

## Market Analysis on Edition of EuroSciCon Conference on StemCell

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Globally Regenerative Medicines market size is predicted to reach USD 30,237 million by 2022. Recently, Regenerative Medicine has emerged with full of promise approaches to treat and cure complex degenerative disorder and to support, restore the function of tissues and cells in other therapies. North America leads the way of a global market in 2015 and it is expected to remain ascendant during 2015-2022. Stem Cells are used to treat cancer and different immune system diseases. And now Stem Cells are suspected for the treatment in Neurodegenerative Diseases, wound healing, spinal cord injury, etc. The worldwide Stem cell & regenerative medicines market is divided according to product type, application, sources, geography and end users. By the product type stem cells market is again divided into human embryonic stem cells, adult stem cells, IPsec's, etc. Whereas, regenerative medicines have the capability to regenerate, repair & replace tissues of the organ which are affected due to injury, natural aging process, and some diseases. These medicines are able to restore the performance of cells & tissues, therefore, now researchers are focusing on the new technologies which are basically based on biologics, genes, somatic and stem cells as well. The proliferation and differentiation is the major capability of stem cells owing to which they are of importance in this field. Utilization of Nano-materials in immunomodulation, drug delivery, and wound care make the growth the avenues for the regenerative medicines market.

The regenerative medicine market is broadly divided into three categories namely biologically derived materials, synthetic materials, and genetically engineered materials. The Synthetic materials and biologically derived materials have high demands in the market due to its higher efficiency as compared to other naturally derived materials.

The global stem cell therapy market is estimated to grow with a CAGR of 27.99% in duration 2019-2025 increasing approach to reach USD 167.34 million. The factors like stem cell preservation or banking globally, target to heart disease, diabetes, neurodegenerative diseases, musculoskeletal disorders, spinal cord injury, stroke, autoimmune diseases, major trauma and their therapeutics, clinical trials and ethics related to the use of stem cell transplants and preservation which grows in

expanding and flourishing the global market of stem cell therapy with maximum clinical trials in countries like USA, Iran, South Korea, Australia, China, Spain, Israel, India, Canada, Germany, etc. However, stem cell research using human embryo is illegal in Germany and many other countries.

As per the current reports the Cancer Stem Cell Therapeutics have created effective growth by introducing cell therapy manufacturing, genomic analysis technique and various researches proved the effective transplant of stem cells and their growth factors, with bone marrow transplant with higher success rate in treatment of cancer.

As per sources the stem cells are divided into two types: Differentiated Stem Cells and Undifferentiated Stem and as such are the types of Stem Cell Transplants like Adipose tissue transplant, bone marrow transplant, embryonic stem cell transplant, fibroblast stem cell transplant, mesenchymal stem cell transplant, neural stem cell transplant, placenta stem cells and unfertilized egg stem cell preservation for future transplant when required. Among these various types of transplants the bone marrow transplant is more prominent in therapeutics. Recent researches are going on with the neural, mesenchymal and adipose stem cell transplants.

With the increasing growth in the global market, stem cells and regenerative medicine are setting trends in the field of health and medicine.

### 12 TH World Congress on Cell & Stem Cell Research

The success of the 11th Cell Science conferences series LLC Ltd has given us the prospect to bring the gathering one more time for our 12th World Congress 2020 meet in Prague Czech Republic, UK. Since its commencement in 2011 cell science series has perceived around 750 researchers of great potentials and outstanding research presentations around the globe. The awareness of stem cells and its application is increasing among the general population that also in parallel offers hope and add woes to the researchers of cell science due to the potential limitations experienced in the real-time.

Stem Cell Research-2020 has the goal to fill the prevailing gaps in the transformation of this science of hope to promptly serve solutions to all in the need.

World Congress 2020 will have an anticipated participation of 100-120 delegates from around the world to discuss the conference goal.

### **History of Stem cells Research**

Stem cells have an interesting history, in the mid-1800s it was revealed that cells were basically the building blocks of life and that some cells had the ability to produce other cells. Efforts were made to fertilize mammalian eggs outside of the human body and in the early 1900s, it was discovered that some cells had the capacity to generate blood cells. In 1968, the first bone marrow transplant was achieved successfully to treat two siblings with severe combined immunodeficiency. Other significant events in stem cell research include:

1978: Stem cells were discovered in human cord blood

1981: First in vitro stem cell line developed from mice

1988: Embryonic stem cell lines created from a hamster

1995: First embryonic stem cell line derived from a primate

1997: Cloned lamb from stem cells

1997: Leukaemia origin found as haematopoietic stem cell, indicating possible proof of cancer stem cells

### **Funding in USA**

No federal law forever did embargo stem cell research in the United States, but only placed restrictions on funding and use, under Congress's power to spend. By executive order on March 9, 2009, President Barack Obama removed certain restrictions on federal funding for research involving new lines of human embryonic stem cells. Prior to President Obama's executive order, federal funding was limited to non-embryonic stem cell research and embryonic stem cell research based upon embryonic stem cell lines in existence prior to August 9, 2001. In 2011, a United States District Court "threw out a lawsuit that challenged the use of federal funds for embryonic stem cell research".

### **Members Associated with Stem Cell Research**

Discussion on Development, Regeneration, and Stem Cell Biology takes an interdisciplinary approach to understanding the fundamental question of how a single cell, the fertilized egg, ultimately produces a complex fully patterned adult organism, as well as the intimately related question of how adult structures regenerate. Stem cells play critical roles both during embryonic development and in later renewal and repair. More than 65 faculties in Philadelphia from both basic science and clinical departments in the Division of Biological Sciences belong to Development, Regeneration, and Stem Cell Biology. Their research uses traditional model species

including nematode worms, fruit-flies, Arabidopsis, zebrafish, amphibians, chick and mouse as well as non-traditional model systems such as lampreys and cephalopods. Areas of research focus include stem cell biology, regeneration, developmental genetics, and cellular basis of development, developmental neurobiology, and "evo-devo" (Evolutionary developmental biology).

### **Stem Cell Market Value**

Worldwide many companies are developing and marketing specialized cell culture media, cell separation products, instruments and other reagents for life sciences research. We are providing a unique platform for the discussions between academia and business.

### **Raw Material Analysis**

For biologically derived materials for regenerative medicines, demand is higher compared to other naturally derived materials due to its efficiency. The procedures say synthetic materials have used hydrogel in tissue engineered scaffolds. This report provides a complete overview of the growth rate of regenerative medicines and stem cells. It is believed that the stem cell market will grow appreciably. Regenerative medicine is a wider field which encompasses the potential to acquire its achievement. Financially, investment in this field is all by grants, private inventors, and publicly traded stocks. Looking ahead, the regenerative medicine and stem cells market is promising for a number of powerful reasons including.

### **Stem Cell-A new opportunity in Cosmeceuticals Market**

The market was evaluated at \$42.24 billion in 2016 and is expected to reach a value of \$68.72 billion by 2022, witnessing a CAGR of 8.52% during the predicted period, 2017-2022.

Cosmeceuticals are the emerging market and so there are lots of opportunities lies in the market that is needed to be explored. North America has been declared as the second largest in the market of cosmeceuticals that has estimated for a share of 31% approx. in 2016.

The United States is the major industry for the organic and in North America natural cosmetic products which shares 85% approx. in 2016 with a market value of \$10.62 billion. Whereas, the Asia Pacific is the third largest industry for skin care products market which estimated a share of 22% approx. in 2016.

### **Global Market Study of Stem Cells & Regenerative Medicine**

**USA:** The regenerative medicine & stem cell market is assuming to reach \$38.70 billion by the year 2022 from \$13.33 billion in 2016 at a CAGR of 23.56%.

**Europe:** The regenerative medicine & stem cells market is expected to reach USD 13.578 billion by 2022 from USD 5.06 billion in 2016 at a CAGR of 21.80% during the period 2016-2022.

**Middle East:** The regenerative medicines market is expected \$ 40.55 billion revenue in 2022 from \$ 17.03 billion revenue in 2016.