

# **Neuromodulation Market by Type (Internal (Spinal Cord Stimulation, Deep Brain Stimulation), External (Transcranial Magnetic Stimulation), Application (Tremor, Epilepsy, Parkinson's Disease, Depression, Gastroparesis), and Region - Global Forecast to 2028**

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## **Abstracts**

The global neuromodulation market is valued at an estimated USD 6.2 billion in 2023 and is projected to reach USD 11.0 billion by 2028, at a CAGR of 12.0% during the forecast period. Market growth is driven by factors such as prevalence of neurological disorders and nerve injuries, increasing focus on development of advanced neuromodulation and neurostimulation technologies, growing geriatric population and subsequent increase in prevalence of neurological disorders, government support for research on neurological disorders, availability of reimbursement of neuromodulation devices, collaborations among device manufacturers, healthcare providers, and research institutions to develop neuromodulation devices.

“The internal neuromodulation dominated the neuromodulation market, by type.”

Based on type, global neuromodulation market is categorized into internal and external neuromodulation on type. In 2022, internal neuromodulation contributed largest of neuromodulation market. Market growth is largely driven by the long term associated with cost saving, minimally invasive nature, reduced physical impact and improved quality of life.

“Deep Brain Stimulation segment to grow at a considerable rate among internal neuromodulation type during the forecast period.”

The neuromodulation market is segmented into into deep brain stimulation, spinal cord

stimulation, vagus nerve stimulation, sacral nerve stimulation, and gastric electrical stimulation on type. The increasing incidences of targeted diseases such as Parkinson's disease & depression and companies are focusing product launches, approvals in this segment. These driving factors are the boost market growth.

“Asia Pacific: The fastest-growing region in the neuromodulation market.”

The global neuromodulation market is segmented into five regions - North America, Europe, the Asia Pacific, Rest of the World. The Asia Pacific region is expected to grow at the highest rate during the forecast period in the neuromodulation market. The high growth in the region is due to the primarily be attributed to the increasing geriatric population, and high disease burden of neurological disorders among senior population.

The break-up of the profile of primary participants in the neuromodulation market:

By Company Type: Tier 1 - 28%, Tier 2 - 42%, and Tier 3 - 30%

By Designation: C-level - 30%, D-level - 34%, and Others - 36%

By Region: North America - 46%, Europe - 25%, Asia Pacific - 18%, and the Rest of the World – 11%

The key players in this market are Medtronic (Ireland), Boston Scientific Corporation (US), Abbott Laboratories (US), LivaNova (UK), NeuroPace (US), Neuronetics (US), Helius Medical Technologies (US), Renishaw (UK), Bioinduction (UK), Axonics (US), Nevro Corporation (US), BlueWind Medical (Israel), Aleva Neurotherapeutics (Switzerland), GiMer Medical (Taiwan), NeuroSigma (US), BioWaveGo USA (US), Synapse Biomedical (US), Theranica Bio-Electronics (Israel), MicroTransponder (US), Soterix Medical (US), Saluda Medical (US), Electrocore, Inc. (US), Magstim (UK), BIOTRONIK (Germany), tVNS Technologies (Germany).

Research Coverage:

This research report categorizes the neuromodulation market by type (internal, external), internal (spinal cord stimulation (SCS), deep brain stimulation (DBS), vagus nerve stimulation (VNS), sacral nerve stimulation (SNS), and gastric electrical stimulation (GES)), application ((spinal cord stimulations (failed back syndrome, chronic pain, ischemia), deep brain stimulation (Parkinson's disease, tremors, depression,

other DBS application), sacral nerve stimulation (urine incontinence, fecal incontinence), vagus nerve stimulation (epilepsy, other epilepsy application), gastric electrical stimulation (gastroparesis, obesity), transcutaneous electrical nerve stimulation (Treatment-resistant Depression and other TENS application), transcranial magnetic stimulation (Migraine, Depression) and region (North America, Europe, Asia Pacific, Rest of the World). The scope of the report covers detailed information regarding the major factors, such as drivers, opportunities, and challenges, influencing the growth of the neuromodulation market. A detailed analysis of the key industry players has been done to provide insights into their business overview, products offered, key strategies, acquisitions, and partnerships. New product launches and approvals, and recent developments associated with the neuromodulation market. This report covers the competitive analysis of upcoming startups in the neuromodulation market ecosystem.

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall neuromodulation market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (the rising prevalence of neurological disorders, expanding applications of neuromodulation, and rising awareness of neurodegenerative disorders), opportunities (Widening application scope of neuromodulation, large population and increasing healthcare expenditure in emerging economies), and challenges (stringent regulatory frameworks and time-consuming approval processes, shortage of trained professionals, product recalls ) influencing the growth of the neuromodulation market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the neuromodulation market.

Market Development: Comprehensive information about lucrative markets – the report analyses the neuromodulation market across varied regions.

**Market Diversification:** Exhaustive information about new products, untapped geographies, recent developments, and investments in the neuromodulation market

**Competitive Assessment:** In-depth assessment of market shares, growth strategies and product offerings of leading players like Medtronic (Ireland), Boston Scientific Corporation (US), Abbott Laboratories (US), LivaNova (UK), NeuroPace (US), among others in the neuromodulation market strategies.

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\*Details on Business overview, Products/Services/Solutions offered, Recent Developments, MNM view might not be captured in case of unlisted companies.

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## About

The global neuromodulation market is estimated at \$3.65 Billion in 2015, and is projected to reach \$6.20 Billion by 2020, at a CAGR of 11.2% during the forecast period.

The global neuromodulation market is segmented on the basis of technology, application, and region.

Factors such as rising geriatric population, increasing prevalence of neurological diseases, strong product pipeline offered by players, and expanded target applications and new indications are driving the growth of this market. However, factors such as unfavourable reimbursement scenario and lack of trained professionals are hindering its market growth.

Some of the major players in the global Neuromodulation Market are

Medtronic, Inc. (U.S.)

Boston Scientific Corporation (U.S.)

St. Jude Medical, Inc. (U.S.)

Synapse Biomedical, Inc. (U.S.)

Nevro Corporation (U.S.)

Neurosigma, Inc. (U.S.)

Based on technology, the neuromodulation market is segmented into internal neuromodulation and external neuromodulation. Internal neuromodulation is further segmented into spinal cord stimulation (SCS), deep brain stimulation (DBS), vagus nerve stimulation (VNS), sacral nerve stimulation (SNS), and gastric electrical stimulation (GES). External neuromodulation is categorized into transcutaneous

electrical nerve stimulation (TENS), transcranial magnetic stimulation (TMS), and respiratory electrical stimulation (RES).

Based on application, the neuromodulation market is segmented into technology-wise applications, such as spinal cord stimulation (chronic pain, failed back surgery, ischemia); deep brain stimulation (Parkinsons disease, tremor, depression, others); sacral nerve stimulation (urine incontinence, fecal incontinence); vagus nerve stimulation (epilepsy, others); gastric electrical stimulation (gastro paresis, obesity); transcutaneous electrical nerve stimulation (treatment resistant depression, others); and transcranial magnetic stimulation (depression, migraine headaches).

On the basis of region, the market is divided into North America, Europe, Asia-Pacific, and rest of the world (RoW). The rest of the world region comprises Latin America, the Middle East, and Africa. North America is expected to account for the largest share of the neuromodulation market, followed by Europe, Asia-Pacific, and rest of the world (RoW) in 2015.

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Product name: Neuromodulation Market by Type (Internal (Spinal Cord Stimulation, Deep Brain Stimulation), External (Transcranial Magnetic Stimulation), Application (Tremor, Epilepsy, Parkinson's Disease, Depression, Gastroparesis), and Region - Global Forecast to 2028

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