

# Global Artificial Organs and Bionic Implants Market Size study & Forecast, by Product (Artificial Organs, Artificial Bionics) by Technology (Mechanical bionics, electronic bionics) and Regional Analysis, 2023-2030

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# **Abstracts**

Global Artificial Organs and Bionic Implants Market is valued at approximately USD 27.65 billion in 2022 and is anticipated to grow with a growth rate of more than 9.3% over the forecast period 2023-2030. Artificial organs and bionic implants are medical devices that are designed to replace or enhance the function of specific organs or body parts. They are developed to assist individuals with organ failure, physical disabilities, or other medical conditions that affect the normal functioning of their bodies. Artificial organs and bionic implants have significantly advanced in recent years, improving the quality of life for many individuals with medical conditions or disabilities. The Artificial Organs and Bionic Implants market is expanding because of factors such as rising incidence of organ failures and increasing prevalence of Kidney chronic diseases.

The rising prevalence of chronic diseases, such as cardiovascular diseases, kidney failure, diabetes, and organ failures, has created a growing demand for artificial organs and bionic implants. These devices provide a solution for patients who are unable to receive organ transplants or have failed conventional treatments. the Centres for Disease Control and Prevention (CDC) reported that 37 million Americans, or more than 1 in 7 persons, had chronic kidney disease in 2021. Similarly, as per a report by the national health portal of the Indian Government in July 2022, the prevalence of end-stage renal disease (ESRD) in India is leading to a significant rise in the number of new patients, estimated at approximately 2.2 lakh each year. Thus, rising prevelance of kidney chronic disease across the globe is fostering the market growth. Along with these, factors such as the rising rate of organ failures, the high rate of traffic accidents resulting in amputations, the lack of organ donors, and technological improvements will



propel market expansion. For example, according to the article 'Organ donation in India - There is light at the end of the tunnel' published in April 2022, it is projected that almost 5 lakh Indians suffer from organ failure each year, but only 2%–3% of them obtain a life-saving transplant. It is projected that the burden of organ failure will open up chances for artificial organs and the Indian bionics sector. As a result, it is projected that this would result in the artificial organs and bionics market growth over the projected years. In addition, rising investments and research initiatives and technological advancements in the artificial organ and bionics is creating a lucrative opportunity to the market growth. However, the high cost of artificial organs and bionic implants and regulatory hurdles stifles market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Artificial Organs and Bionic Implants Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 with largest market share owing to the dominance of key market players, rising prevalence of kidney disorders, rising technological advancement and investment for research and development activities in the region. Whereas, Asia Pacific region is projected to have fastest growth owing to factors such as rising prevelance of chronic diseases, rising number of organ transplantation activities, favorable government reimbursement policies in the region.

Major market player included in this report are:

Abiomed Inc

Asahi Kasei Medical Co., Ltd

Baxter International Inc.

Berlin Heart GmbH

Boston Scientific Corporation

Cyberonics Inc.

Ekso Bionics Holdings Inc.

Ossur hf



Getinge AB

Medtronic

Recent Developments in the Market:

In August 2022, The Kidney Innovation Accelerator announced a new prize competition, with the American Society of Nephrology and the US Department of Health and Human Services offering USD 10.5 million in total prize money. In Phase 2 of the Artificial Kidney Prize competition, ideas for developing prototype bioartificial kidneys are being sought after, as well as any innovative tools or components that could enable them.

In January 2022, IIT-Kanpur has begun working on developing a cutting-edge artificial heart. This project was launched in cooperation with a few hospitals in India, and it will be overseen by a team of innovative thinkers with relevant experience who were hand-picked with the help of a task force composed of business executives.

Global Artificial Organs and Bionic Implants Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered - Product, Technology, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*



The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Product:

Artificial Organs

Artificial Bionics

By Technology:

Mechanical bionics

Electronic bionics

By Region:

North America

U.S.

Canada

Europe

UK

Germany



France
Spain
Italy
ROE
Asia Pacific
China
India
Japan
Australia
South Korea
RoAPAC
Latin America
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Saudi Arabia
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Rest of Middle East & Africa



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