Achondrogenesis Market Information: by type (type IA (Houston-Harris type), type IB (Fraccaro type), type II (Langer-Saldino type)), Diagnosis (Molecular Genetic Testing, Biochemical Testing), End User (Hospitals & Clinics) - Global Forecast till 2023

Market Scenario

Achondrogenesis is a severe congenital growth hormone deficiency that affects cartilage and bone development. This rare genetic disease is characterized by narrow chest, rounded abdomen, and extremely short limbs. There are majorly three types of achondrogenesis, type 1A, type 1B and type 2. Out of these three, type 1B is most severe and caused by mutations in the SLC26A2 gene. Achondrogenesis type 1B (ACG1B) is also known as Parenti-Fraccaro type. Achondrogenesis exhibits various symptoms such as, abdominal distention, flat face, anteverted nares, frontal bossing, lethal skeletal dysplasia, hydropsfetalis, abnormal enchondral ossification, and many others. According to the U.S National Library of Medicine, the incidence of 1A and 1B, whereas achondrogenesis type 2 occur in 1 in 40,000 to 60,000 newborns. The condition of achondrogenesis type 2 is mostly found in combination with hypochondrogenesis.

Appropriate treatment for the condition is unknown but to deal with the symptoms associated with achondrogenesis, palliative care is suggested by physicians. Genetic Counseling is also recommended to the people who have genetic disorders in their family history. Diagnosis or testing of achondrogenesis is based on histopathologic, clinical, and radiologic features. As per an article published in GeneReviews book, it is found that SLC26A2 is the only mutated gene known to cause ACG1B. Out of all the testing methods, molecular genetic testing is the most commonly used diagnosis for Achondrogenesis Type 1B. Molecular genetic testing method includes targeted mutation analysis, sequence analysis, and deletion/duplication analysis.

Notably, presence of mutated gene in the family history is the key factor driving the achondrogenesis market. As per the information suggested by National Center for Advancing Translational Sciences (NCATS), achondrogenesis type 1A and type 1B occur due to autosomal recessive inheritance which means each parent carry one copy of the mutated gene. However, it is also reported that achondrogenesis type 2 is an autosomal dominant disorder and typically found in people with no history of gene mutation in their family. Various other push factors such as, rise in facilities for patients affected by rare diseases, increasing awareness among people,
increasing government assistance, and improvement in regulatory framework continuously contribute to the growth of the global achondrogenesis market.

Despite these drivers, there are some issues associated with achondrogenesis market. Challenges in research and development, and lack of skilled healthcare professionals in developing countries hinder the growth of market to an extent.

It is estimated that achondrogenesis market is expected to grow at a CAGR of 3.9% during the forecast period of 2017-2023.

**Intended Audience**

- Pharmaceutical Companies
- Surgical equipment Companies
- Research and Development (R&D) Companies
- Diagnostic Laboratories
- Government Research Institute
- Academic Institutes and Universities

**Segmentation**

The achondrogenesis market is segmented on the basis of type, diagnosis, and end-users.

On the basis of type, market is segmented into achondrogenesis type IA (Houston-Harris type), achondrogenesis type IB (Parenti-Fraccaro type), and achondrogenesis type II (Langer-Saldino type).

On the basis of diagnosis, market is classified into physical examination, molecular genetic testing, and biochemical testing. Physical examination is further classified into X-ray, ultrasound, and others. Molecular genetic testing is also further segmented into Chorionic villus sampling (CVS), amniocentesis, and others.

On the basis of end-users, market is segmented into hospital & clinics, diagnostic centers, research & academic institutes, and others.

**Regional Analysis**

The Americas dominate the achondrogenesis market owing to the rise in awareness among people, and high healthcare expenditure. According to the Centers for Disease Control and Prevention, in 2015, the total health expenditure in the United States was reported to be USD 3.2 trillion and hospital care accounted for a share of 32.3%.

Europe holds the second position in achondrogenesis market. It is expected that the support provided by government bodies for research & development and improvement in reimbursement policies in healthcare will drive the market in Europe region.

Asia Pacific is the fastest growing achondrogenesis market owing to the huge patient pool and developing healthcare technology.

**Key Players**

Some of key the players in the achondrogenesis market are Cook, Thermo Fisher Scientific, CooperSurgical Inc., Illumina, Inc., Siemens AG, FUJIFILM Holdings Corporation, Koninklijke, Philips N.V., Stryker, Toshiba.

**Research Methodology**

Sources: Annual reports, Press release, White paper, and Company presentation

**Contents:**

**Chapter 1. Report Prologue**

**Chapter 2. Market Introduction**

- 2.1 Definition
- 2.2 Scope of the Study
- 2.2.1 Research Objective
- 2.2.2 Assumptions
- 2.2.3 Limitations

**Chapter 3. Research Methodology**

- 3.1 Introduction
- 3.2 Primary Research
- 3.3 Secondary research
- 3.4 Market Size Estimation

**Chapter 4. Market Dynamics**

- 4.1 Drivers
- 4.2 Restains
- 4.3 Opportunities
- 4.4 Challenges
- 4.5 Macroeconomic Indicators
- 4.6 Technology Trends & Assessment

**Chapter 5. Market Factor Analysis**
5.1 Porters Five Forces Analysis
5.1.1 Bargaining Power of Suppliers
5.1.2 Bargaining Power of Buyers
5.1.3 Threat of New Entrants
5.1.4 Threat of Substitutes
5.1.5 Intensity of Rivalry
5.2 Value Chain Analysis
5.3 Investment Feasibility Analysis
5.4 Pricing Analysis

Chapter 6. Global Achondrogenesis Market, by Type
6.1 Introduction
6.2 Achondrogenesis type IA (Houston-Harris type)
6.3 Achondrogenesis type IB (Fraccaro type)
6.4 Achondrogenesis type II (Langer-Saldino type)

Chapter 7. Global Achondrogenesis Market, by Diagnosis
7.1 Introduction
7.2 Physical Examination
7.2.1 Market Estimates & Forecast, 2017 – 2023
7.3 Molecular Genetic Testing
7.3.1 Market Estimates & Forecast, 2017 – 2023
7.4 Biochemical Testing
7.4.1 Market Estimates & Forecast, 2017 – 2023

Chapter 8. Global Achondrogenesis Market, by End User
8.1 Introduction
8.2 Hospitals and Clinics
8.2.1 Market Estimates & Forecast, 2017 – 2023
8.3 Diagnostic Centers
8.3.2 Market Estimates & Forecast, 2017 – 2023
8.4 Research & Academic Institutes
8.4.2 Market Estimates & Forecast, 2017 – 2023
8.5 Others

Chapter 9. Global Achondrogenesis Market, by Region
9.1 Introduction
9.2 Americas
9.2.1 North America
9.2.1.1 US
9.2.1.1 Canada
9.2.2 South America
9.3 Europe
9.3.1 Western Europe
9.3.1.1 Germany
9.3.1.2 France
9.3.1.3 Italy
9.3.1.4 Spain
9.3.1.5 UK
9.3.1.6 Rest of Western Europe
9.3.2 Eastern Europe
9.4 Asia Pacific
11.6.1 Company Overview
11.6.2 Types Overview
11.6.3 Financial Overview
11.6.4 Key Developments
11.7 FUJIFILM Holdings Corporation
11.7.1 Overview
11.7.2 Types Overview
11.7.3 Financials
11.7.4 Key Developments
11.7.5 SWOT Analysis
11.8 Others

Chapter 12 MRFR Conclusion
12.1 Key Findings
12.1.1 From CEO's View Point
12.1.2 Unmet Needs of the Market
12.2 Key Companies to Watch
12.3 Prediction of Achondrogenesis industry

Chapter 13 Appendix

LIST OF TABLES

Table 1 Achondrogenesis Industry Synopsis, 2017 – 2023
Table 2 Achondrogenesis Market Estimates and Forecast, 2017 – 2023, (USD Million)
Table 3 Achondrogenesis Market by Region, 2017 – 2023, (USD Million)
Table 4 Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 5 Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 6 Achondrogenesis Market by End Users, 2017 – 2023, (USD Million)
Table 7 North America Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 8 North America Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 9 North America Achondrogenesis Market by End Users, 2017 – 2023, (USD Million)
Table 10 US Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 11 US Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 12 US Achondrogenesis Market by End Users, 2017 – 2023, (USD Million)
Table 13 Canada Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 14 Canada Achondrogenesis market by Condition, 2017 – 2023, (USD Million)
Table 15 Canada Achondrogenesis market by End Users, 2017 – 2023, (USD Million)
Table 16 South America Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 17 South America Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 18 South America Achondrogenesis Market by End Users, 2017 – 2023, (USD Million)
Table 19 Europe Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 20 Europe Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 21 Europe Achondrogenesis Market by End Users, 2017 – 2023, (USD Million)
Table 22 Western Europe Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 23 Western Europe Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 24 Western Europe Achondrogenesis Market by End Users, 2017 – 2023, (USD Million)
Table 25 Eastern Europe Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 26 Eastern Europe Achondrogenesis market by Condition, 2017 – 2023, (USD Million)
Table 27 Eastern Europe Achondrogenesis Market by End Users, 2017 – 2023, (USD Million)
Table 28 Asia Pacific Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 29 Asia Pacific Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 30 Asia Pacific Achondrogenesis market by End Users, 2017 – 2023, (USD Million)
Table 31 Middle East & Africa Achondrogenesis Market by Types, 2017 – 2023, (USD Million)
Table 32 Middle East & Africa Achondrogenesis Market by Condition, 2017 – 2023, (USD Million)
Table 33 Middle East & Africa Achondrogenesis market by End Users, 2017 – 2023, (USD Million)

LIST OF FIGURES

Figure 1 Research Process
Figure 2 Segmentation for Achondrogenesis Market
Figure 3 Segmentation Market Dynamics for Achondrogenesis Market
Figure 4 Global Achondrogenesis market Share, by Types 2016
Figure 5 Global Achondrogenesis market Share, by Condition 2016
Figure 6 Global Achondrogenesis market Share, by End Users, 2016
Figure 7 Global Achondrogenesis market Share, by Region, 2016
Figure 8 North America Achondrogenesis market Share, by Country, 2016
Figure 9 Europe Achondrogenesis market Share, by Country, 2016
Figure 10 Asia Pacific Achondrogenesis market Share, by Country, 2016
Figure 11 Middle East & Africa Achondrogenesis market Share, by Country, 2016
Figure 12 Global Achondrogenesis market: Company Share Analysis, 2016 (%)
Figure 13 Cook: Key Financials
Figure 14 Cook: Segmental Revenue
Figure 15 Cook: Geographical Revenue
Figure 16 Thermo Fisher Scientific: Key Financials
Figure 17 Thermo Fisher Scientific: Segmental Revenue
Figure 18 Thermo Fisher Scientific: Geographical Revenue
Figure 19 CooperSurgical Inc.: Key Financials
Figure 20 CooperSurgical Inc.: Segmental Revenue
Figure 21 CooperSurgical Inc.: Geographical Revenue
Figure 22 Stryker: Key Financials
Figure 23 Stryker: Segmental Revenue
Figure 24 Stryker: Geographical Revenue
Figure 25 Siemens AG: Key Financials
Figure 26 Siemens AG: Segmental Revenue
Figure 27 Siemens AG: Geographical Revenue
Figure 28 Toshiba Corporation: Key Financials
Figure 29 Toshiba Corporation: Segmental Revenue
Figure 30 Toshiba Corporation: Geographical Revenue
Figure 31 FUJIFILM Holdings Corporation: Key Financials
Figure 32 FUJIFILM Holdings Corporation: Segmental Revenue
Figure 33 FUJIFILM Holdings Corporation: Geographical Revenue