

## **Australia Artificial Organs And Bionic Implants - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029**

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### **Report description:**

Australia artificial organs and bionics market is expected to register a CAGR of 7.1% over the forecast period.

#### Key Highlights

-The COVID-19 pandemic impacted the studied market significantly. During the initial phase of the pandemic, the number of organ transplants and surgeries decreased to avoid the contamination and spread of coronavirus. According to the study published in Kidney International in October 2020, the Australian National Transplantation and Donation Rapid Response Taskforce recommended the suspension of all adult kidney transplantation as early post-transplant COVID-19 could result in severe illness and mortality. Only urgent heart, lung, liver, and pediatric transplantation continued, following a case-by-case assessment of risks and benefits. Such instances led to a negative impact on market growth during the pandemic. However, with resumed services and transplantation procedures, the studied market is expected to witness significant growth over the forecast period. Furthermore, post-pandemic, the market is expected to drive significantly to transplant organs in patients who lagged during the pandemic.

-Certain factors that are propelling the market growth are the rising number of chronic diseases and technological advancements in artificial organs and bionics. The increasing prevalence of chronic diseases such as cardiovascular disease, diabetes, kidney diseases, and others is the key factor driving the market growth due to the rise in demand for artificial organs. For instance, according to the Australian Institute of Health and Welfare, in 2022, almost half (47%, or 11.6 million) of Australians were estimated to have one or more common chronic health conditions, including diabetes, cancer, and chronic kidney disease in the year 2021. Such a huge number of chronic diseases in the Australian population is anticipated to drive market growth due to the increased adoption of artificial organs in organ failure patients.

-Additionally, as per the data published by the Australian Institute of Health and Welfare in August 2022, it has been observed that in Aboriginal and Torres Strait Islanders, 292 males and 677 females per 100,000 population have chronic kidney diseases,

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respectively, in 2021. As per the same source, Indigenous Australians were 4.6 times more likely to be diagnosed with chronic kidney disease than their non-Indigenous counterparts. Thus, the rising burden of kidney disease among the population can lead to kidney failure, which is expected to increase the demand for medical bionics and artificial kidney transplants, thereby propelling market growth.

-Furthermore, the rising initiatives from researchers in Australia are expected to drive market growth over the forecast period. For instance, in December 2021, biomedical researchers at the University of Sydney and UNSW developed a bionic eye that has shown to be safe and stable for long-term implantation in a three-month study, paving the way for human trials. Such innovations by the researchers will lead to rising approvals in Australia, leading to increased adoption and market growth.

-Therefore, factors such as the rising prevalence of chronic diseases such as cardiovascular disease, diabetes, kidney diseases, and others is the key factor driving the market growth. Furthermore, technological advancements in artificial organs and bionics are expected to drive market growth. However, the high cost of the procedure is likely to impede market growth over the forecast period.

## Australia Artificial Organs And Bionic Implants Market Trends

### Artificial Kidney Segment is Expected to Show Better Growth in the Forecast Years

- The artificial kidney segment is expected to witness significant growth in the artificial organs and bionic implants market over the forecast period owing to factors such as the rising kidney transplantation, rising prevalence of renal failures, and increasing chronic diseases such as diabetes leading to kidney disease.

- According to the Australian Government Organ and Tissue Authority 2022, 713 kidney transplantations took place in Australia in 2022 compared to 656 in 2021. Furthermore, according to the same source, there are currently around 1,800 Australians on the waitlist for a kidney transplant. Therefore, the rising kidney transplantations and the huge demand for organs are anticipated to drive the segment growth.

- The increasing number of kidney diseases among the population is the key factor driving the market growth. For instance, as per the data published by the Australian Institute of Health and Welfare, in August 2022, in 2020-2021, about 42,300 emergency department patients (14,900 males and 27,400 females) had chronic renal disease as the primary diagnosis. Also, 13,100 emergency department patient visits had a primary diagnosis of acute renal failure, which accounts for 31% of all chronic kidney disease (CKD) related emergency department visits.

- Furthermore, according to NPS MedicineWise update in November 2022, One in 10 Australian adults have signs of probable chronic kidney disease (CKD), and in Aboriginal and Torres Strait Islander peoples, the prevalence is even higher, affecting nearly one in five adults. Thus, the rising number of acute kidney failure cases is expected to increase the demand for artificial kidney transplants, which in turn is anticipated to propel the market growth over the forecast period.

- Furthermore, according to the statistics published by the International Diabetes Federation in 2022, 1,491.8 people were living with diabetes in Australia in 2021. In addition, as per the same source, this number is projected to reach 1,693 by 2030 and 1,935.2 by 2050. Thus, the high blood sugar from diabetes can damage blood vessels in the kidney as well as nephrons, leading to kidney disease and kidney failure. This is expected to increase the demand for organ transplantation, which in turn is anticipated to propel the market growth over the forecast period.

- Therefore, owing to the aforementioned factors, such as rising kidney transplantation and high prevalence of chronic kidney diseases, the segment is expected to witness growth over the forecast period.

Ear Bionics is Expected to Hold a Significant Market Share Over the Forecast Period.

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- Cochlear implants/Ear Bionics work by translating sound into nerve impulses that are transmitted to the brain, thereby assisting those with severe to profound hearing loss. In ear bionics, electrodes are implanted inside the cochlea, and a transmitter is put beneath the skin behind the ear (a cone-shaped tube in the inner ear).
- The rising prevalence of hearing loss in Australia is expected to drive the segment growth over the forecast period. According to the Australian Government Department of Health and Aged Care, in August 2022, there are about 3.6 million people who have some level of hearing loss in Australia, and more than 1.3 million people live with a hearing condition that could have been prevented. Furthermore, according to the same source, the number of people with a hearing impairment is estimated to reach 7.8 million in 2060. Such prevalence of hearing loss in Australia is anticipated to drive segment growth due to the increased adoption of ear bionics in Australia.
- Furthermore, the rising initiatives from the key market players in introducing innovative products in the market are also expected to propel the growth of the segments. For instance, in September, Such initiatives will lead to increased adoption of these products, driving the market growth. The Astellas RX+ Healthcare Innovation Challenge for 2021 has been won by Augmented Bionics, Australia.
- The medical technology startup received rewards of USD 30,000 to help fund the creation of the first non-surgical bionic ear for those with profound hearing loss. Such funding for innovative products will lead to increased development and adoption of ear bionics, driving segment growth.
- Therefore, factors such as the rising prevalence of hearing loss, accompanied by the rising initiatives from the key market players, are expected to drive the segment growth.

#### Australia Artificial Organs And Bionic Implants Industry Overview

The Australia artificial organs and bionics market is moderately competitive, with the presence of few companies in the market. The majority of the artificial organs and bionics are being manufactured by the global key players, and the factors owing to the competition include rising initiatives such as launches and expansion from the key market players. Market leaders with more funds for research and a better distribution system have established their position in the market. Some of the players operating in the market include Cochlear Ltd, Control Bionics, Inc., Medtronic PLC, Abiomed Inc., LivaNova PLC, Bionic Vision Technologies, and Ossur, among others.

#### Additional Benefits:

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

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