FCTI

Precursor (Progenitor) Stem Cell Therapy

Autologous Stem Cell Therapy

Active Specific Immunotherapy

THE ANSWER

to treatment of chronic, incurable or untreatable diseases, ageing diseases and general rejuvenation

ABOUT FCTI

FCTI is an adaptive, regenerative medical innovations organisation delivering therapeutic solutions for practitioners managing patients with untreatable diseases, conditions or syndromes and those deemed no longer treatable by contemporary healthcare.

FCTI is a frontier research and development organisation, earning and learning a knowledge base in precursor stem cells for xenotransplantation and stem cell culturing for autologous transplant.

FCTI is a world leader in the manufacture of precursor stem cells from a state of the art European Union laboratory, delivering for practitioners around the world.

Continuous FCTI parallel research programs with partners, advisers, contractors and in-house specialists enabled new discoveries in primary tissue culturing. Clinical experience from our network of practitioners unlocked methodologies for application in new advanced therapies.

FCTI has evolved from product provider to therapeutic service delivery. In 2016, to reflect this, we changed our name to Frontier Cytobiological Therapies International.

Our revolution for evolutionary therapy.

FCTI Frontier Cytobiological Therapies International

FCTI

The new normal for science and medicine changes second by second, hour by hour, day by day. It is moving fast.

The thirst for knowledge, the quest for discovery moves exponentially faster as each day dawns and along with it, and the pace of change in this modern digital world is rapid and relentless.

Two distinct, but very different challenges accompany this progress. New diseases of the modern world are emerging as we are exposed to more and more visible toxins in our environment and invisible toxins in our modern and increasingly processed diet.

Long identified disease, syndromes and conditions have opportunity for new solutions; particularly those deemed too hard, too expensive or impossible to treat. The research and clinical practice in finding solutions using cells themselves began with some success in Western Europe during the great depression.

A world war and a baby boom later, the stem cell was discovered and, with it, the race began to unlock the stem cell's regenerative healing biological power. It took until the 1980's for it to become part of the modern lexicon. It was the 1990's before the importance of this discovery was widely understood and for religious and cultural, moral and ethical issues to be debated.

In the new millennium, it became a – mostly incorrect – catch cry in marketing for aesthetic products that set back public perception and saw a myriad of new laws governing research and application. Now, decades of contemporary research, clinical and case studies have seen remarkable breakthroughs in therapies for new diseases of the modern world and old diseases left untreated.

Contents

STEM CELL THERAPY

STEM CELL THERAPY

Stem Cell Therapy (SCT) is a minimally invasive therapeutic procedure where the live stem cells from human (allo-) or animal (xeno-) origin are implanted to the recipient and due to its multi-potency and restorative function, stem cell therapy is an outstanding therapy technology that addresses multiple functional requirements of different vital organs and tissues and for the treatment of chronic disease.

Transplanted cells bring life back by replenishing or repairing the cells of damaged organs. It effectively restores tissues and organs by stimulating the innate repair system of damaged cells, activating the growth function of dormant cells and replacing degraded, malfunctioning cells. In other words, Stem Cell Therapy may potentially be used when conventional treatments are no longer effective.

When the stem cells come from a donor of the same species it is called allogenic cell therapy. When the stem cells come from your own blood or tissue it is known as autologous – or self – therapy. When the stem cells are derived from a different species it is called xenogenic therapy.

HISTORICAL USE

A forerunner of modern regenerative medicine, Stem Cell Therapy has been utilised successfully in Europe in some form or another for almost 80 years. Clinical data from patients – principally in Germany and Switzerland – has been consolidated and conclusive regarding the safety and effectiveness of these stem cell based treatments.

PRECURSOR STEM CELLS

Precursor Stem Cells are partially differentiated stem cells that are procured from animal fetus once at the stage of organogenesis. These multi-potent stem cells are therefore committed to follow a predetermined path of differentiation along one lineage only – they divide through cell division to produce new cells specific for the tissue of origin, and follow the body commands. Through the direct stimulation or replacement of the recipient's own malfunctioning cells, these precursor stem cells can deliver regenerative effect by restoring functions to injured, diseased and debilitated tissues and organs – being a subset of the ultimate individualised therapy for tissue regeneration.

When all conventional methods of treatment have been exhausted and in the prevention or management therapies of ongoing challenging conditions, the patient may consider an alternative approach. Preferably a minimally invasive therapy.

FCTI offers three highly individualised therapies under physician prescription for patients worldwide.

Therapies chosen by practitioners are dependent on the legal frameworks for practice and treatment in their respective countries.

FCTI does not offer products for sale.

All therapies are patient specific.

PSCT

Precursor Stem Cell Therapy through xenotransplantation stimulates the patient's malfunctioning damaged or injured cells with new cells harvested from premium rabbit fetus.

ASCT

Autologous (self) Stem Cell Therapy sees the patient's own blood drawn to extract stem cells that are reprocessed using highly advanced stem cell culturing techniques.

ASI

FCTI scientists developed a new approach to effectively target and destroy only cancerous cells while leaving healthy cells unharmed by Active Specific Immunotherapy.

PRECURSOR STEM CELL THERAPY

FCTI selectively uses premium rabbits as the source for its precursor stem cells due to the abundance in supply, as well as the discordant genetics of rabbits with human, which renders an outstanding compatibility for long-term therapeutic administration into diseased patients. It is recorded in medical literature that immune-suppressants are not necessary if stem cells are prepared by the FCTI patented preparation methodology; Primary Tissue Culture from the fetal material.

PREMIUM SOURCE

FCTI precursor Stem Cell Therapy PSCT differs from other fetal stem cell therapies in its multi-detailed preparation method of primary tissue culturing. The fetal stem cells on their own are limited in their ability to differentiate into other types of cells.

SOURCE SAFETY

Rabbits have a natural barrier against zoonosis transmission. Rabbits have been ascertained as the only mammal species to date to have no endogenous retrovirus.

The tissue-specific precursor stem cells of FCTI are procured from a European state certified closed colony raised for more than 40 generations, surpassing WHO and USFDA requirements.

The handling protocols to meet stringent prevention of cruelty guidelines are certified by AAALAC International.

- Daily inspection by qualified personnel
- Weekly veterinarian check
- Documentation of medical records, full history & hereditary links
- Bi-annual blood and excreta testing of female rabbits
- Full autopsy on each death
- Microbiological testing
- Bacterial endotoxin test

Samples of blood, brain, bone marrow, liver and spleen are all obtained and cryogenically preserved for 5 years

WORLD LEADING TISSUE CULTURE TECHNOLOGY

FCTI utilises a patented preparation methodology – Primary Tissue Culture – that is a unique cell culturing procedure.

This involves creating an environment of ideal growth conditions for a specific cell type of a tissue that is simultaneously unfavourable for other cell types from the same tissue that are deemed useless for the desired therapeutic effect.

This preparation is necessary for optimal treatment effect and prevents an antigenic overload.

CELL THERAPY PRINCIPLES

The fundamental scientific principles of cellular therapy and precursor stem cell therapy remain;

1. Organ specificity
2. Homing principle
3. Principle of homology
4. Similarity in genetics
5. Life cycle of cells
6. Phenomenon of paracrine effect

COMPARATIVE ANALYSIS OF PRECUSOR STEM CELLS WITH OTHER STEM CELLS

Advantages of Fetal Precursor Stem Cells over Adult Stem Cells

	Fetal Precursor	Adult
Therapeutic potential	High	Low
Differentiation	Fast	Slow
Adaptability	High	Low
Cell division	Fast	Slow
Immunogenicity	Practically nil	Higher
Survival rate	Higher	Lower
Quantity	Numerous	Less
Age	Zero ensuring the best quality	Cells quality As old as the host itself

Advantages of Fetal Precursor Stem Cells over Embryonic Stem Cells

	Fetal Precursor	Embryonic
Stability	More stable	Unstable due to oncogenicity
Historical data	>85 years cell therapy and about 1 million patients treated in Europe	<70 years
Attainability	Easy and safe procurement from a fetus in natural environment	Exist only in a laboratory dish and not in a living embryo
Origin	Animal - abudantly available	Human - very limited and rare
Renewal	Long term self renewal	Self renewal except in cancer cases
Method of preparation	Based on primary tissue fragments or cell clusters	Based on primary cell culture of dispersed cells

What about Umbilical Cord Blood Stem Cells?

Umbilical cord blood is the blood that remains in the umbilical cord and placenta following birth and after the cord is cut. Cord Blood is collected because it contains stem cells, which are genetically unique to the baby and his/her family. However, cord blood has its limitation and can only be used generally for the treatment of blood and immune system disorders.

Umbilical cord blood contains only hematopoietic stem cells and mesenchymal cells but of no other targetted or specific organ systems of the body. For that reason, a number of industry experts have postulated that diseases of central nervous system, digestive system, excretory system, respiratory system, as well as genetic and chromosomal diseases etc. may not be treated with success by umbilical cord blood stem cells as there is no such existence of the targetted specific cells found in umbilical cord blood stemcells nor in the mesenchyme cells.

It is rather impossible that the only 2 to 3 cell types out of the 220 cell types present in our bodies can stimulate the regeneration of every organ or tissue. Although the potential use of umbilical cord blood is expanding rapidly, the odds are low that family members without a defined risk will need to use their child's umbilical cord blood. It contains only a limited amount of stem cells, which may not be sufficient for an adult usage.

Will umbilical cord blood be of guarantee a match for family members or siblings? It is still uncertain. Hence, umbilical cord blood stem cells will not guarantee suitable treatment for all inherited genetic diseases.

CELL TYPES

FCTI has the production capacity and know-how to prepare more than 90 types of precursor stem cells, many of which may not be listed below. The production of certain uncommon cell types may be arranged on a request basis.

Placenta (Cytotrophoblast)	Synergistic Cells
Mesenchyme	
Thymus	Immune System
Lymph Nodes (Mesenteric)	
Ovary	Endocrinal System
Testis	
Prostate	
Pituitary	
Hypothalamus	
Adrenal Cortex	
Thyroid	
Parathyroid	
Peripheral Myoblasts	Musculoskeletal System
Smooth Muscle	
Osteoblast	
Cartilage (Articular)	
Synovia	
Bone Marrow	Hematopoietic System
Blood (Hematopoietic)	
Parasympathicus of Autonomous NS	Nervous System
Spinal Cord	
Cauda Equina	
Stomach	Digestive, Excretory and Respiratory Systems
Gastric Mucosa	
Intestinal Mesenchyme	
Intestinal Mucosa	
Liver	
Spleen	
Pancreas (Islets)	Digestive, Excretory and Respiratory Systems
Pancreas (Exocrine)	
Kidney	
Lungs	
Skin	
Heart (Cardiac Myoblast)	Cardiovascular System
Artery	
Gingiva	Ocular Tissues
Eye (Retina)	
Optic Nerve	
Eye Ball	
Whole brain (Neural stem cells)	Brain Tissues
Lobus Occipitalis (Occipital Lobe)	
Lobus Frontalis (Frontal Lobe)	
Lobus Temporalis (Temporal Lobe)	
Lobus Parietalis (Parietal Lobe)	
Thalamus	
Cerebellum	
Medulla Oblongata	
Medulla Alba	
Hippocampus	
Amygdala	
Mesencephalon	
Rhinencephalon	
Basal Ganglia	
Diencephalon	
Brain Stem	
Cerebral Cortex	
Cerebral Hemisphere	
Pineal Gland	

FCTI PSCT INDICATIONS

Age-related Diseases
• Menopause • Depression • Impotence and loss of libido
• Memory loss • Arteriosclerosis • Impaired liver function
• Osteoarthrosis • Immune deficiency, etc.

Central Nervous System Diseases
• Neurodegenerative disease • Parkinson's disease
• Demyelinisation diseases • Old/fresh spinal cord injuries
• Apallic syndrome • Encephalitis
• Locked-in-syndrome • Amyotrophic lateral sclerosis
• Friedreich's ataxia • Werdnig-Hoffman disease
• Duchenne & Becker muscular dystrophies • Dementia

Autism

Autoimmune Diseases
• Scleroderma • Rheumatoid arthritis • Dermatomyositis
• Systemic lupus erythematosus • Polymyositis
• Sjogren syndrome • Hashimoto's thyroiditis
• Addison's disease • Chronic active hepatitis
• Primary biliary cirrhosis • Glomerulonephritis
• Good pasture's syndrome • Myasthenia gravis
• Bronchial asthma • Pemphigus
• Bullous pemphigoid • Vitiligo • Atopic dermatitis
• Autoimmune hemolytic anemia
• Autoimmune thrombocytopaenic purpura
• Pernicious anemia

Chromosomal Disorders
• Down syndrome • Noonan syndrome
• Turner syndrome • Wolf syndrome

Neonatal & Perinatal Diseases
• Cerebral palsy • Inborn errors of metabolism

Endocrine Diseases
• Diabetes mellitus • Vasculopathy
• Adrenocortical hormonal insufficiency
• Premature menopause and andropause
• Retarded puberty • Female infertility
• Imbalance state of autonomous nervous system
• Endometriosis • Uterine myomas
• Habitual abortion of adrenal etiology
• Parathyroid insufficiency • Hypothyroidism

Immune System Disorders
• Immunodeficiency • Chronic fatigue syndrome
• Disorder of non-specific immunity
(e.g. defects of natural killer [N. K.] cells)

Cardiovascular Diseases
• Myocardial infarction
• Congestive heart failure • Peripheral arterial disease
• Chronic cardiac disorder
• Arteriosclerotic vascular disease

Liver Diseases
• Liver cirrhosis • Chronic hepatitis • Fatty Liver disease
• Crigler-Najjar syndrome • Primary Biliary cirrhosis
• Non-alcoholic steatohepatitis (NASH)

Kidney Diseases
• Genetic diseases of renal tubules
• Nephrotic syndrome • Glomerular disease
• Chronic Kidney Disease stage 1-4

Lung Diseases
• Pulmonary fibrosis • Emphysema

Locomotor System Diseases
• Non-healing fractures • Osteoarthrosis
• Chronic osteomyelitis • Osteogenesis imperfecta
• Achondroplasia
• Arthrogryposis multiplex • Chronic osteomyelitis
• Chronic arthritis • Rheumatoid arthritis • Osteoporosis

Metabolic Diseases
• Atherosclerosis • Lipoprotein metabolism disorder
• A-β-lipoproteinemia

Digestive System Diseases
• Atrophic gastritis • Chronic pancreatitis
• Malabsorption syndrome

Genetic Diseases
• Wilson's disease • Muscular dystrophy
• Neurofibromatosis • Tuberous sclerosis
• Cornelia-de-Lange syndrome • Gaucher disease
• Metachromatic leukodystrophy • Fabry's disease
• Gangliosidoses • Refsum disease
• Mitochondrial genetic disease

Skin Diseases
• Deep burns
• Acne vulgaris • Ulcus cruris • Various eczemas
• Sarcoid Darier-Roussy • Hereditary keratosis
• Palmaris et plantaris • Chronic lichen • Scleroderma
• Alopecia areata

Radiation Injuries
e.g. Post radiation ulcers

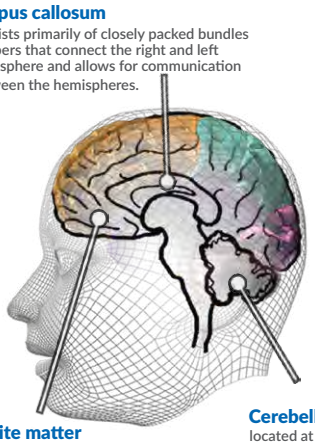
Hematological Diseases
• Thalassemias • Sickle cell anemia • Aplastic anemias
• Hereditary hemolytic anemias • Thrombocytopaenias
• Erythropoiesis disorder • Primary hemachromatosis
• Werlhof disease

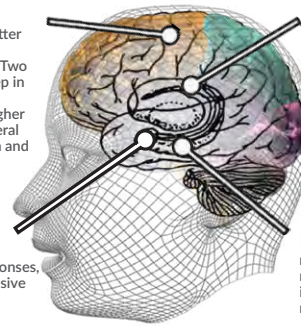
AUTISM

Autism is a brain development disorder characterised by impaired social interaction and communication, and by repetitive and restricted behavior. It is believed to have a strong genetic basis and much contemporary argument points towards links to immunisation. Heavy metals are found in the mothers of many autistic children perhaps due to exposure to chemicals like paint, pesticides, new furniture or carpet during pregnancy. 2016 data concludes perhaps as many as in 60 children are affected with the USA then China the world's leading affected countries.

Corpus callosum
consists primarily of closely packed bundles of fibers that connect the right and left hemisphere and allows for communication between the hemispheres.

Cerebral cortex
a thin layer of gray matter on the surface of the cerebral hemispheres. Two thirds of its area is deep in the fissures or folds. Responsible for the higher mental functions, general movement, perception and behavioral reactions.





Basal ganglia
gray masses deep in the cerebral hemisphere that serves as a connection between the cerebrum and cerebellum. Helps to regulate automatic movement.

Amygdala
responsible for emotional responses, including aggresive behavior.

Hippocampus
makes it possible to remember new information and recent events.

White matter
consists of the fibers that connect one nerve cell to another. Decrease of White matter density is an early sign of the risk of Autism development.

Cerebellum
located at the back of the brain, it fine tunes our motor activity, regulates balance, body movements, coordination, and the muscles used in speaking.

In pre-1957 German, Spain, Russia, select European states and the USA, documented PSCT therapy applied before the age of 13 proved statistically significant improvement in height, IQ, concentration, speech, motor skills and immune system.

DOWN SYNDROME

A condition caused by an error in cell division that results in chromosomal abnormalities, generally in one in every 700 births; much higher in the middle east. As a woman's age increases, the risk heightens in carrying a child with Down Syndrome. Physical development occurs at a lower rate because of weak and floppy muscles. Speech is delayed yet patients can normally live to 60 with normal fertility and the capacity for offspring.

Down Syndrome is one condition that responds well to PSCT. Early intervention of down syndrome in infants and children with FCTI PSCT can make a difference in maximising their potential ability for a better quality of life.

½ years old ½ years old 10 years old

From ½ years old to 10 years old with controlled, clear facial expression, speaks fluently, read books and writes accurately.

½ years old 3 years old 10 years old

DIABETES

Absence or insufficient production of insulin causes diabetes. The two types of diabetes are referred to as type 1 (insulin-dependent, juvenile onset) and type 2 (non-insulin-dependent, adult onset).

Diabetes remains one of the most common chronic medical conditions threatening the modern world. In China, the prevalence has more than quadrupled in recent decades where patients have at least twice the increased risk of mortality due to ischemic heart disease, stroke, chronic liver disease, and infection

PSCT has shown effectiveness slowing the progress of diabetic complication. The sooner a patient receives PSCT after diagnosis the success rate of the therapy proves greater. Especially children with diagnosed type 1, able to significantly delay the progression of diabetic complications that are deleterious to their growth and development.

Also for diabetic women on fertility treatment for more than a year without success, PSCT is a strong therapeutic consideration. If a pregnant diabetic woman delivers a baby with diabetic fetal distress syndrome, PSCT is often recommended before the next pregnancy or even during the pregnancy between 12th and 16th weeks.

CEREBRAL PALSY

Cerebral Palsy (CP) is a disorder that affects muscle tone, movement, and motor skills (the ability to move in a coordinated and purposeful way). CP usually is caused by brain damage that happens before or during a baby's birth, or during the first 3 to 5 years of a child's life. The abnormality in the motor system is a result of non-progressive brain lesions.

PSCT has shown great benefit for CP patients, specifically for;

- *Spastic forms that respond to intensive forms of physical training (possible up to 10 years old);*
- *Dyskinetic forms – choreoathetosis and ataxic form (possible up to 10 years old);*
- *Hypotonic forms - (possible up to 4 years old)*

The age at which PSCT is introduced can be a significant factor. The earlier the PSCT, the better chance children have overcoming developmental disabilities or learning new ways to accomplish the tasks that challenge them daily.

FCTI PSCT

PARKINSONS, AGE RELATED, HEART

PARKINSON'S DISEASE

PD is an degenerative disorder of the central nervous system that often impairs the patient's motor skills, speech and other functions. PSCT has shown great promise in helping regenerate the central nervous system. For Parkinsons patients in particular, the neurons that die are responsible for connecting a structure in the brain. Such neuronal connections allow for releases of the chemical transmitter dopamine onto their target neurons in the striatum, which controls body movement. It is the regeneration of the dopamine-producing neurons that restores normal body movement.

PSCT has been shown to be effective assisting this regeneration.

AGE RELATED DISEASE

Ageing is an accumulation of damage in an organism over time to macromolecules, cells, tissues and organs. As we grow older our bodies' ability to repair and regenerate starts to decline. Wrinkles, loss of elasticity in skin tone, stiff joints, loss of bone and muscle mass, and loss of hearing are some age-related issues everyone experiences.

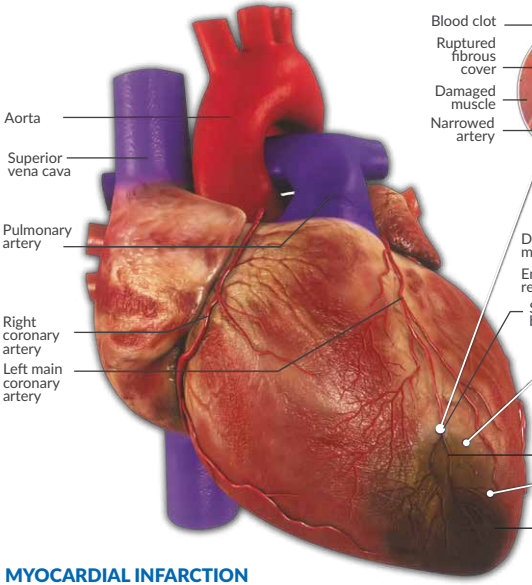
As cells progressively weaken over time and die, PSCT can work to remediate aging by treating, slow and reverse age related disease. The prime age to commence regenerative therapy is age 35.

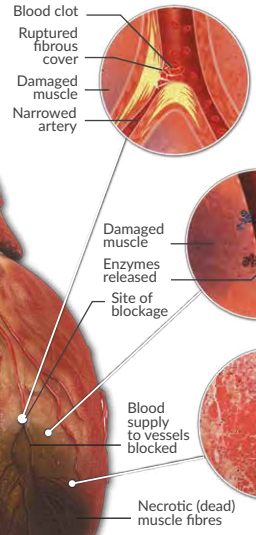
After PSCT, some benefits may include:

**improved mental and physical activity*
**increased vitality & metabolism*
**quality sleeping patterns*
**reduced wrinkles *healthier skin colour*
**enhanced blood circulation*
**improved appetite*

HEART DISEASE

PSCT is a therapeutic answer for a variety of heart conditions and disease.





CORONARY THROMBOSIS

An area of plaque becomes roughened, because of fibrous covering tears. Blood cells, especially platelets, begin to stick to the area and trigger the formation of a thrombus (clot).

ENZYME RELEASE

Degenerating muscle fibres in the affected area release a number of enzymes into the circulation. Measuring these enzymes through a blood test indicates the extent of the heart muscle damage.

DAMAGED HEART MUSCLE

If cells are deprived of oxygen and nutrients, they quickly degenerate. If the blood supply is not restored quickly, the tissue eventually dies, a process known as necrosis. At this stage, the damage to the cells is irreversible.

MYOCARDIAL INFARCTION

When a coronary artery becomes blocked, the cells of the heart muscle it supplies begin to die from the lack of oxygen and nutrients and the accumulation of poisonous waste products. FCTI products can possibly complement its recovery after myocardial infarction.

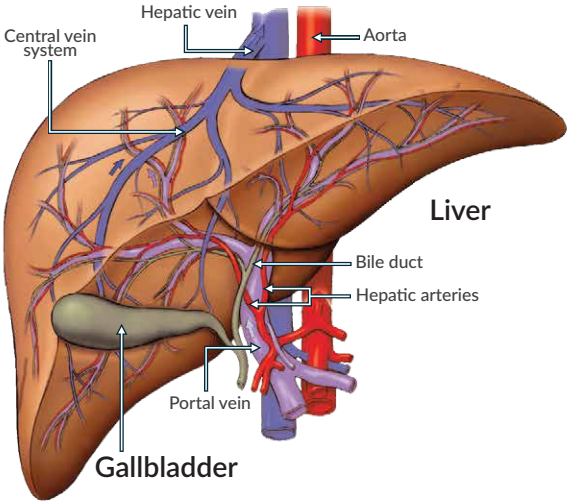
as well as :

- **INTRACTABLE ARRHYTHMIA**
- **CONGESTIVE HEART FAILURE**
- **PERIPHERAL ARTERIAL DISEASE**
- **ARTERIOSCLEROTIC VASCULAR DISEASE**

LIVER DISEASE

PSCT is a treatment of choice for a variety of liver disease including

- Fatty Liver disease
- Crigler-Najjar syndrome
- Primary biliary cirrhosis
- Non-alcoholic steatohepatisis (NASH)



Hepatitis, is an inflammation of the liver, caused mainly by viruses. However, alcohol, toxins, immune deficiency, and immune imbalance play an important role in damage of the liver too.

Cirrhosis is a result of the excessive formation of the fibrous tissues in the liver that affect liver's structure and function. Chronic viral or toxic hepatitis, accompanied by the auto-immune mechanisms are the main reasons of the Liver Cirrhosis.

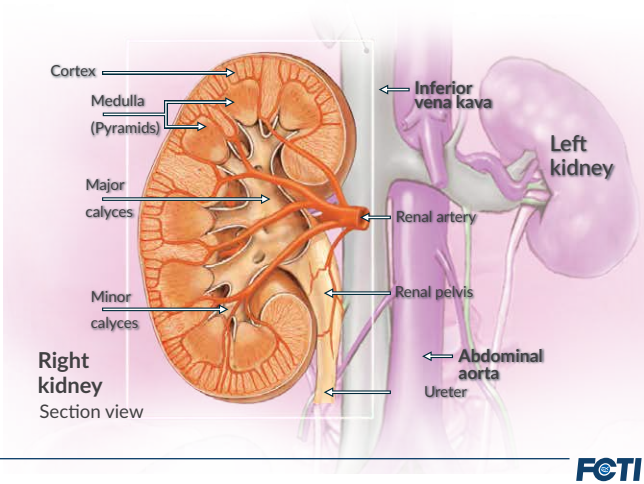
KIDNEY DISEASE

The kidneys perform a number of functions, chiefly filtering the blood, removing waste by creating urine, adjusting the chemical and fluid balance in the body by controlling the concentration of urine, and participating in the control of blood pressure.

There are two types of kidney injury: acute and chronic.

The main causes of kidney failure are:

- Diabetes
- Hypertension
- Autoimmune diseases
- Kidney stone



THERAPEUTIC PROCESS

Consult

- Doctor consultation with patient.
- Doctor completes medical report and FCTI standard medical questionnaire.
- FCTI medical advisors prescribe appropriate cytobiological therapy.
- Doctor consults patient with recommended therapy.
- Patient decides.

Culturing & Preparation

- Payment is confirmed 21 days before implantation.
- Individualised therapy is prepared using proprietary culturing method in Europe.
- Tissue culturing requires 11 days, commencing 22 days before therapy.
- Precursor Stem Cells are hand carried to end destination worldwide.

Implantation

- PSCT must be performed within 72 hours of cell culture completion in Europe.

Post care

- Doctor follows up with patient regularly and reports progress every 4 months to FCTI

FCTI ASCT THERAPY

AUTOLOGOUS STEM CELL THERAPY

Autologous or 'Self' Stem Cell Therapy gives greater choice to Doctors and patients who believe stem cell therapy may alleviate their symptoms, but remain concerned about safety issues or are unconvinced of the benefits of xenotransplantation.

ASCT is produced from taking the patient's own blood, harvesting their stem cells, the culturing the cells using proprietary tissue culturing methodology.

ASCT PRODUCTION PROCESS

Consult

- Doctor consultation with patient.
- Doctor completes medical report and FCTI standard medical questionnaire.
- 5cc of blood is taken from adult patients/3cc from child patients.

Culturing & Preparation

- Payment is confirmed 21 days before implantation.
- Blood is collected by medical biohazard courier and hand carried to Europe.
- Individualised therapy is prepared by segregating stem cells from blood cells then using proprietary culturing method.
- Tissue culturing requires 20 days intensive preparatory work.
- The autologous 'Self' Stem Cells are hand carried to patient's Doctor.

Implantation

- ASCT must be performed within 72 hours of cell culture completion in Europe.

Post care

- Doctor follows up with patient regularly and reports progress every 4 months to FCTI.

FCTI ASI

ACTIVE SPECIFIC IMMUNOTHERAPY

FCTI ASI THERAPY

Active Specific Immunotherapy (ASI®) is one of the most recent advances in cancer tumour therapy in this modern integrative medical field.

ASI® is a form of complementary / alternative therapy to improve immunity at the various stages of the disease.

The ASI® foundation is based on the fact that the immune system is the best tool in combatting disease.

This concept modulates the immune system to achieve an antitumour response with tumour-associated antigens as the immunizing materials.

It potentially helps fight cancer and other diseases of the immune system.

Recent clinical studies reflect the effectiveness of immunotherapy in combination with complementary therapies as a potential approach to specifically target cancer cells without causing any harm to the immune system.

Further immunologic studies have shown that cancer is not only a cellular disorder triggered by false genetic information but also an immunologic issue.

One of the major benefits of Immunotherapy is that it does not display any form of toxicity.

In addition, it offers a different mode of attack on the tumour by strengthening the immune system.

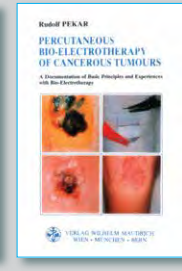
ASI® is most commonly used for cancers of :

- Liver
- Stomach
- Pancreas
- Breast
- Prostate
- Intestine
- Lymph glands
- Melanblastomas

Active Specific Immunotherapy (ASI®) is a therapy patented by the Edith Liebergeld Institute in Germany.

ASI® was developed by Dr. Rudolph Pekar; a renowned Austrian cell therapist and expert on bioelectrotherapy.

Dr. Rudolph Pekar



IMMUNE SYSTEM

The human immune system is made up of a network of cells, tissues and organs and is a system of biological structures and processes within an organism that work together to protect the body against the invasion of bacteria, viruses, parasites and other diseases.

When foreign substances or antigens are detected invading the body, several types of cells work together to recognise and respond to them. These cells trigger the B lymphocytes (the main type of immune cells) to produce antibodies into bodily fluids. Once produced, these antibodies remain in the body so that when the same antigen reappears, the antibodies replicate the function. An antibody will interlock with an antigen and mark the antigen for destruction. They are not able to destroy any antigen without seeking assistance from T cells, which act like soldiers attacking and destroying the invaders. T lymphocytes work primarily by secreting a potent chemical known as lymphokines. Binding to target cells, lymphokines mobilise other cells, encouraging cell growth, activity, mobility and eliminate target cells.

IMMUNE SYSTEM DISORDERS

1. Immunodeficiency disorders

Primary immunodeficiencies are disorders in which part of the body's immune system is not present or working properly. Most are hereditary, autosomal recessive or X-linked effecting 1 in 500 at birth.

Secondary or acquired immunodeficiencies are the result of external processes – malnutrition, ageing, medication like immunosuppressive drugs or chemotherapy - or via infection.

2. Allergic Disorders

Allergic disorders occur when the immune system over reacts after exposure to antigens. These include asthma, eczema or specific environmental allergies (dust mites) drug allergies, seasonal allergies (hay fever) and food allergies (nuts).

3. Cancers of the immune system

Leukemia and lymphoma are both cancers of the immune system.

4. Autoimmunity

This refers to the failure of an organism to recognise its own parts, which causes a mistaken immune system response against its own cells or tissues. These include insulin dependent diabetes, rheumatoid arthritis and systemic lupus erythematosus.

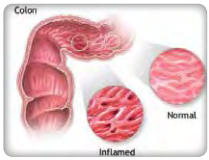
FCTI ASI INDICATIONS

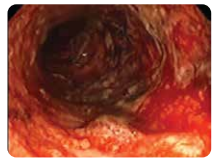
IMMUNOTHERAPY AS COMPLEMENTARY THERAPY FOR CANCER

• Prevention • Early stage • Late stage

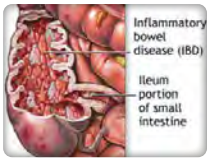
AUTOIMMUNE DISEASE

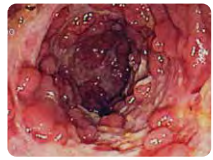
• Colitis



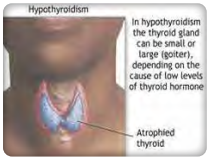


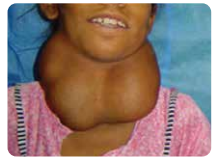
• Crohn's disease



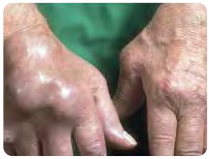


• Hypothyroidism/Autoimmune Thyroiditis

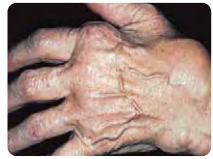




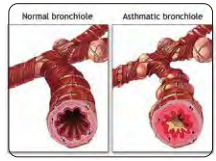
• Polyarthritis



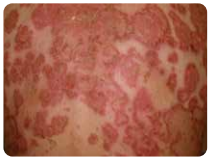
• Rheumatoid arthritis



• Bronchial asthma



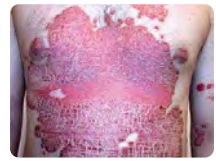
• Pemphigus



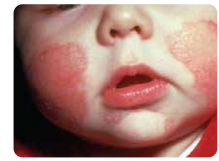
• Dermatomyositis
• Scleroderma

SKIN DISEASE

• Psoriasis



• Eczema

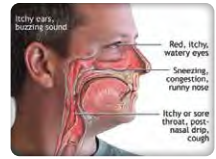


• Acne

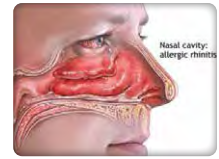
• Keratosis

ALLERGIES

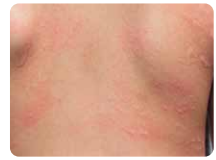
• Sinusitis

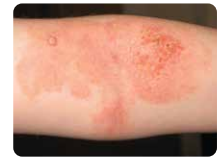


• Allergic Rhinitis



• Allergic dermatitis





ANTI-AGEING

BLOOD FOR ANTI AGEING AND EARLY STAGE CANCER

- 30ml of blood is drawn from patient in 3 x 10ml syringes
- syringe positioned vertically with piston facing down at room temperature
- labelled correctly with patient data, name & DOB
- biohazard courier directly to German laboratory within 24 hours
- laboratory receipt & treatment under sterile conditions (GMP standard laminar-flow technique)
- isolation of Buffy-coat
- separation of Buffy-coat elements & biochemical treatment
- addition of immune activating substances
- ozone boosting therapy
- preparation of 30 x 1.1ml vials for alternate daily subcutaneous injection
- or (dependent on Doctor's recommendation)
- 3 x 10ml vials for weekly subcutaneous injection

The buffy coat is the fraction of an anticoagulated blood sample that contains most of the white blood cells and platelets following density gradient centrifugation of the blood.

TUMOUR TISSUE FOR LATE STAGE CANCER

- Tumour tissue removed (5-10 grams; about the size of fingertip) during surgery
- Preferably not exposed to radiation
- If undergoing chemotherapy, 2 weeks must lapse prior to sample acquisition
- Tissue stored in small sterile pipe in refrigerator (not to be frozen)
- Biohazard courier directly to German laboratory within 12 hours at 4-8 degrees C
- Laboratory receipt & treatment under sterile conditions (GMP standard laminar-flow technique)
- Separation of elements & biochemical treatment
- Addition of immune activating substances
- Ozone boosting therapy
- Preparation of 1 x 30ml vial for single dose subcutaneous injection
- or (dependent on Doctor's recommendation)
- Manufacture of specific-active preparation for a series of injections of graded cytoplasmic cell wall fractions, protoplasms (without nucleic acid and deactivated tumour commensals)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