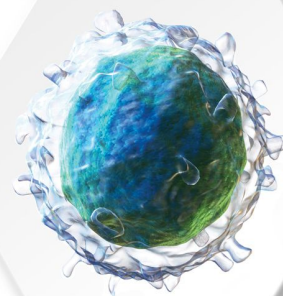


Autism





Advancells Group believes in the almost limitless potential of stem cells in managing life threatening diseases. Advancells provides customized protocols for 360° management of diseases and conditions with a regenerative medicine solution. We believe in promoting stem cell awareness to ensure that patients and caregivers, worldwide, know their role in the regeneration of damaged body tissues for neurodegenerative, musculo-skeletal, organ damage, and aging disorders.

With the **CMO Asia Healthcare Excellence Award** and the **Healthcare and Lifescience Award** (Corporate LiveWire) adorning our achievements, we provide the best medical consultation with value to treatment aesthetics and patient consent. Besides patient-friendly therapeutics, we also aid efficient biomedical research with our customized stem cells and primary cells, as it precedes every clinical translation that can help our future generation.

NEURODISORDERS FOR REGENERATIVE THERAPY

- ALZHEIMER
- PARKINSON
- **AUTISM**
- ALS
- MULTIPLE SCLEROSIS
- STROKE
- MUSCULAR DYSTROPHY
- CEREBRAL PALSY

WE ARE HERE TO HELP



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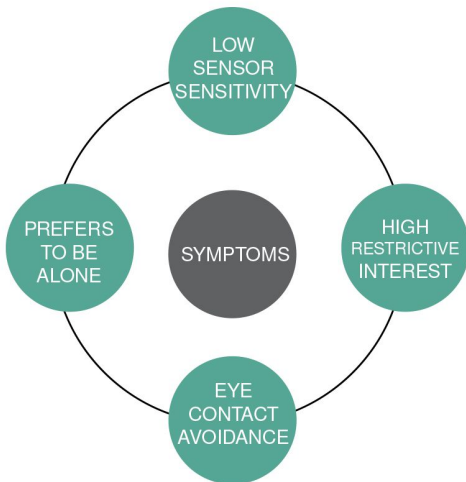
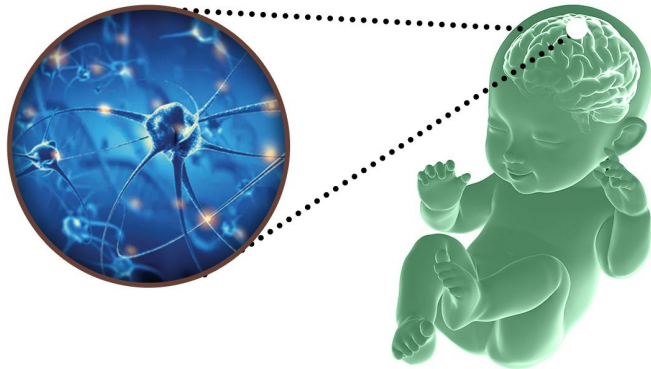
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What is Autism?

■ Neurodegenerative disorder with decreased social response

1 IN 41 CHILDREN

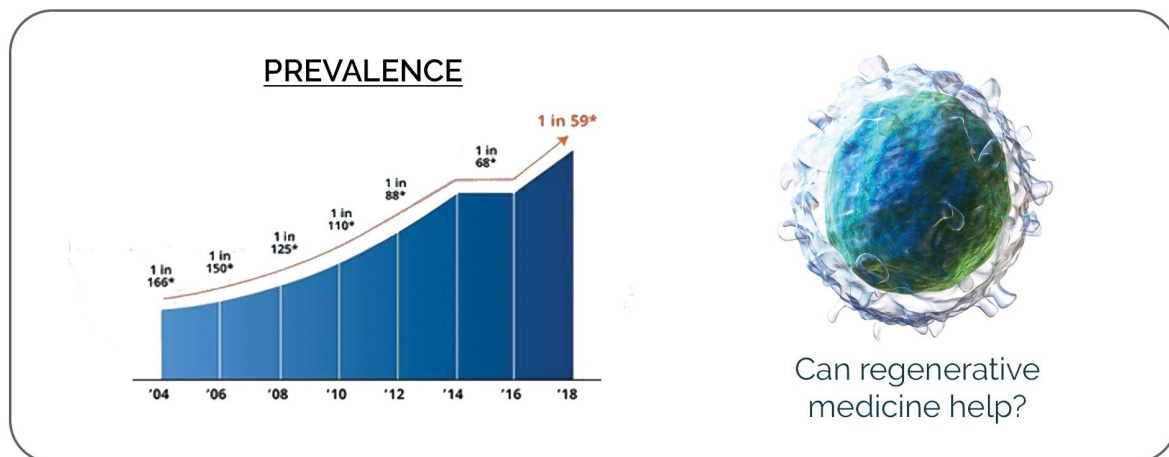
Autism is a neuro-degenerative disorder and has been detected in 1 out of 41 children; with boys having higher tendency.



Autism is a spectrum of complex neuropsychiatric disorders that affects brain development in childhood. It is characterized by disturbances in social interaction and communication, and unusual or repetitive behavioral patterns. Autism is normally diagnosed before the age of six in most patients and the prognosis varies for each patient due to the range of mild to severe cases of autism.

The numbers are expected to rise further with rise in broader diagnostic criteria for Autism Spectrum Disorder. However with higher diagnostic tools and increased awareness, it has been proven that autism can be better managed by a combination of stem cell therapy and other supportive treatments.

Although there is no specific medication for Autism till date, the treatment regime is multimodal and often involves speech and behavior therapy, social skill training and psychotropic drugs. With recent scientific advances and research in stem cell therapeutics, Hence, the regenerative medicine is new hope in better management of the disorder.



* As per the new figures disclosed by 2018

STEM CELL *Treatment for* **Autism**

- Reduced sensory integration.
- Improved motor skills and cognitive abilities.
- Better tolerability of daily chores.
- Improved concentration.
- Improved social quotient.
- Improved communication.



Regenerative Medicine

Stem cells have the unique potential to undergo self-renewal as well as differentiate into cells of neuronal origin in the body upon natural.

What can you expect?

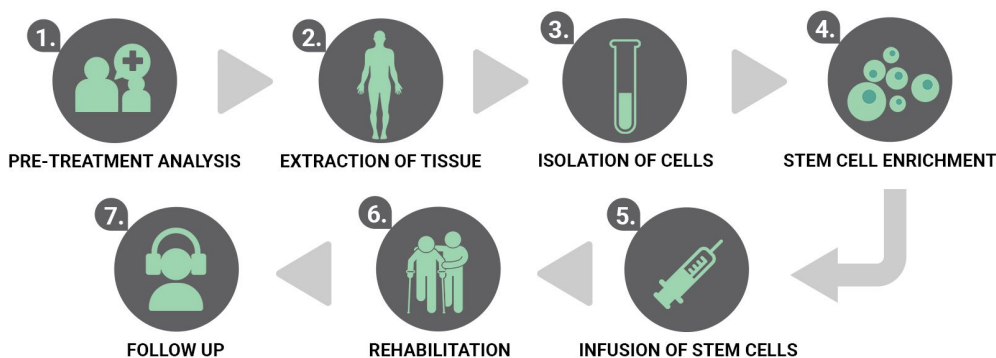
Majority of patients treated by us have reported a good control over sudden mood swings, change of attitude and behavioural issues, by exhibiting effective ways of interacting with people and willingness to participate in social events. Further to which our data suggests that post stem cell therapy children are less hyperactive, more responsive and better emotionally stable.

Although, type and extent of improvement is patient specific some of the common benefits that you can expect after stem cells treatment for Autism are:

- Reduced sensory integration, associated with improved motor skills and cognitive abilities.
- Decreased emotional and food sensitivity with reduced flare ups, mood swings and attitude problems.
- Improved communication and social interaction with notable improvement in normal reflexes and functionalities.
- Better tolerability of daily chores, improved concentration and willingness to be social with balanced emotional and mental well being.
- Improved immunological and inflammatory functions based on pre-treatment and post-treatment marker analysis.

Cell Therapy Management

Establishment of day care procedure.



PRE-TREATMENT procedure

Complete assistance will be given to the patient in all pre treatment procedures such as consultation, hospitalization (If required), Assessment.

■ Eligibility Criteria

Pre-Treatment Assessment

- Routine Blood Test
- Routine Urine Analysis
- Infectious Disease Testing
- Physical Examination
- X-Ray

Pre-Op Procedure

- MRI
- CT Scan
- Neurophysiology
- Medical Neurological Reports
- Medical History

EXTRACTION of tissue sources

Generally the entire procedure takes around 7-8 hrs including 1-2 hrs of source aspiration, 2-3 hrs of stem cell isolation and another 1-2 hrs in injecting cells. The processing of sample is done in a state-of-the-art class 10000 clean room wherein we strictly adhere to maintain quality of standards. Wherein the extracted sources undergo minimum manipulation such as been spun in a centrifuge to pull out a stem cells.

TARGETED delivery

Once isolated, intensified and ready for reinstalling back into the body, we work out different mode of implantation: depending upon patient's health condition.

■ Intravenous Administration

Cells will be infused directly into the vein to be able to circulate in the vascular system. This may further help to induce immediate signaling pathways to direct cells to the site of injury.

■ Intra-thecal Administration

Intrathecal administration is the infusion of stem cells via injection into the spinal canal, most popularly known as **Lumbar Puncture**.

REHABILITATION

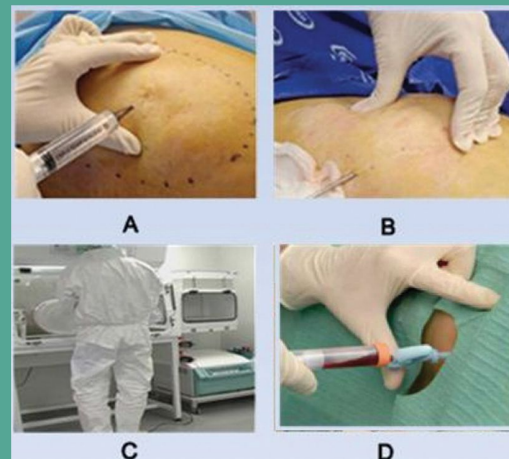
Post treatment care involves multiple reclamation therapies for accelerated recovery. Advancells is recommending range of therapies as discussed later.

Bone Marrow Extraction



- A. Application of local anesthesia.
- B. Bone Marrow collection by needle insertion in the hip bone.
- C. Isolation of Stem Cells in the clean room.
- D. Intra-thecal Injection of stem cells.

Adipose Tissue Extraction



- A. Application of tumescent anesthesia.
- B. Adipose Tissue collection by lipoaspiration.
- C. Isolation of Stem Cells in the clean room.
- D. Intra-thecal Injection of stem cells.

Why Should YOU choose Advancells?

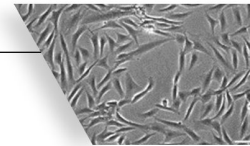
01 AUTOMATED and CLOSED System

At Advancells, stem cell therapy is performed under the supervision of medical experts in a multi speciality hospital and cells are processed in the state-of-the-art GMP compliant laboratory i.e. fully functional with automated equipments.



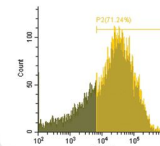
02 HIGH Quality of Cells

At Advancells, we ensure that cells are of best quality; and hence we perform a thorough **Quality Assessment** by experienced scientists. We provide a detailed certificate of analysis to each patient further authenticating the cell quantity and viability.



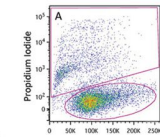
03 Disease-Specific MARKER Analysis

Our clinical research scientists do a thorough disease-specific marker analysis both **pre and post-treatment** to ensure subjective reduced expression levels of the same, thus showing evidence based assesment of improvement in each case. Reports are shared to confirm physiological improvement.



04 HIGH Concentration Enriched with MULTIPLE Cell Population

The treatment procedure is performed using a high concentration of viable cells with multiple cell population, created from a very small portion of the tissue.



05 SAFE Treatment Procedure

The procedure is completely safe and has not detected any adverse events throughout the globe.



06 PATIENT SATISFACTION Assurance

Our medical team assures you treatment aesthetics and formal consent for your stem cell therapy. We prioritize patient follow-ups to ensure that your health improvements ascend with our therapeutic solutions.



07 Globally Recognized HEALTHCARE

Advancells Regenerative Medicine solutions have been globally recognized with the CMO Asia Healthcare Award for the Best Product Innovation and Quality Initiative. We were also privileged to host His Royal Highness, the king of Kuwait, for regenerative therapy during his 2017 visit.



Special services for International Patient

- Assistance in Visa and planning travel itinerary.
- Assistance in getting comfortable accommodation in nearby location.
- Travel Assistance for sight seeing.
- Assisting with your interpretation services.
- Assisting with multiple payment options.
- Expedite arrival with fast track registration.



Each Case is Special For Us,

Therefore Every Cell has to pass through a Stringent Quality Control Parameter.

■ Clinical Definition of Stem Cells

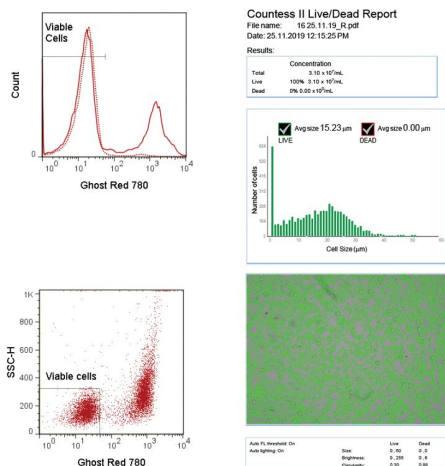
- Stem Cells are the mother cells of our body.
- They can divide unlimited times.
- Can differentiate into any cell type.
- Can be exploited to treat diseased condition.

At Advancells, we provide a high concentration of viable stem cells with enhanced differentiation potential for our treatment procedure. The patient derived stem cells are checked for mycoplasma and endotoxin contamination after isolation from the patient's body.

The stem cell suspension are checked for both gram-positive and gram-negative bacterial load during procedure for preventing any bacterial infection upon re-injecting them to the patient's body.

1.

Characteristics of Stem Cells



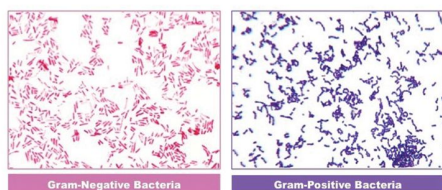
2.

Mycoplasma Detection



3.

Detection of bacterial containment



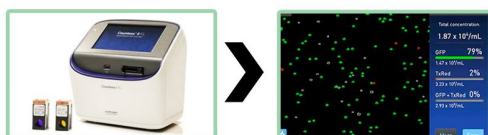
4.

Endotoxin Analysis



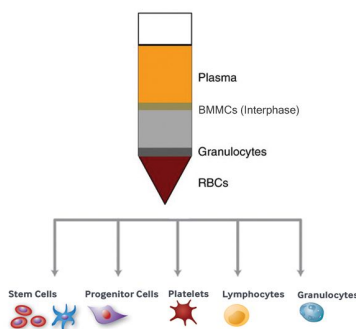
5.

Viable Cell Count & Analysis through Automated cell counter



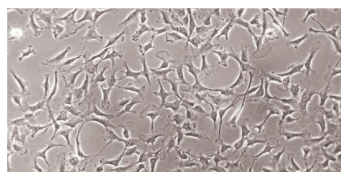
Analysis report		
Viable cell count at the time of dispatch: $x \times x^x$ cells		
Mycoplasma : Negative		Endotoxin : Negative (Qualitative Test > 0.2EU/ml)
Marker Analysis (Reference Document No: 0024GI001552):		
Markers Detected	Interpretation	Percentage
XX	Positive/ Negative	xx%
XX	Positive/ Negative	xx%
XX	Positive/ Negative	xx%

Technology Calling...



Bone Marrow derived mononuclear cells

Neutrophil	72.3%
Eosinophil	1.8%
Lymphocyte	12.1%
Monocyte	2.8%
Nucleated Erythrocyte	8.9%
Blast Cells	1.6%

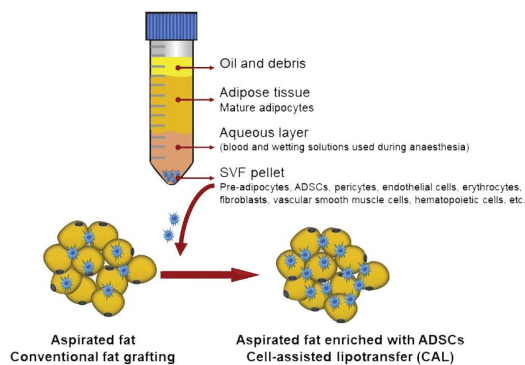


Bone Marrow Stem Cells promote vasculogenesis and differentiation to enhance blood circulation.

★ Wide Range of other cell types such as Mesenchymal Stem Cell are available for therapeutic operations.

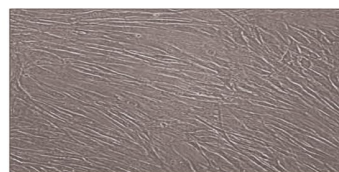
Stem Cell Therapy Success Rate

Symptoms	Percentage Improvement
Social Interaction	67.30
Eye Contact	81.06
Attention/ Concentration	83.41
Stereotypical behaviour	54.30
Aggressiveness	59.04
Hyperactivity	66.49
Self-Injurious Behaviour	61.33
Sitting Tolerance	87.93
Command Following	85.43
Speech	60.48
Communication	61.27
ISAA	94.23
CARS	95.67



Stromal Vascular Fraction

Endothelial Cells	25%
Myeloid Cells	22%
Monocyte	20%
cKit ⁺ Progenitor Cells	5%
CXCR4 ⁺ Multipotent Cells	2.5%
PDGFR-β ⁺ Perivascular Cells	20%



Pre-Adipocytes are known to produce cells of neuronal origin and regularise inflammatory immune responses.

FACILITY & EXPERTISE



CAN only Rehab Help?

- Applied Behavioral Analysis
- Occupational Therapy
- Speech Therapy
- Therapy for verbal behavior interventions
- PECS Therapy
- GFCF diet
- Hyperbaric oxygen therapy (Immediately post treatment)
- Chelation Therapy

How should I choose a good center for stem cell therapy for my child?

The following criteria should be kept in mind:

- A center with all types of regulatory compliance & certifications.
- Specialized in offering safe & viable stem cells which is further certified through CoA.
- A centre with good technical expertise & good infrastructure.



Children of all ages learn through movement and need to master core motor skills in order to maximize their overall potential. Beginning as infants they develop stability so that they can learn to use their hands and feet independently from the rest of the body. They also learn how to manipulate the environment and how to move their bodies within it. They use movement to bond and communicate with others and to explore the world. Limitations in motor skills can lead to difficulty with all areas of development. Physical Therapy can be a beneficial part of a team approach to help children with ASD to be as successful and independent as possible in school, home and in the community.

- Improve postural control to increase stability during fine motor, gross motor, and self-care activities.
- Improve static balance to improve motor control and motor skills.
- Lay down the foundations of gross motor skills to support participation in community and peer activities.
- Calming and relaxing effect.

Let's Hear it from the Parents.. .

■ ARCHIT DEV, 7 YRS OLD, AUTISTIC CHILD PATIENT STORY, INDIA

My son is an Autistic child and I was hopeful from stem cell Autism treatment, as many advances were made in this field through medical research.

■ MS. THARINI, 15 YRS OLD, AUTISM PATIENT STORY, INDIA

15 years old Tharini from Chennai was diagnosed as an instance of Autism by the age 3. Within 2/3 weeks of stem cells therapy she started showing considerable improvements in her social and behavioural patterns.

■ MR. BB, 8 YRS OLD, AUTISM PATIENT, UNITED KINGDOM (UK)

Our patient BB showed remarkable improvement in health, social skills, cognition post stem cell therapy; his parents are quite satisfied with the changes he has undergone.

■ LAUREN DICORCIA, 11 YRS OLD

In the past 6 weeks we have seen significant improvements in our daughter's behaviors, focus, hyperactivity and insomnia.

■ ALFONSO BOLLULLO, 7 YRS OLD, AUTISM PATIENT STORY, SPAIN

I'm happy that stem cells are doing a great job and saving my child from the lost world in which he lives.



Certifications





Advancells

G R O U P

Shaping the Future



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THE POWER TO CURE



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