

# Global Smart Orthopedic Implants Market

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## Abstracts

### Summary:

The global market for smart orthopedic implants is estimated to grow from \$28.8 billion in 2025 to reach \$38.3 billion by the end of 2030, at a compound annual growth rate (CAGR) of 5.9% from 2025 to 2030.

The market for smart orthopedic implants includes devices designed to replace, support or monitor musculoskeletal function. It features total and partial joint replacements, spine implants, and emerging smart implants with integrated sensors and digital monitoring capabilities. These solutions address a wide range of needs, from treating osteoarthritis and osteoporosis to supporting recovery from trauma or minimally invasive surgeries. The global market was valued at REDACTED in 2024 and is projected to reach \$REDACTED by the end of 2030, at a CAGR of REDACTED% during the forecast period.

Smart orthopedic implants improve patient mobility, reduce recovery times, and enhance long-term joint performance. These devices help orthopedic surgeons optimize treatment outcomes and minimize complications or revision surgeries by enabling real-time monitoring of load distribution, alignment, and implant stability.

The market also addresses challenges related to aging populations, rising incidences of musculoskeletal disorders, and trauma from accidents or sports injuries. With the integration of digital health, robotics-assisted surgeries, and AI-powered analytics, smart implants are enabling a shift toward personalized, data-driven orthopedic care.

### Report Scope

This report analyzes the global market for smart orthopedic implants, covering emerging

trends driving the market's growth. The report segments the market by procedure type, application, and end user. Procedure types include total joint replacement and partial joint replacement. Applications include knee, hip, spine, and others. End users include hospitals and orthopedic clinics, ambulatory surgical centers (ASCs) and others, which encompass rehabilitation centers, specialty orthopedic centers, and academic/research institutes.

The report analyzes the global market in five regions: North America, Europe, Asia-Pacific, South America, and the Middle East and Africa (MEA). The study includes an analysis of major market players and their offerings. Also included are global revenue (\$ million) for the base year of 2024, estimated revenue for 2025, and forecasts for the period of 2025 through 2030.

## **Report Includes**

102 data tables and 51 additional tables

Overview and analysis of the global markets for smart orthopedic implants

Analyses of the global market trends, with revenue data from 2022-2024, estimates for 2025, and projections of compound annual growth rates (CAGRs) through 2030

Estimates of the current market size and revenue prospects of global market, along with a market share analysis by procedure type, application, end user and region

Facts and figures pertaining to market dynamics, opportunities and deterrents, technological advances, regulations, innovations and standards, and the impacts of macroeconomic variables

Impact analysis of the U.S. tariff laws on the market

Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, as well as the ESG risk ratings and practices of leading companies

A relevant patent analysis, featuring key granted and published patents

Analysis of the industry structure, including companies' market shares and rankings, strategic initiatives, M&A activity and a venture funding outlook

Profiles of the leading companies, including Stryker Corp., Zimmer Biomet, DePuy Synthes (formerly Johnson & Johnson division), Medtronic and Smith+Nephew

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