

# Mesenchymal Stem Cells: Market Research Report

<https://marketpublishers.com/r/MF74EB89B9FEN.html>

Date: December 2018

Pages: 167

Price: US\$ 5,450.00 (Single User License)

ID: MF74EB89B9FEN

## Abstracts

This report analyzes the worldwide markets for Mesenchymal Stem Cells in US\$ Million. The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, and Rest of World.

Annual estimates and forecasts are provided for the period 2015 through 2022. Also, a six-year historic analysis is provided for these markets.

Market data and analytics are derived from primary and secondary research. Company profiles are primarily based on public domain information including company URLs.

The report profiles 47 companies including many key and niche players such as -

Aastrom Biosciences, Inc.

Cell Applications, Inc.

Celprogen, Inc.

Cyagen US Inc.

Genlantis, Inc.

Lonza Group

Mesoblast Limited

## Contents

### 1. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations  
Data Interpretation & Reporting Level  
Quantitative Techniques & Analytics  
Product Definitions and Scope of Study

### 2. MARKET OVERVIEW

Mesenchymal Stem Cells Market on a Rapid Growth Path  
Current and Future Analysis  
The Present and Future of MSC Therapies  
Select MSC-based Therapeutics  
Mesenchymal Stem Cell Research

**Table 1.** Mesenchymal Stem Cells-based (MSCs) Clinical Trials by Category (2018)  
(includes corresponding Graph/Chart)

Completed Phase III Studies with MSCs  
MSCs are Being Explored for Several New Treatment Possibilities  
Widespread Commercialization of 'Off-the-Shelf' MSCs to Become a Reality  
Software Companies Endeavour to Cash in on the Boom

### 3. MARKET DRIVERS, TRENDS & ISSUES

Development of Regenerative Medicine Accelerates Demand for MSCs

**Table 2.** Global Regenerative Medicines Market by Category (2016): Percentage Breakdown for Biomaterials, Stem Cell Therapies and Tissue Engineering (includes corresponding Graph/Chart)

Ageing Demographics to Drive Demand for Mesenchymal Stem Cell Therapies  
Global Aging Population Statistics – Opportunity Indicators

**Table 3.** Elderly Population (60+ Years) as a Percentage of Total Population (2017 & 2050) (includes corresponding Graph/Chart)

**Table 4.** Global Aging Population (2017 & 2050): Population of 60+ Individuals in '000s and as a Percentage of Total Population (includes corresponding Graph/Chart)

**Table 5.** Life Expectancy for Select Countries in Number of Years: 2018 (includes corresponding Graph/Chart)

Growing Prevalence of Chronic Diseases Propels Demand for Mesenchymal Stem Cells  
Key Disease Statistics – Opportunity Indicators

**Table 6.** Worldwide Incidence of Cancer (2012, 2018 & 2040): Number of New Cases Diagnosed (includes corresponding Graph/Chart)

**Table 7.** World Cancer Incidence by Geographic Region and Gender (2018): Number of New Cancer Cases Reported (in Thousands) for Asia-Pacific, Europe, North America, Latin America & the Caribbean, and Africa (includes corresponding Graph/Chart)

**Table 8.** World Cancer Incidence by Cancer Type (2018): Number of New Cancer Cases Reported (in Thousands) for Breast, Cervix uteri, Colorectum, Liver, Lung, Oesophagus, Prostate, Stomach and Others (includes corresponding Graph/Chart)

**Table 9.** Fatalities by Heart Conditions - Estimated Percentage Breakdown for Cardiovascular Disease, Ischemic Heart Disease, Stroke, and Others (includes corresponding Graph/Chart)

**Table 10.** Global Annual Medical Cost of CVD in US\$ Billion (2010-2030) (includes corresponding Graph/Chart)

Growing Volume of Orthopedic Procedures: An Opportunity for the MSC Market

**Table 11.** Global Orthopedic Market by Segment (2018): Percentage Breakdown of Value Sales for Arthroscopy / Soft Tissue, Extremities, Hips, Knees, Orthobiologics, Spine, Trauma and Others (includes corresponding Graph/Chart)

Adult Stem Cell Therapies on Growth Trajectory, as Controversies Continue to Haunt

Embryonic Stem Cell Research  
Adult Stem Cells and Embryonic Stem Cells - A Comparison  
MSCs Versus Embryonic or Induced Pluripotent Stem Cells  
MSC Therapies – Immune to Ethical Issues Applicable to Embryonic Stem Cells  
MSCs – A Potential Vehicle for 'Targeted Drug Delivery'  
Stem Cell Based Bone Grafts: Promising Growth Ahead  
Loopholes Associated with In Vivo Properties Constrain Therapeutic Advancements  
Major Challenges Confronting Mesenchymal Stem Cell Market  
Allogeneic MSCs – Offering Promise in Immunosuppressive and Tissue Repair Therapy  
Administration Route Determines the Effectiveness of MSCs

#### **4. REVIEW OF SELECT MAJOR STEM CELL VARIANTS**

Adult Stem Cells  
A Low Risk Investment  
Adult Stem Cells Garner More Investments for Research  
Low Versatility – A Major Limiting Factor for Adult Stem Cells  
Hematopoietic Stem Cells – Enjoying Enduring Success  
Restraining Factors  
Induced Pluripotent Stem Cells – An Alternative to ESCs  
A Peek into the Discovery of iPS  
Drug Development – A Major Application for iPS  
Use of iPS for Regenerative Medicine  
Establishing iPS Cell Banks  
Intractable and Congenital Disease Treatments  
Embryonic Stem Cells to Transfigure Medicine  
Ethical Issues and Technical Hurdles Bog Down hESC Research  
Lack of Safety and Efficacy Data – A Key Concern

#### **5. MESENCHYMAL STEM CELL RESEARCH BY APPLICATION**

Mesenchymal Stem Cells in Orthopedics  
MSC based Models for Orthopedic Repair  
Delivery of MSCs to Regions Requiring Therapy  
MSCs in the Treatment of Osteoarthritis  
MSCs in the Treatment of Rheumatoid Arthritis  
MSCs in Cancer Treatment  
MSCs in Hepatology  
MSCs in Neurology

MSCs in Cardiology  
MSCs in Radiotherapy  
MSCs in the Treatment of Diabetes  
MSCs in the Treatment of Autoimmune Diseases  
MSCs in Treatment of Premature Ovarian Failure  
MSCs for Gene Therapy  
MSC Therapy in the Treatment of Lung Diseases  
MSCs for Treating Liver Disease  
MSCs for Treating Multiple Sclerosis-Phase II Clinical Trial Completed in the US (2016)  
MSCs in Colon Repair  
MSCs in Kidney Repair

## **6. PRODUCT OVERVIEW**

Mesenchymal Stem Cells (MSCs) – An Introduction  
History  
What Are Allogeneic Mesenchymal Stem Cells?  
Some Major Sources of Mesenchymal Stem Cells  
Bone Marrow  
Wharton's Jelly and Umbilical Cord Blood  
Adipose Tissue  
Trophoblastic Tissues  
Amniotic Fluid  
Developing Tooth Bud of Mandibular Third Molar  
Mechanism of Mesenchymal Stem Cell Therapy  
Important Features of Mesenchymal Stem Cells  
Morphology  
Identification/Detection  
Differentiation Capacity  
Immuno-modulatory Effects  
Culturing  
Clinical Use  
Production of Clinical-Grade MSCs  
Drawbacks of MSCs

## **7. COMPETITIVE LANDSCAPE**

7.1 Focus on Select Players  
Cell Applications, Inc. (USA)

Celprogen, Inc. (USA)  
Cyagen US Inc. (USA)  
Genlantis, Inc. (USA)  
Lonza Group (Switzerland)  
Mesoblast Limited (Australia)  
MilliporeSigma (USA)  
Neuromics (USA)  
Orthofix International N. V. (Italy)  
PromoCell GmbH (Germany)  
R&D Systems, Inc. (USA)  
ScienCell Research Laboratories (USA)  
Stemcell Technologies Inc. (Canada)  
Stemedica Cell Technologies, Inc. (USA)  
Thermo Fischer Scientific, Inc. (USA)  
Vitro Biopharma (USA)

#### 7.2 Product Launches

RoosterBio Launches CliniControl (CC) Product Portfolio  
Provia Labs Launches Library of Stem Cell Material Available for Researchers  
JCR Pharmaceuticals Develops TEMCELL HS  
PuRec Announces Plans to Produce MSCs/RECs

#### 7.3 Recent Industry Activity

Mesoblast Partners with Tasly for MPC Products  
SanBio Acquires Patent Portfolio Regarding Cell Medicines Derived from MSC  
Otsuka to Acquire New Shares Issued by TWO CELLS  
Stemedica Receives FDA Approval for Phase I/IIa Clinical Study for Traumatic Brain Injury  
Stemedica Enrolls into Phase I/IIa Clinical Study for Ischemic Stroke

## 8. GLOBAL MARKET PERSPECTIVE

**Table 12.** World Recent Past, Current and Future Analysis for Mesenchymal Stem Cells by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2015 Through 2022 (includes corresponding Graph/Chart)

**Table 13.** World Historic Review for Mesenchymal Stem Cells by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2009

Through 2014 (includes corresponding Graph/Chart)

**Table 14.** World 14-Year Perspective for Mesenchymal Stem Cells by Geographic Region - Percentage Breakdown of Annual Revenues for US, Canada, Japan, Europe, Asia-Pacific (excluding Japan), and Rest of World Markets for Years 2009, 2018 & 2022 (includes corresponding Graph/Chart)

## 9. REGIONAL MARKET PERSPECTIVE

### 9.1 The United States

#### A. Market Analysis

Rapidly Ageing Population: A Major Driving Demand for MSC based Therapies

**Table 15.** The US Elderly Population by Age Group in Million (2016-2050) (includes corresponding Graph/Chart)

Increasing Incidence of Chronic Diseases Drives Focus onto MSCs

**Table 16.** CVD in the US: Cardiovascular Disease Prevalence in Adults by Gender & Age Group (includes corresponding Graph/Chart)

**Table 17.** New Cancer Cases in Males in US by Body Site (2018) (includes corresponding Graph/Chart)

**Table 18.** New Cancer Cases in Females in US by Body Site (2018) (includes corresponding Graph/Chart)

Arthritis

**Table 19.** % of Population Diagnosed with Arthritis by Age Group (includes corresponding Graph/Chart)

Prochymal Obtains Fast Track Designation from FDA

MSCs for Treating Multiple Sclerosis-Phase II Clinical Trial Completed in the US

Rising Governmental Investments in Stem Cell Therapies – A Growth Booster

FDA Issues Warning Against Illegal Stem Cell Therapies

US Regulates Stem Cells as Drugs  
Federal Law on Stem Cells in the US  
NIH at the Forefront of Research Funding  
NIH Guidelines on Stem Cell Research Funding  
Bans and Restrictions on Stem Cell Research  
American Type Culture Collection Inc (ATCC) – A Major Non-Profit Organization  
B. Market Analytics

**Table 20.** The US Recent Past, Current and Future Analysis for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)

**Table 21.** The US Historic Review for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)

9.2 Canada  
A. Market Analysis  
Current and Future Analysis  
Prochymal – Canada's First MSC-based Therapy  
B. Market Analytics

**Table 22.** Canadian Recent Past, Current and Future Analysis for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)

**Table 23.** Canadian Historic Review for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)

9.3 Japan  
A. Market Analysis  
Current and Future Analysis  
Increasing Demand for Regenerative Medicine in Geriatric Healthcare and Cancer Care to Drive Demand for Mesenchymal Stem Cells



**Table 24.** Japanese Population by Age Group (2015 & 2040): Percentage Share Breakdown of Population for 0-14, 15-64 and 65 & Above Age Groups (includes corresponding Graph/Chart)

**Table 25.** Cancer Related Incidence and Deaths by Site in Japan: 2018 (includes corresponding Graph/Chart)

New Regulation for Accelerated Stem Cell Approval and Its Impact on Stem Cells Product Market

B. Market Analytics

**Table 26.** Japanese Recent Past, Current and Future Analysis for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)

**Table 27.** Japanese Historic Review for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)

9.4 Europe

A. Market Analysis

Current and Future Analysis

Ageing Population to Drive Demand for MSC based Therapies

**Table 28.** European Population by Age Group (2016, 2030 & 2050): Percentage Share Breakdown by Age Group for 0-14, 15-64, and 65 & Above (includes corresponding Graph/Chart)

**Table 29.** European Country-wise Statistics of 65+ Population as % of Total Population: 2018 & 2030 (includes corresponding Graph/Chart)

Cancer in Europe: Key Statistics

**Table 30.** Cancer Related Incidence and Deaths by Site in Europe: 2018 (includes corresponding Graph/Chart)

Legislations on Stem Cell Research and Therapy in the EU  
Unproven Stem Cell Therapies Receive Government Backing in the EU?  
Scientists and Government Tussle over Safety of Stamina Foundation's MSC Therapy in Italy  
Stem Cell Clinics Shut Down in Germany due to Malpractices  
B. Market Analytics

**Table 31.** European Recent Past, Current and Future Analysis for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)

**Table 32.** European Historic Review for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)

## 9.5 Asia-Pacific

### A. Market Analysis

Current and Future Analysis

Overview of Select Countries

Australia

Stem Cell Tourism – A Popular Trend in Australia

South Korea

South Korea Pacing towards Regaining Lost Glory in Stem Cell Research

South Korea Upbeat on Stem Cell Therapy Market Potential

India

An Outline of the Stem Cell Research Structure in India

A Regulatory Picture of the Indian Stem Cell Research and Therapy

Adult Stem Cells – A Highly Money-Spinning Market

Indians 'Bank' on Dental Stem Cells

New Zealand

Stem Cell Research Scenario in New Zealand

B. Market Analytics

**Table 33.** Asia-Pacific Recent Past, Current and Future Analysis for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)

**Table 34.** Asia-Pacific Historic Review for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)

9.6 Rest of World

A. Market Analysis

Current and Future Analysis

Stem Cell Research in Full Swing in Israel

B. Market Analytics

**Table 35.** Rest of World Recent Past, Current and Future Analysis for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2015 through 2022 (includes corresponding Graph/Chart)

**Table 36.** Rest of World Historic Review for Mesenchymal Stem Cells Analyzed with Annual Revenue Figures in US\$ Million for Years 2009 through 2014 (includes corresponding Graph/Chart)

## 10. COMPANY PROFILES

Total Companies Profiled:

The United States (25)

Canada (1)

Japan (2)

Europe (6)

Germany (2)

The United Kingdom (1)

Rest of Europe (3)

Asia-Pacific (Excluding Japan) (9)

Latin America (1)

Middle East (3)

## I would like to order

Product name: Mesenchymal Stem Cells: Market Research Report

Product link: <https://marketpublishers.com/r/MF74EB89B9FEN.html>

Price: US\$ 5,450.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/MF74EB89B9FEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970