

# Ventricular Assist Devices Market By Product (Left Ventricular Assist Devices (LVADs), Right Ventricular Assist Devices (RVADs), Biventricular Assist Devices (BIVADs)), By Application (Bridge-To-Transplant (BTT), Destination Therapy, Bridge-To-Recovery (BTR), Bridge To Candidacy Therapy), By Design (Transcutaneous Ventricular Assist Devices, Implantable Ventricular Assist Devices), By Age (Adults, Pediatrics): Global Opportunity Analysis and Industry Forecast, 2021-2031

Market Report | 2023-02-01 | 316 pages | Allied Market Research

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## **Report description:**

The ventricular assist devices market valued for \$1,338.53 million in 2021 and is estimated to reach \$2,880.66 million by 2031, exhibiting a CAGR of 7.9% from 2022 to 2031.

Ventricular assist device (VAD), also known as mechanical circulatory support (MCS) device, supports the pumping function of the heart. It is used to increase the amount of blood that flows through the patient's body. It enables a patient with advanced heart failure to lead an improved quality of life once again. A ventricular assist device (VAD) helps in supporting either of the right or the left ventricle, however, is mostly implanted in the left ventricle. When placed in the left ventricle, it is called a left ventricular assist device (LVAD).

Ventricular assist devices are commonly used in treatment of heart failure. The VAD transplant can be temporary or permanent depending on the function for which it is implanted. They are implanted temporarily when the patient is either waiting for a heart transplant or is receiving treatment to help the heart recover until it is healthy enough to pump blood on its own. On the other hand, it is implanted permanently to ensure proper blood flow through the heart in the patient with abnormal

ventricle function. Such applications of ventricular assist devices in treatment of heart failure increases its demand in the healthcare sector and thus boost the growth of the market. In addition, rise in awareness among the patients and healthcare practitioners about ventricular assist devices fosters the market growth.

Moreover, there are initiatives taken up by the governments and other organizations in creating awareness among the people regarding cardiovascular diseases and its advanced treatment options. For instance, the National Health Service (NHS) Long Term Plan for England designated heart failure as a priority in 2019, with a focus on promoting earlier detection of heart failure in the community through primary care networks (PCNs), a stronger emphasis on multidisciplinary teams (MDT)-led care, and quicker access to specialized care in hospitals. Such awareness programs initiated by various organizations increase the public awareness about advanced treatment options in heart failure including the ventricular assist devices. This further leads to the expansion of the ventricular assist devices market.

Although, various key factors are driving the growth of the market, there are few factors such as high cost associated with the device & implantation and serious risks involved in the procedure are hampering the growth of the market. These high prices create limitations in accessing ventricular assist devices majorly in developing and underdeveloped countries. Moreover, lack of awareness about advanced treatment procedures for heart failure among the people in underdeveloped countries also acts as a restraint to the growth of the market. In addition, implanting a VAD may result in blood clots and bleeding from the surgery that may cause infection and device malfunction, which act as a restraint to the market.

On the other hand, the key market players are investing on a large scale for the R&D activities related to ventricular assist devices. Companies are focusing on innovation to develop advanced ventricular assist devices that can overcome the drawbacks of the existing VADs. Moreover, large number of clinical and developmental studies are carried out to prove the efficiency of the devices, and to get the approval for the same. This is anticipated to drive the market expansion during the forecast period. For instance, in October 2022, Abiomed announced that Impella RP Flex with SmartAssist received U.S. Food and Drug Administration (FDA) pre-market approval (PMA), as safe and effective to treat acute right heart failure for up to 14 days. Thus, more such product approvals and launches contribute to the growth of the market. Moreover, surge in incidences of heart failure across the globe, new technological advancements in ventricular assist devices, awareness among patients about monitoring of the heart, and shortage of heart donors drive the market growth.

The ventricular assist devices market is segmented on the basis of product, application, design, age, and region. By product, the market is categorized into left ventricular assist devices (LVADs), right ventricular assist devices (RVADs), and biventricular assist devices (BIVADs). On the basis of application, the market is fragmented into bridge-to-transplant (BTT), destination therapy, bridge-to-recovery (BTR), and bridge to candidacy therapy.

On the basis of design, the market is bifurcated into transcutaneous ventricular assist devices and implantable ventricular assist devices. By age, the market is divided into adults and pediatrics. Region wise, the market is analyzed across North America (the U.S., Canada, and Mexico), Europe (Germany, France, the UK, Italy, Spain, and rest of Europe), Asia-Pacific (Japan, China, Australia, India, South Korea, and rest of Asia-Pacific), and LAMEA (Brazil, South Africa, Saudi Arabia, and rest of LAMEA). Major Key players that operate in the global ventricular assist devices market are Abbott Laboratories, Abiomed, Inc., AdjuCor GmbH, Berlin Heart GmbH, Bivacor Inc., Calon Cardio-Technology Ltd, Carmat SA, CH Biomedical, Inc., Corewave SA, Evaheart, Inc., Fineheart, Jarvik Heart, Inc., LivaNova PLC, NuPulseCV, Inc., SynCardia Systems, LLC, and Windmill Cardiovascular Systems. Key Benefits For Stakeholders

-This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the ventricular assist devices market analysis from 2021 to 2031 to identify the prevailing ventricular assist devices market opportunities. -The market research is offered along with information related to key drivers, restraints, and opportunities.

-Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.

-In-depth analysis of the ventricular assist devices market segmentation assists to determine the prevailing market opportunities. -Major countries in each region are mapped according to their revenue contribution to the global market.

-Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.

-The report includes the analysis of the regional as well as global ventricular assist devices market trends, key players, market

segments, application areas, and market growth strategies.

Key Market Segments

- By Product
- Left Ventricular Assist Devices (LVADs)
- Right Ventricular Assist Devices (RVADs)
- Biventricular Assist Devices (BIVADs)
- By Application
- Bridge-To-Transplant (BTT)
- Destination Therapy
- Bridge-To-Recovery (BTR)
- Bridge To Candidacy Therapy
- By Design
- Transcutaneous Ventricular Assist Devices
- Implantable Ventricular Assist Devices
- By Age
- Adults
- Pediatrics
- By Region
- North America
- U.S.
- Canada
- Mexico
- Europe
- Germany
- France
- UK
- Italy
- Spain
- Rest of Europe
- Asia-Pacific
- Japan
- China
- Australia
- India
- South Korea
- Rest of Asia-Pacific
- LAMEA
- Brazil
- Saudi Arabia
- South Africa
- Rest of LAMEA
- Key Market Players
- Evaheart, Inc.
- Abiomed, Inc.
- Abbott Laboratories
- CH Biomedical, Inc.
- Carmat SA

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- Calon Cardio-Technology Ltd
- Bivacor Inc.
- LivaNova PLC
- Berlin Heart GmbH
- Fineheart
- AdjuCor GmbH
- NuPulseCV, Inc.
- Jarvik Heart, Inc.
- SynCardia Systems, LLC
- Corewave SA
- Windmill Cardiovascular Systems

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