China's Central Nervous System Drug Market Fueled by Demographic Trends, Regulatory Development and Government Initiatives

Executive Summary

Neurological disorders, which refer to diseases pertaining to the central nervous system ("CNS") and its peripherals, are among the leading causes of death globally although not as prevalent as heart diseases, cancers and chronic respiratory diseases. CNS is consisted of the brain and spinal cord. Its responsibilities include receiving, processing, and responding to sensory information (smell, taste, touch, hearing, and sight) that is collected by our senses. There are a host of CNS disorders, the most widely known ones include neurodegenerative diseases such as Alzheimer's disease¹, Multiple sclerosis² ("MS"), Parkinson's disease³, as well as cerebrovascular diseases like stroke and brain tumors, alongside the ones with psychiatric symptoms as in depression and schizophrenia⁴, among others.

According to a study by The Lancet Neurology, more than three billion people around the globe were living with a neurological condition in 2021. More than 80% of neurological deaths and health loss are associated with low- and middle-income countries. Since 1990, the number of individuals living with or dying from neurological conditions has been on the rise. Specifically, diabetic neuropathy was the fastest-growing neurological condition, with the number of people suffering from diabetic neuropathy more than tripling globally since 1990 to 206 million cases in 2021. This increase is in line with the worldwide increase in diabetes. Meanwhile, Alzheimer's disease is expected to be diagnosed in 150 million people worldwide by 2050.

CNS drugs have garnered heightened interest from pharmaceutical companies as evidenced by the high-profile acquisitions of Cerevel Therapeutics and Karuna Therapeutics by AbbVie (ABBV) and Bristol Myers Squibb (BMY) respectively. In December 2023, AbbVie announced the approximately US\$8.7 billion all-cash deal that would strengthen its neuroscience pipeline with several clinical-stage and preclinical candidates with potential treating schizophrenia, Parkinson's disease, and mood disorders. Meanwhile, Bristol Myers Squibb disclosed on 18 March 2024 the completion of the Karuna transaction, supplementing its neuroscience portfolio with acquiree's lead candidate designated initially for the treatment of schizophrenia in adults and likely psychosis⁵ in patients with Alzheimer's disease, as well as other indications.

IQVIA, a market research firm focusing on life sciences, is predicting the CNS drug market to register higher growth rates over the next few years. From a global perspective, in 2022, CNS drugs' market size was US\$116 billion, trailing the US\$189 billion for the #1 ranked oncology segment. Owing to expectations for a continued improvement in the fundamentals of innovation, the global CNS drug segment is projected

¹ A brain disorder that slowly destroys memory and thinking skills and, eventually, the ability to carry out the simplest tasks

² A chronic disease of the central nervous system. It is thought to be an autoimmune disorder, a condition in which the body attacks itself by mistake. MS is an unpredictable disease that affects people differently

³ A brain disorder that causes unintended or uncontrollable movements, such as shaking, stiffness, and difficulty with balance and coordination. Symptoms usually begin gradually and worsen over time. As the disease progresses, people may have difficulty walking and talking

⁴ A serious mental condition of a type involving a breakdown in the relation between thought, emotion, and behavior, leading to faulty perception, inappropriate actions and feelings, withdrawal from reality and personal relationships into fantasy and delusion, and a sense of mental fragmentation

⁵ A collection of symptoms that affect the mind, where there has been some loss of contact with reality



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