

# Germany Artificial Organs and Bionics Market - Growth, Trends, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 80 pages | Mordor Intelligence

#### **AVAILABLE LICENSES:**

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

#### **Report description:**

The German artificial organs and bionics market is expected to register a CAGR of 5% during the forecast period.

The COVID-19 pandemic had an unprecedented public health threat that harmed communities, industries, enterprises, and people throughout Germany. COVID-19 hampered the supply and manufacture of artificial organs and bionics. According to the study published by Colegio Brasileiro de Cirurgioes in May 2021, in Germany, there were no appreciable changes in the number of patients on the lung transplant waiting list, the overall number of organ donors, or the death rate on the lung transplant waiting list in the first five months of 2020. Moreover, a study published in Transplantation in July 2022 revealed a slight decline in transplant rates in Germany along with higher death rates. As a result, there were no changes in the organ transplant waiting list. However, there was a slight decline in transplant activity in the country hampered the growth of the studied market. The market recovery over the last two years has been driven by the high prevalence of diseases and product launches by market players.

The major factors responsible for the growth of the artificial organs and bionics market include the scarcity of donor organs for organ transplantation and technological advancements. The lack of availability of potential organs to transplant has been a major issue. As reported by the IRODaT in July 2022, Germany's organ donation rate remained stubbornly low in 2020. More than 9,000 people are already on the organ waiting list. Germany's organ donation rate is over three times lower than the United States and more than four times lower than that of world leader Spain, with 11.5 donors per million people. Bionics and artificial organs can cater to the needs of those in need of organ transplantations and replacements. They can replicate the function of damaged organs.

Moreover, various organic and inorganic strategies adopted by key market players are expected to boost market growth during the forecast period. For instance, in July 2021, Ottobock planned to prepare for a huge stock market IPO in 2022 that may value

the German manufacturer of prosthetic limbs at more than EUR 5 billion (USD 5.9 billion). Additionally, in November 2021, Ottobock acquired 100% of the shares of suitX, a US-based company spun out of the Robotics and Human Engineering Lab at the University of California, Berkeley, which specializes in the research and development of occupational and medical exoskeletons. Ottobock and suitX are combining their expertise and products to take the exoskeleton market to a new level and to foster the worldwide adoption of exoskeletons.

However, other factors, such as the high cost of the procedure, the risk of compatibility issues, and malfunctions are expected to impede the market growth.

Germany Artificial Organs & Bionic Implants Market Trends

Artificial Kidney Segment is Expected to Hold a Significant Share in the Market Studied During the Forecast Period.

Hemodialysis is a method for removing waste products such as creatinine and urea, as well as free water from the blood when the kidneys are in kidney failure. An artificial kidney is used to clean the patient's blood. Hence, the other name for an artificial kidney is a dialysis machine. The segment is driven by the increasing prevalence of kidney diseases and product launches by key market players.

According to a study published in the International Journal of Environmental Research and Public Health in November 2021, the prevalence of CKD is approximately 10%. Patient and physician knowledge of CKD is often poor, limiting early diagnosis and treatment. This may aggravate the renal disease and damage the kidney, which increases the demand for artificial kidneys and is projected to drive segment growth.

Additionally, increasing demand for kidney transplants is expected to drive market growth. For instance, according to the Deutsches Referenzzentrum fur Ethik den Biowissenschaften published in October 2022, the total number of kidney transplants in Germany in 2021 reached 1,994 compared to 1,909 in the previous year. Thus, the growing demand for kidney transplants is expected to boost market growth during the forecast period.

Thus, owing to the above-mentioned factors, the artificial kidney segment is expected to grow during the forecast period.

Cochlear Implants is Expected to Hold a Significant Market Share Over the Forecast Period

Cochlear implants convert sound into electrical signals that restore hearing by replacing damaged parts of the cochlea and transmitting the signals to the brain. It is used by people as a hearing aid for low to high hearing loss. These cochlear implants are surgically implanted and consist of two parts. The inside component is implanted under the skin, while the other external component is worn at the back of the ear. The major factors bolstering segment growth are the upsurge in hearing impairment in the growing geriatric population, the risk of hearing loss due to exposure to noise in recreational settings in the younger population, and technological advancements and increased battery life of cochlear implants.

According to the EuroTrak Germany 2022 Survey, around 9.24 million people in Germany perceive their hearing to be impaired. This represents 11.1% of the total population. Approximately 9.03 million adults are affected by the epidemic. Furthermore, as per the same source, the prevalence of hearing loss in Germany in 2022 was 4.6%, and the adoption rate for hearing aids in the total population was 4.6%. Thus, with the growing prevalence of hearing loss and increases in the adoption of hearing aids in the country, the demand for cochlear implants is expected to increase during the forecast period.

As a result, all of the above factors, such as the growing burden of hearing loss and the adoption of hearing aids, are expected to drive market growth.

Germany Artificial Organs & Bionic Implants Market Competitor Analysis

The German artificial organs and bionic implants market is moderately competitive with several major players. The majority of artificial organs and bionics are manufactured by global key players. Market leaders with more funds for research and a better distribution system have established their position in the market. This has helped the market grow. Some of the market players are Abiomed Inc., Asahi Kasei Medical Co. Ltd, Baxter International Inc., Berlin Heart GmbH, and Boston Scientific Corporation.

Additional Benefits:

The market estimate (ME) sheet in Excel format 3 months of analyst support

### **Table of Contents:**

1 INTRODUCTION 1.1 Study Assumptions and Market Definition 1.2 Scope of the Study

2 RESEARCH METHODOLOGY

### **3 EXECUTIVE SUMMARY**

- 4 MARKET DYNAMICS
- 4.1 Market Overview
- 4.2 Market Drivers
- 4.2.1 Scarcity of Donor Organs for Organ Transplantation
- 4.2.2 Technological Advancements
- 4.3 Market Restraints
- 4.3.1 Expensive Procedures
- 4.3.2 Risk of Compatibility Issues and Malfunctions
- 4.4 Porter's Five Forces Analysis
- 4.4.1 Threat of New Entrants
- 4.4.2 Bargaining Power of Buyers/Consumers
- 4.4.3 Bargaining Power of Suppliers
- 4.4.4 Threat of Substitute Products
- 4.4.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION (Market Size by Value - USD million)

- 5.1 By Type
- 5.1.1 Artificial Organ
- 5.1.1.1 Artificial Heart
- 5.1.1.2 Artificial Kidney
- 5.1.1.3 Cochlear Implants
- 5.1.1.4 Other Organ Types
- 5.1.2 Bionics
- 5.1.2.1 Ear Bionics
- 5.1.2.2 Orthopedic Bionic

## 5.1.2.3 Cardiac Bionics

5.1.2.4 Other Bionics

## 6 COMPETITIVE LANDSCAPE

6.1 Company Profiles
6.1.1 Abiomed Inc
6.1.2 Asahi Kasei Medical Co., Ltd
6.1.3 Nader Holding GmbH & Co. KG. (Ottobock SE)
6.1.4 Berlin Heart GmbH
6.1.5 Boston Scientific Corporation
6.1.6 LivaNova PLC
6.1.7 Esko Bionics
6.1.8 Ossur
6.1.9 Reboocon Bionic
6.1.10 Medtronic PLC

7 MARKET OPPORTUNITIES AND FUTURE TRENDS



## Germany Artificial Organs and Bionics Market - Growth, Trends, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 80 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

#### **ORDER FORM:**

Select license	License		Price
	Single User License		\$4750.00
	Team License (1-7 Users)		\$5250.00
	Site License		\$6500.00
	Corporate License		\$8750.00
		VAT	
		Total	

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346. []\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	Phone*	
First Name*	Last Name*	
Job title*		
Company Name*	EU Vat / Tax ID / NIP number*	
Address*	City*	
Zip Code*	Country*	
	Date	2025-05-09
	Signature	