

INDUSTRY OVERVIEW

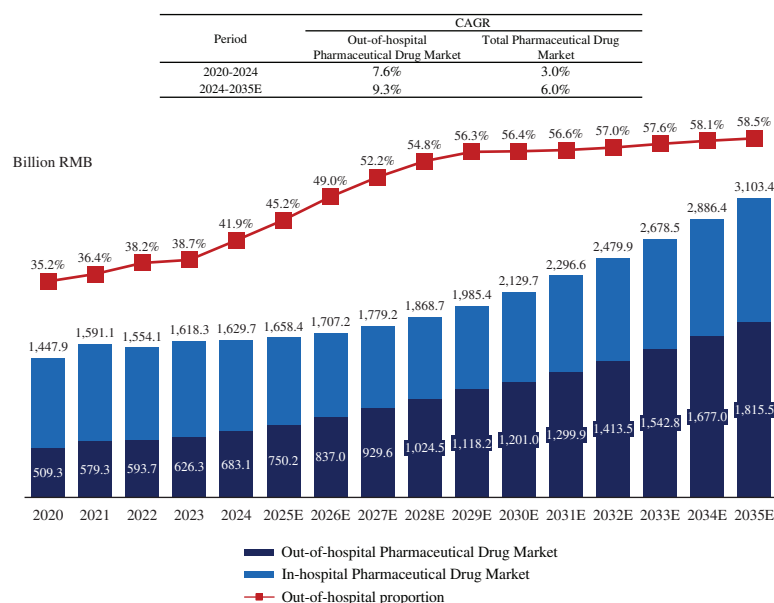
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THE PHARMACEUTICAL MARKET IN CHINA

China’s pharmaceutical market is underpinned by a structured and integrated value chain designed to facilitate the efficient delivery of medicines from development to patient consumption. The upstream segment forms the foundation of this ecosystem, encompassing drug R&D, raw material supply, and API production. The mid-stream circulation network acts as a critical bridge, leveraging distributors and service providers to channel pharmaceutical products through diverse dispensing avenues, including hospitals, primary healthcare institutions, and retail pharmacies across both in-hospital and out-of-hospital settings. Ultimately, this comprehensive infrastructure seamlessly connects upstream manufacturers with downstream end customers, ensuring a streamlined and effective healthcare delivery system for patients nationwide.

China has become one of the world’s most important pharmaceutical markets. China’s overall pharmaceutical market reached RMB1,629.7 billion in 2024, representing a CAGR of 3.0% from 2020 to 2024. The market is expected to grow to RMB3,103.4 billion by 2035 at a CAGR of 6.0% from 2024 to 2035. The market size of China out-of-hospital Pharmaceuticals has grown rapidly in recent years. From 2020 to 2024, China pharmaceutical out-of-hospital drug market has grown from RMB509.3 billion to RMB683.1 billion, with a CAGR of 7.6%. It is estimated to achieve RMB1,815.5 billion in 2035, with a CAGR of 9.3% from 2024 to 2035.

China Pharmaceutical Drug Market Size, Breakdown by In-hospital and Out-of-hospital, 2020-2035E

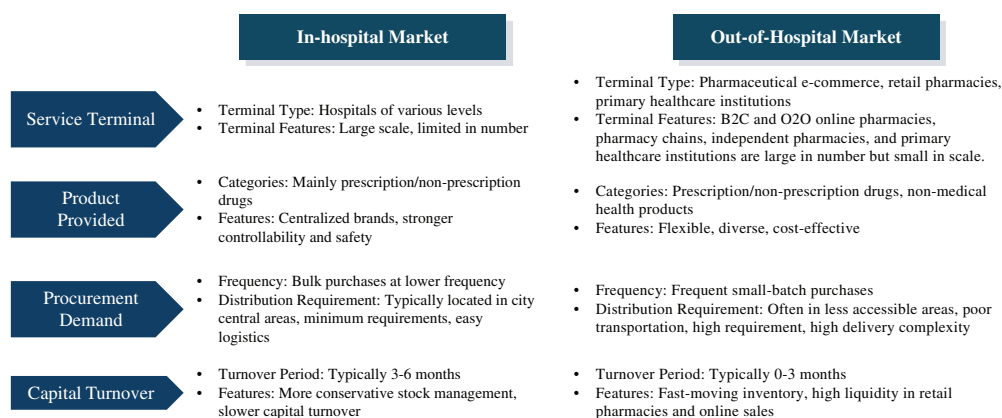


Source: Company Annual Report, Frost & Sullivan Analysis

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China’s Out-of-Hospital Pharmaceutical Market

China’s pharmaceutical market can be divided into the in-hospital market and the out-of-hospital market. The in-hospital market, dominated by hospitals across various tiers, is characterized by centralized regulatory oversight, more standardized procurement process and relatively concentrated product categories, particularly prescription drugs. By contrast, the out-of-hospital market is more fragmented, comprising retail pharmacies, primary healthcare institutions and online pharmacy platforms. While these end-point institutions are highly diverse and numerous, they are typically small in scale, resulting in a fragmented, dispersed market structure characterized by flexible, competitive, and highly market-driven operations. Together, the in-hospital and out-of-hospital channels establish a complementary distribution framework, facilitating comprehensive patient access to pharmaceuticals across both clinical and retail settings.



Source: Literature Review, Frost & Sullivan Analysis

The growth of the out-of-hospital pharmaceutical market is supported by a combination of policy-driven channel shifts and strengthening patient demand. The normalization of volume-based procurement (“VBP”) has exerted downward pressure on in-hospital sales of non-winning originator drugs, prompting manufacturers to increasingly expand into out-of-hospital channels where pricing and product selection are more flexible. In parallel, the implementation of “Dual-Channel” and related prescription circulation policies have facilitated the orderly outflow of prescriptions from hospitals to qualified retail and online pharmacies, broadening patient access and accelerating the redistribution of demand toward out-of-hospital settings. Concurrently, rising disposable income, an increasing willingness to self-pay for high-quality therapies, and the growing need for long-term management of chronic diseases — particularly in therapeutic areas requiring convenience, privacy, and continuity of care — have contributed to robust patient demand. Furthermore, the rapid development of pharmaceutical e-commerce and digital prescription services has enhanced accessibility and efficiency, reinforcing the sustained expansion of out-of-hospital channels.

OVERVIEW OF CENTRAL NERVOUS SYSTEM DISEASE DRUG MARKET IN CHINA

Overview

Central nervous system (“CNS”) diseases refer to a broad group of neurological disorders that affect the structure or function of the brain and spinal cord, which together constitute the core components of the human nervous system responsible for cognition, movement, sensation and the coordination of vital bodily functions. CNS diseases may arise from inherited metabolic abnormalities, neurodegenerative processes, structural damage, infections, demyelinating conditions, or multifactorial and idiopathic causes.

CNS disorders encompass several major categories, including neurodegeneration (e.g. Parkinson’s disease, Alzheimer’s disease), functional disorders (e.g. epilepsy, migraine and dizziness), structural disorders (e.g. brain or spinal cord injury or tumors), CNS infections (e.g. meningitis and encephalitis),

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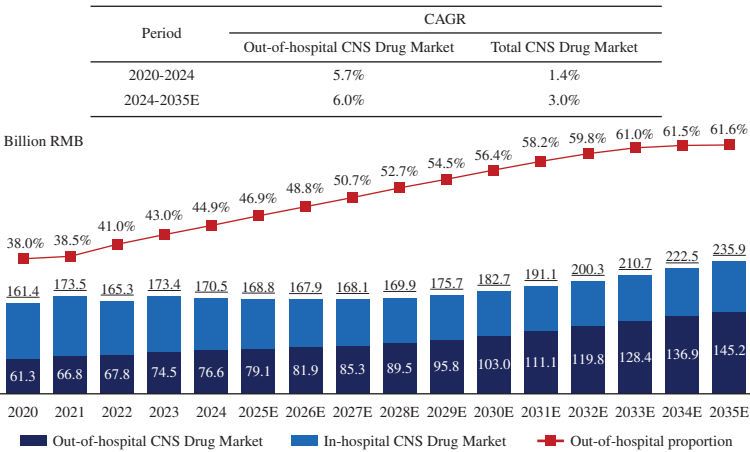
and demyelinating diseases (e.g. multiple sclerosis and damage to the myelin sheath). Collectively, these conditions impose a substantial disease burden characterized by high prevalence, chronic progression, a severe impact on patient quality of life, and the frequent necessity for long-term management.

Despite growing awareness and advancements in diagnostic technologies, many CNS diseases remain underdiagnosed or are only identified at advanced stages. This diagnostic delay is primarily attributed to heterogeneous symptoms, overlapping clinical presentations, and the reliance on specialized neurological assessments. Current standards of care typically employ a multidisciplinary approach, combining pharmacological therapy, rehabilitation, symptomatic management, and occasionally, disease-modifying or interventional strategies. Nevertheless, significant unmet medical needs persist across multiple CNS indications. These are largely driven by limited treatment efficacy, the inherent challenges of long-term disease control, and the highly complex pathophysiology underlying these disorders.

Market Size

China’s CNS drug market has maintained steady growth in recent years. From 2020 to 2024, the market size increased from RMB161.4 billion to RMB170.5 billion, and is projected to reach RMB235.9 billion by 2035. Within the overall CNS market, the out-of-hospital CNS drug market is expected to experience a notable growth trend, increasing from RMB61.3 billion in 2020 to RMB76.6 billion in 2024 and further expanding to RMB145.2 billion by 2035 at a CAGR of 6.0% from 2024 to 2035, outperforming the growth of the total China CNS drug market. The following figure illustrates the market size breakdown of China’s CNS drug market by in-hospital and out-of-hospital channels.

China CNS Drug Market Size, breakdown by in-hospital and out-of-hospital, 2020-2035E



Source: Company Annual Report, Frost & Sullivan Analysis

Entry Barriers for the CNS Disease Drug Market

The CNS disease drug market is characterized by high entry barriers, which are summarized as follows.

- R&D barriers.** The development of CNS therapies involves substantial capital requirements, lengthy development timelines and historically high clinical attrition rates. Development is further complicated by the narrow therapeutic windows typical of these indications, where strict pharmacokinetic consistency and bioequivalence are difficult to achieve and even minor deviations in drug exposure can lead to serious clinical risks, such as breakthrough seizures.

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- **Manufacturing barriers.** The manufacturing of CNS therapies requires precise processes to ensure stability, bioavailability and consistent therapeutic effect. The need for formulations capable of crossing the blood — brain barrier increases technical difficulty and manufacturing cost, limiting new entrants.
- **Brand and reputation challenges.** Established CNS brands benefit from strong Key Opinion Leader (“KOL”) trust and extensive clinical familiarity, creating high barriers to switching. This brand loyalty is often reinforced by clinical guidelines; for instance, guidelines strongly advise against altering anti-seizure medications in well-controlled epilepsy patients due to the risk of relapse. Capitalizing on this entrenched market position, originator products frequently extend their product lifecycles through incremental formulation and therapeutic enhancements.
- **Market and channel barriers.** CNS treatment is heavily concentrated within specialized neurological centers, where prescribing patterns are deeply shaped by established clinical protocols and the influence of KOLs. Building this requisite academic presence takes years and cannot be achieved through sales force expansion alone.

Market Drivers and Future Trends

We believe the growth of China’s CNS disease drug market will be driven by the following factors and trends.

- **Growing disease burden.** The aging population, compounded by rising societal and psychological stressors, continues to drive the elevated prevalence of major CNS disorders. As of the end of 2024, China had approximately 220.23 million people aged 65 and above, representing 15.6% of the total population. The incidence of neurological conditions correlates strongly with age; for instance, stroke incidence peaks between ages 60 and 84, while Alzheimer’s disease and other dementias rise most significantly after age 85. Consequently, this expanding geriatric demographic not only increases the absolute number of patients with CNS diseases but also intensifies the demand for long-term care, driving a sustained need for pharmacological interventions across a broad spectrum of neurological conditions.
- **Favorable policies and government initiatives.** Government initiatives aimed at expanding mental health and neurological care services further support market development. Recent national programs, including efforts to improve pediatric and mental health services, promote diversified psychological outpatient formats, and strengthen sleep disorder clinics, collectively enhance patient access. In addition, the “15th Five-Year National Health Plan” supports the development of provincial and key municipal mental health institutions, emphasizes the strengthening of psychological and psychiatric services, and promotes the early identification and comprehensive intervention of common mental disorders and psychological issues among key populations. Such policy support is expected to encourage earlier diagnosis, broader treatment uptake, and increased long-term demand for CNS therapies.
- **Expansion of out-of-hospital access and improved patient adherence.** The rapid expansion of out-of-hospital channels has significantly enhanced patient access to CNS medications. These alternative channels are particularly beneficial for managing chronic and long-term CNS conditions that require consistent therapeutic intervention, as they offer greater convenience, privacy, and continuity of care compared to traditional hospital-based pathways. Furthermore, the proliferation of digital prescription circulation and online follow-up services continues to lower access barriers, directly driving higher rates of treatment adherence. This structural shift is expected to broaden treatment coverage, facilitate ongoing disease management, and unlock new commercial growth opportunities within the CNS drug market.

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Indication

Epilepsy

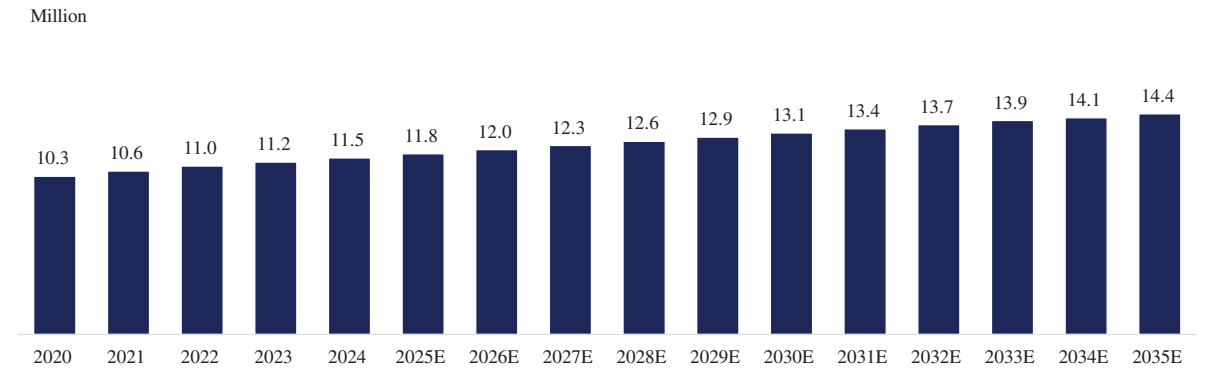
Epilepsy is a chronic brain disorder marked by repeated seizures caused by abnormal electrical discharges in neuronal networks. Seizures can affect part of the brain or the whole brain and may lead to loss of awareness, involuntary movements, sensory changes or severe convulsions. The condition is rooted in disrupted communication between neurons, driven by excessive excitatory activity or reduced inhibitory control. Recurrent seizures further reshape neural circuits and worsen network instability. Epilepsy arises from multiple factors such as genetic susceptibility, structural brain injuries, perinatal complications, infections, metabolic problems and cases with no identifiable cause. The disease creates significant long-term burden by affecting cognition, mental health, daily functioning and social participation. With a wide range of seizure types and varied clinical presentations, epilepsy remains a complex neurological condition that requires sustained medical management.

Prevalence

In China, the epilepsy patient population grew from 10.3 million in 2020 to 11.5 million in 2024, representing a CAGR of 2.8%, and is projected to reach 14.4 million by 2035 at a CAGR of 2.0% from 2024 to 2035. This sustained expansion underscores the long-term clinical demand for effective anti-epileptic therapies and disease management.

China Prevalence of Epilepsy, 2020-2035E

Period	CAGR
2020 -2024	2.8%
2024 -2035E	2.0%



Source: Literature Review, Frost & Sullivan Analysis

Treatment Paradigm

The treatment landscape for epilepsy has evolved significantly across three generations of anti-seizure medications (ASMs). First-generation agents — such as phenytoin, carbamazepine, and valproate — provided broad seizure control but were often limited by substantial adverse effect profiles. Consequently, the standard of care shifted toward second-generation therapies, including levetiracetam, lamotrigine, gabapentin, and topiramate, which offer improved tolerability and broader clinical application.

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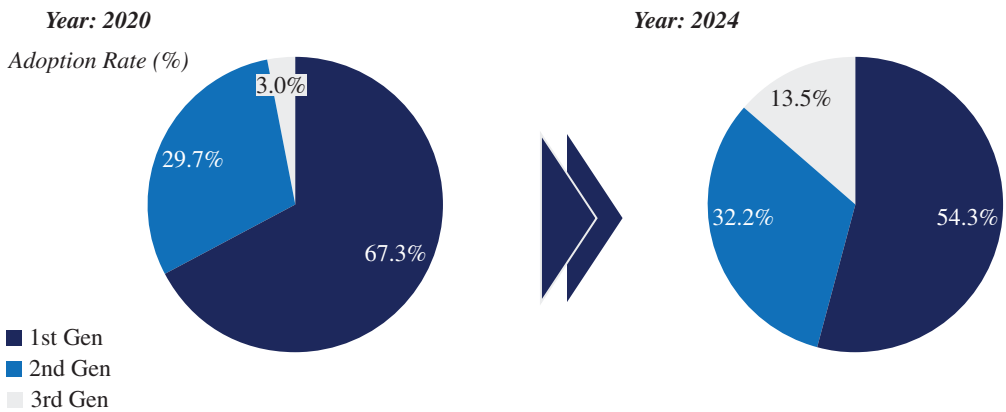
	First-Generation ASMs	Second-Generation ASMs	Third-Generation ASMs
Representative Drugs	Phenytoin, Carbamazepine, Valproate, Phenobarbital	Levetiracetam, Lamotrigine, Gabapentin, Topiramate,	Lacosamide, Eslicarbazepine, Brivaracetam, Perampanel
Primary Mechanism of Action	Sodium channel blockade (Phenytoin, Carbamazepine), GABA enhancement (Phenobarbital), multiple mechanisms (Valproate)	Sodium channel modulation (Lamotrigine), Calcium channel modulation (Gabapentin), GABA/Glutamate modulation (Topiramate), SV2A binding (Levetiracetam)	SV2A high-affinity binding (Brivaracetam), Slow sodium channel inactivation enhancement (Lacosamide), AMPA receptor antagonism (Perampanel), Sodium channel modulation (Eslicarbazepine)
Approval Period	1930s–1970s	1980s–1990s	2000s onward
Spectrum of Activity	Broad (partial and generalized seizures)	Broad, effective for both focal and generalized seizures	Targeted for refractory or adjunctive
Tolerance/Adverse Effects	Poorer tolerance; cognitive impairment, ataxia, weight changes, bone metabolism effects	Better tolerance	Generally well tolerated; may cause somnolence, dizziness
Efficacy Profile	Established efficacy; some patients poorly controlled	Stable efficacy, suitable for most seizure types	Effective in refractory cases, often used adjunctively

Source: Literature Review, Frost & Sullivan Analysis

Adoption Rates of 1st-/2nd-/3rd-generation ASMs

In 2020, China first-generation ASMs dominated the market with a 67.3% adoption rate, while second-generation drugs accounted for 29.7%, and third-generation drugs had minimal adoption at 3.0%. By 2024, the adoption pattern shifted: first-generation ASMs declined to 54.3%, second-generation drugs increased to 32.2%, and third-generation drugs rose to 13.5%, showing a clear transition toward newer-generation ASMs over time, with first-generation drugs gradually being replaced by second- and third-generation therapies.

Comparison of ASMs Generation Adoption Rate Between 2020 and 2024 in China



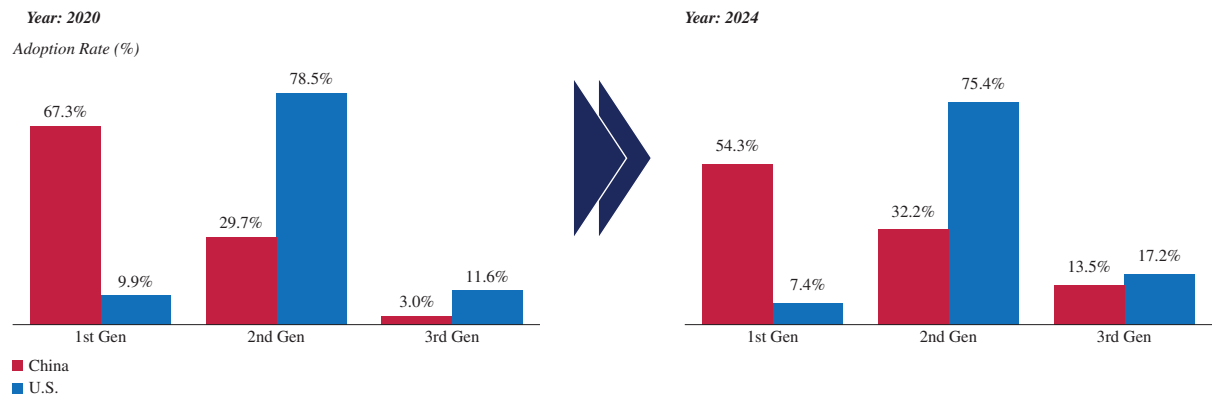
Source: Expert Interview, Frost & Sullivan Analysis

In 2020, ASM adoption showed a clear contrast between China and the U.S. In China, first-generation drugs dominated at 67.3%, while second-generation drugs made up 29.7% and third-generation drugs only 3.0%. In the U.S., second-generation ASMs were the mainstay at 78.5%, with first-generation drugs at 9.9% and third-generation drugs at 11.6%. This reveals a significant gap, as China still relied largely on older medications, whereas the U.S. had mostly shifted to newer-generation therapies. By 2024, the gap remained but showed some narrowing. In China, first-generation drug use fell to 54.3%, second-generation rose to 32.2%, and third-generation increased to 13.5%, reflecting a gradual

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move toward newer therapies. In the U.S., second-generation ASMs continued to dominate at 75.4%, first-generation fell further to 7.4%, and third-generation increased to 17.2%. Overall, both countries are adopting newer-generation ASMs, but China still trails the U.S. in uptake of second- and third-generation drugs.

Comparison of ASMs Generation Adoption Rate Between China and the U.S. (2020 vs 2024)

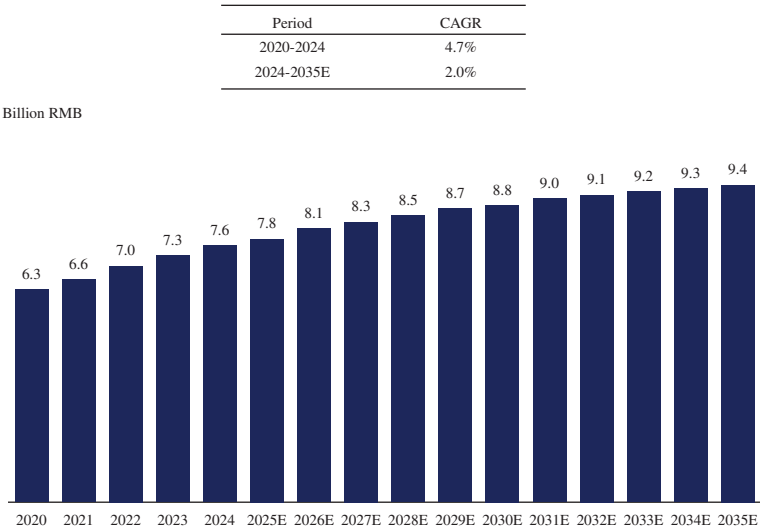


Source: Expert Interview, Frost & Sullivan Analysis

Market Size

From 2020 to 2024, the Chinese ASMs market expanded from RMB6.3 billion to RMB7.6 billion, with a CAGR of 4.7%. Rising prevalence and improving diagnosis rates, supported by broader healthcare access and growing acceptance of online consultations, continue to drive treatment demand. By 2035, the market is projected to reach RMB9.4 billion, reflecting a steady growth at a CAGR of 2.0% from 2024 to 2035. The following figure shows the market size trend.

China ASMs Market Size, 2020-2035E



Source: Company Annual Report, Frost & Sullivan Analysis

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Competitive landscape

As of the Latest Practicable Date, 12 originator ASMs had been approved in China, details of which are summarized in the table below.

Generation	Brand Name	Drug Name	Dosage Form	Company	First Approval Date	Indication
1 st Gen	得理多® Tegretol®	Carbamazepine	Tablet	Novartis	1993/04	Partial seizures (simple or complex), trigeminal neuralgia; primary or secondary generalized tonic-clonic seizures; mixed seizures. Can be used alone or in combination. Not effective for absence or myoclonic seizures.
2 nd Gen	開浦蘭® Keppra®	Levetiracetam	Tablet	NeuroGen	2006/11	For the treatment of partial-onset seizures (with or without secondary generalized seizures) in adults and children aged 4 years and older, and as adjunctive therapy for generalized tonic-clonic seizures in adults and adolescents aged 16 years and older.
			Oral solution		2011/03	For the treatment of partial-onset seizures in patients aged 1 month and older; as adjunctive therapy for myoclonic seizures in adolescents aged 12 years and older; and as adjunctive therapy for primary generalized tonic-clonic seizures in children aged 6 years and older with idiopathic generalized epilepsy.
			Injection		2017/07	For the treatment of partial-onset seizures (with or without secondary generalized seizures) in adults and children aged 4 years and older. Can be used as an alternative route of administration when patients are temporarily unable to take oral dosage forms.
2 nd Gen	紐諾汀® Neurontin®	Gabapentin	Capsule	Pfizer	2002/01	Postherpetic neuralgia; focal seizures. Adjunctive therapy for partial seizures in adults and children aged 12+ years, and for children 3–12 years.
	曲萊® Trileptal®	Oxcarbazepine	Tablet	Novartis	2003/06	For adults and children aged 5 years and older, for primary generalized tonic-clonic seizures and partial seizures, with or without secondary generalized seizures.
			Oral suspension		2013/11	For the treatment of primary generalized tonic-clonic seizures and partial-onset seizures, with or without secondary generalized seizures. It is indicated for adults and children aged 2 years and older.
	利必通® LAMICTAL®	Lamotrigine	Tablet	GSK	2003/11	For monotherapy in adults and children aged 12 years and older for the treatment of simple partial seizures, complex partial seizures, secondary generalized tonic-clonic seizures, and primary generalized tonic-clonic seizures. Monotherapy is currently not recommended for children under 12 years of age, as controlled trial data in this population are not yet available. It is also indicated as adjunctive therapy in adults and children aged 2 years and older for the same seizure types, and may be used to treat seizures associated with Lennox-Gastaut syndrome.
	妥泰® Topamax®	Topiramate	Tablet	J&J	1998/01	For monotherapy in patients newly diagnosed with epilepsy, or in patients previously on combination therapy who are being switched to monotherapy. This product is indicated as adjunctive therapy for partial-onset seizures in adults and children aged 2 to 16 years.
			Capsule		2001/05	Adjunctive therapy for partial-onset seizures in adults and children aged 2 to 16 years.
2 nd Gen	露朗® Zonegran®	Zonisamide	Tablet	Sumitomo	2011/12	Adjunctive therapy for epilepsy adults with partial seizures.
3 rd Gen	維派特® VIMP AT®	Lacosamide	Tablet	NeuroGen	2018/11	For monotherapy or adjunctive therapy of partial-onset seizures in patients aged 4 years and older, and as adjunctive therapy for primary generalized tonic-clonic seizures in patients aged 4 years and older.
			Injection		2019/12	Adjunctive therapy for partial-onset seizures in patients aged 4 years and older.
			Oral solution		2020/07	Adjunctive therapy for partial-onset seizures in patients aged 2 years and older.
	衛克泰® Fycompa®	Perampanel	Tablet	Eisai	2019/09	Partial seizures (with or without secondary generalized seizures) in adults and children aged 4 years and older. Adjunctive therapy for primary generalized tonic-clonic seizures in adults and children aged 12 years and older.
	翼弗瑞® Xcoprie/ Ontozry®	Cenobamate	Tablet	Ignis	2025/12	Partial seizures in adults with epilepsy.
	樂瑞卡® LYRICA®	Pregabalin	Capsule	Pfizer	2026/01	Adjunctive for partial-onset seizures in adults.
	Diacomit®	Stiripentol	Capsule	Giddi	2026/04	Adjunctive therapy of refractory generalized tonic-clonic seizures in patients with severe myoclonic epilepsy in infancy (SMEI, Dravet syndrome) whose seizures are not adequately controlled with clobazam and valproate.

Source: NMPA, Frost & Sullivan Analysis

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Market Drivers

The following sets out the principal drivers that the Directors believe will shape the development of this market.

- **Growing prevalence and rising treatment demand.** The demand for epilepsy medications in China is rising as the prevalence of the condition grows, particularly among aging populations and in historically underserved regions. Improved diagnostic capabilities and greater access to healthcare infrastructure across the country are driving this trend, leading to a larger number of patients being identified, diagnosed and treated. As public awareness of epilepsy and its management continue to increase, the need for effective and accessible treatment options becomes increasingly critical, creating a substantial and expanding addressable patient population for ASMs.
- **Expansion of e-commerce pharmacy and online prescription channels.** E-commerce pharmacy and online consultations are transforming how patients manage chronic conditions such as epilepsy. Under the *Guidelines for Long-Term Prescription Management (Trial)* (《長期處方管理規範(試行)》), long-term prescriptions are generally issued for periods of up to four weeks and may be extended to up to 12 weeks for patients with stable chronic conditions. Patients typically receive their initial prescription during an in-person visit at a medical institution, while subsequent medication purchases are increasingly conducted through online platforms. Compared with traditional in-person consultations, this channel offers a more convenient and cost-effective solution for patients, particularly those requiring ongoing treatment for chronic conditions such as epilepsy. In addition, patients with epilepsy who also experience co-morbid mental health challenges often avoid in-person visits due to social stigma; the shift to online healthcare provides a more private, supportive, and less stigmatised environment, helping ensure these patients can access consultations and medication without fear of judgment. The continued development and regulatory acceptance of online healthcare channels is expected to further reduce barriers to medication access and improve treatment continuity for epilepsy patients across China.
- **Increasing adoption of sustained-release formulations.** As demand for epilepsy treatments rises, sustained-release (“SR”) formulations are gaining importance in the ASMs market. SR formulations are designed to maintain stable drug levels in the bloodstream, thereby reducing pharmacokinetic fluctuations and improving overall seizure control. These formulations enhance patient adherence through fewer required daily doses, which is of particular benefit to children, the elderly and those managing complex medication regimens. In addition, SR formulations help lower the incidence of adverse side effects by avoiding the peak drug concentrations associated with immediate-release alternatives. The improved stability, tolerability and dosing convenience offered by SR formulations are expected to drive continued growth and product differentiation within the ASMs market in China.
- **Increasing adoption of next-generation ASMs.** Driven by better efficacy and improved tolerability, next-generation ASMs are experiencing increasing adoption. The market in China, historically dominated by first-generation therapies, is now progressively transitioning toward second- and third-generation ASMs. Supported by a growing emphasis on patient safety and quality of life, China’s ASM market is expected to continue aligning with mature markets, where next-generation therapies constitute the majority of prescriptions.

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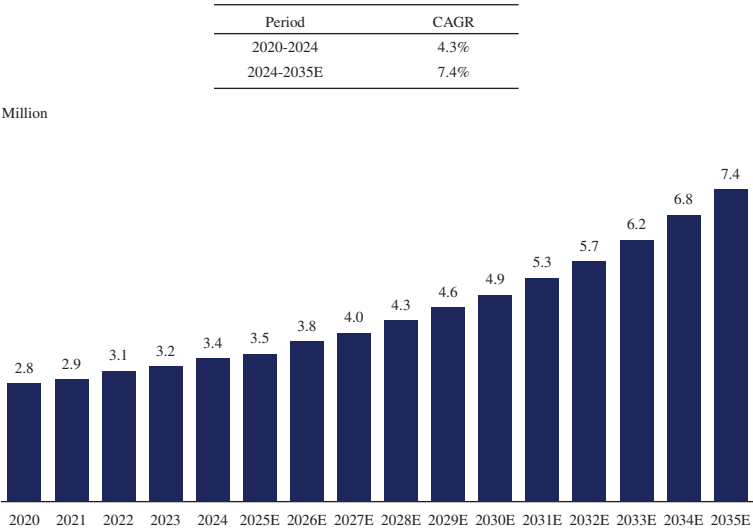
Parkinson’s Disease

Parkinson’s disease (“PD”) is a chronic, progressive neurodegenerative disorder primarily characterized by severe motor and non-motor dysfunctions. The condition is fundamentally driven by the progressive degeneration of dopaminergic neurons in the substantia nigra pars compacta. This loss leads to a critical deficiency of dopamine in the basal ganglia, disrupting the neural signalling pathways responsible for regulating voluntary motor control. As dopamine levels deplete, patients manifest a spectrum of cardinal motor symptoms, including resting tremor, muscle rigidity, bradykinesia (slowness of movement), and postural instability. The clinical progression of PD is highly heterogeneous and insidious. In the early stages, patients typically present with localized tremors and rigidity. However, as the disease advances, patients frequently experience severe gait impairment, loss of functional independence, and debilitating non-motor complications, such as cognitive decline, autonomic dysfunction, and psychiatric or behavioural disorders.

Prevalence

In China, the number of patients with Parkinson’s disease increased from 2.8 million in 2020 to 3.4 million in 2024, representing a CAGR of 4.3%. Driven by the accelerating ageing of China’s population, prolonged patient life expectancy and advances in early-stage neurological diagnostics, the patient population is expected to reach 7.4 million by 2035, reflecting a CAGR of 7.4% from 2024 to 2035. The following figure shows the prevalence trend in China.

Prevalence of PD in China, 2020-2035E



Source: Literature Review, Frost & Sullivan Analysis

Treatment Paradigm

Treatment for Parkinson’s disease focuses on improving motor symptoms by restoring or enhancing dopamine signaling. Early stages are commonly managed with non-ergot dopamine agonists, MAO-B inhibitors or amantadine, while carbidopa and levodopa remain the core therapy across all stages. As symptoms progress, patients may require combination regimens or the addition of COMT inhibitors to maintain stable symptom control. For patients with advanced or medication-refractory disease, surgical options such as deep brain stimulation or focused procedures that target specific brain regions can help reduce motor fluctuations and improve daily function. While there is currently no disease-modifying cure, the chronic nature of PD necessitates lifelong pharmacological intervention and supportive care to manage symptoms and preserve the patient’s quality of life. Consequently, this high disease burden drives a substantial, long-term clinical demand for efficacious PD therapeutics.

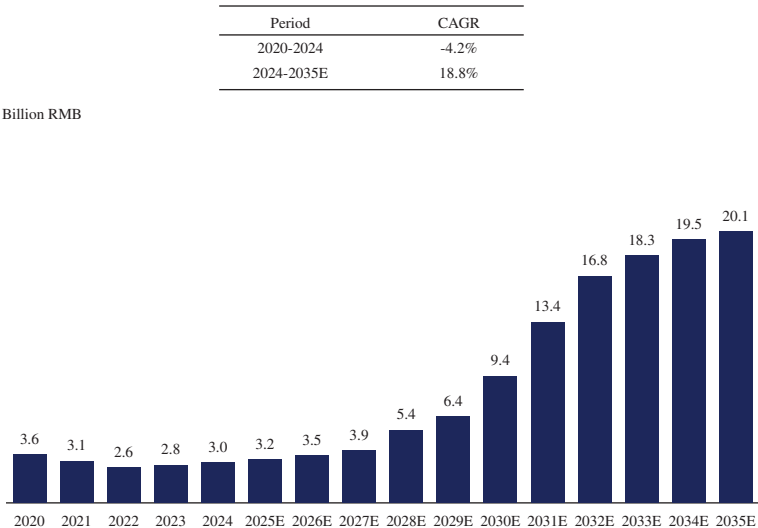
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Despite available therapies, patients continue to face significant unmet needs. Oral treatments can produce fluctuating drug levels that lead to on-off symptoms and reduced motor stability. Nighttime and early morning symptoms remain difficult to manage because current medications provide limited 24-hour control. Complex dosing schedules also challenge adherence, especially for elderly patients or those with cognitive impairment. These limitations highlight the need for more consistent delivery approaches and treatments that provide sustained and predictable symptom relief.

Market Size

From 2020 to 2024, the Parkinson’s disease drug market in China declined from RMB3.6 billion to RMB3.0 billion, primarily due to the implementation of the VBP program in China, which mandated steep price reductions for several foundational, high-volume PD medications. Driven by the rising prevalence of Parkinson’s disease and the anticipated commercial launch of innovative therapies, the market is projected to grow to RMB20.1 billion by 2035, representing a CAGR of 18.8% from 2024 to 2035. The following figure shows the market size trend.

Market Size of PD in China, 2020-2035E



Source: Company Annual Report, Frost & Sullivan Analysis

Competitive landscape

As of the Latest Practicable Date, 11 originator Parkinson’s disease therapies had been approved in China, including the class of levodopa-based therapy, MAO-B inhibitors, dopamine agonists and COMT inhibitors. The following table summarizes the approved PD therapies in China and their mechanisms of action.

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Competitive Landscape of Originator Marketed Parkinson’s Disease Treatment Drugs

Class	Drug Name	Brand Name	Company	NMPA Approved Date	Mechanism of Action
Levodopa-based therapy	Levodopa + Benserazide	Madopar®	Roche	1999/10	• Crosses the blood-brain barrier and is converted to dopamine; • benserazide inhibits peripheral AADC to enhance central availability.
MAO-B inhibitor	Selegiline	Eldepryl®	Organon	2000/10	• Inhibits MAO-B-mediated dopamine degradation in the brain, thereby increasing synaptic dopamine levels.
	Rasagiline	Azilect®	Teva	2017/06	
	Safinamide	Xadago®	Newron	2024/12	
Dopamine agonist (non-ergot)	Piribedil	Trivastal®	Servier	2000/11	Selective dopamine receptor agonists (D2/D3), stimulating postsynaptic receptors to enhance dopaminergic signaling
	Pramipexole	Sifrol®/Mirapex®	Boehringer Ingelheim	2005/12; 2014/08	
	Ropinirole	Requip®	GSK	2014/02	
COMT inhibitor	Entacapone	Comtan®	Orion Pharma	2004/05	• Inhibits COMT-mediated metabolism of levodopa, prolonging its availability and increasing central dopamine levels.
Dopamine agonist (ergot)	Bromocriptine	Parlodel®	Novartis	2001/01	Direct dopamine receptor agonists (primarily D2), mimicking dopamine activity in the striatum
	Dihydroergocryptine	Cripar®	Pfizer	2000/12	
Dopamine agonist (patch)	Rotigotine	Neupro®	NeuroGen	2018/06	Continuous stimulation of dopamine receptors (D1–D3) via transdermal delivery, providing stable dopaminergic activation

Source: NMPA, Frost & Sullivan Analysis

Market Drivers

We believe the growth of China’s PD drug market will be mainly driven by the following factors and trends.

- Growing Patient Population and Aging Demographics:** China’s rapidly aging population and improved diagnostic capabilities are increasing the number of Parkinson’s disease patients. A larger patient base naturally drives demand for effective, long-term therapies that can manage the progressive motor and non-motor symptoms associated with the disease.
- Preference for Convenient Delivery Formats:** Patients and clinicians increasingly favor therapies that provide continuous, stable symptom control with reduced dosing frequency. Transdermal patches maintain steady drug levels in the bloodstream, helping to reduce “on-off” motor fluctuations, simplify daily administration, and improve adherence. These delivery formats are particularly important in a chronic, progressive disease like Parkinson’s, where consistent symptom control is crucial for maintaining quality of life.

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- Enhanced Adoption through Safety, Tolerability, and Home-Based Use:** Parkinson’s disease treatment often requires multiple medications taken several times a day, and such complex regimens can increase the risk of missed or incorrect doses, particularly among patients with cognitive impairment or advanced disease, potentially reducing treatment effectiveness and worsening symptom control. The use of transdermal patches offers a more convenient alternative, enabling outpatient or home-based administration, minimizing the need for frequent hospital visits, and improving adherence. These advantages help overcome key barriers to treatment and support sustained growth in the Parkinson’s disease market.

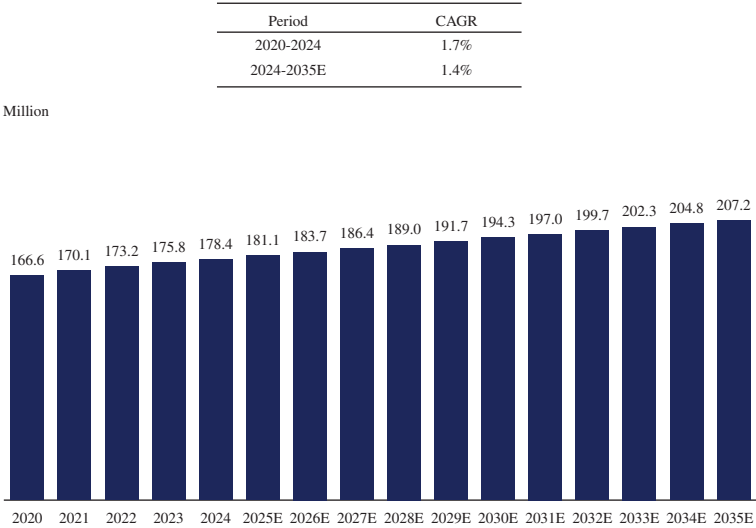
Migraine

Migraine is a common neurological disorder classified as a primary headache disorder and considered a functional disease of CNS. It is characterized by recurrent moderate to severe headaches that are often unilateral and pulsating, frequently accompanied by nausea, vomiting, photophobia and phonophobia. The underlying pathogenesis involves activation and sensitization of the trigeminal system, cortical spreading depression and the release of vasoactive peptides that promote neurogenic inflammation and pain transmission. Migraine symptoms develop across several phases, including prodrome, aura, headache and postdrome, each associated with specific neurological or sensory disturbances. The disease imposes a substantial burden on daily functioning and quality of life due to the frequency of attacks, associated disability and the need for long-term symptom management.

Prevalence

In China, the number of people with migraine reached 178.4 million in 2024, growing from 166.6 million in 2020. The prevalence is expected to continue rising in the coming years, with the patient population projected to reach 207.2 million by 2035. The following figure shows the prevalence of migraine in China.

Prevalence of Migraine in China, 2020-2035E



Source: Literature Review, Frost & Sullivan Analysis

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Treatment Paradigm

Migraine Type	Drug Class (Recommendation Level; Evidence Grade)	Drug Name
Episodic Migraine (EM)	CGRP Monoclonal Antibodies (II; A)	Fremanezumab, Galcanezumab, Eptinezumab, Erenumab
	CGRP Receptor Antagonists/Gepants (II; B)	Rimegepant, Atogepant
	β-blockers (I-III; A-C)	Propranolol, Metoprolol, Atenolol
	Anticonvulsants (I-III; A-C)	Topiramate, Valproate
	ACEI/ARB (II-III; B-C)	Candesartan, Lisinopril
	Calcium Channel Blockers (II-III; B-C)	Flunarizine
Chronic Migraine (CM)	CGRP Monoclonal Antibodies (II; A)	Fremanezumab, Galcanezumab, Eptinezumab, Erenumab
	OnabotulinumtoxinA (I; A)	OnabotulinumtoxinA
	β-blockers (I-III; A-C)	Propranolol, Metoprolol, Atenolol
	Anticonvulsants (I-III; A-C)	Topiramate, Valproate
	Tricyclic Antidepressants (III; C)	Amitriptyline
	SNRIs (III; C)	Venlafaxine
	ACEI/ARB (III; C)	Candesartan
	Muscle Relaxants (III; C)	Tizanidine
	Other (III; C)	Flunarizine
	Supplements (III; C)	Magnesium, Riboflavin (B2), Coenzyme Q10

Source: Chinese Guidelines for the Diagnosis and Treatment of Migraine (First Edition by the Chinese Society of Neurology, Chinese Medical Association), Frost & Sullivan Analysis

Preventive treatment for migraine is divided into strategies for episodic migraine (EM) and chronic migraine (CM). Available preventive therapies include Calcitonin Gene-Related Peptide (“CGRP”)-targeting monoclonal antibodies, CGRP receptor antagonists (gepants), β-blockers, anticonvulsants, ACE inhibitors or ARBs, calcium channel blockers, tricyclic antidepressants, SNRIs, muscle relaxants, onabotulinumtoxinA, and supplements. Among these, CGRP monoclonal antibodies are strongly recommended for both EM and CM due to their mechanism-based action, favorable tolerability, and demonstrated efficacy in reducing migraine frequency.

CGRP Pathway and Monoclonal Antibodies in Migraine Prevention

CGRP is a 37-amino acid neuropeptide widely expressed in both the central and peripheral nervous systems. During migraine attacks, elevated CGRP levels induce vasodilation of cerebral and dural blood vessels, promote neurogenic inflammation through activation of the trigeminovascular system, and enhance nociceptor sensitization, leading to amplified pain transmission. As a critical mediator of both episodic and chronic migraine, CGRP represents a validated therapeutic target for migraine prophylaxis. CGRP-targeting monoclonal antibodies (mAbs) are designed to inhibit the CGRP signaling pathway and reduce the frequency of migraine attacks. These antibodies can be classified into two categories: ligand-targeting mAbs, which selectively bind circulating CGRP molecules to prevent activation of CGRP receptors; and receptor-targeting mAbs, which directly antagonize CGRP receptors on trigeminal neurons and meningeal blood vessels, blocking the binding of CGRP and downstream signaling.

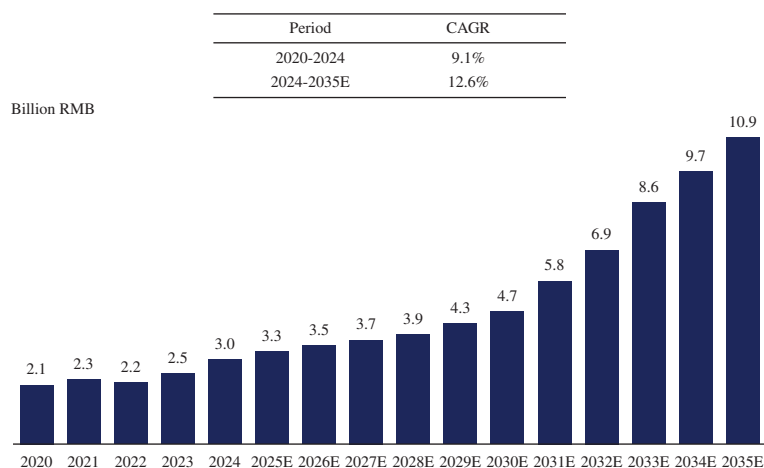
CGRP-targeting monoclonal antibodies offer a preventive migraine therapy with distinct advantages in mechanism, tolerability, and dosing convenience. These antibodies are large protein molecules that are not metabolized by hepatic CYP450 enzymes nor primarily eliminated through renal excretion, minimizing metabolism-related drug-drug interactions and reducing dependence on liver or kidney function. By specifically inhibiting the CGRP pathway, they act on migraine-associated vasodilation, neurogenic inflammation, and nociceptor sensitization. Their long-acting dosing, typically administered monthly or quarterly, can improve patient adherence and reduce the need for daily preventive medications. As non-analgesic preventive agents, CGRP monoclonal antibodies are not associated with medication-overuse headache and may reduce patients’ reliance on acute pain medications. Collectively, these properties differentiate CGRP antibodies from conventional oral preventive therapies.

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Market Size

From 2020 to 2024, the migraine drug market in China grew from RMB2.1 billion to RMB3.0 billion, representing a CAGR of 9.1%. Driven by increasing disease prevalence and the anticipated launch of new therapeutic options, the market is projected to expand to RMB10.9 billion by 2035, representing a CAGR of 12.6% from 2024 to 2035.

China Migraine Drug Market Size, 2020–2035E



Source: Company Annual Report, Frost & Sullivan Analysis

Competitive Landscape

As of the Latest Practicable Date, three CGRP-targeted preventive migraine drugs have been approved and marketed in China, and three additional candidates are currently under BLA/NDA review by the NMPA.

Competitive Landscape of CGRP-targeted Preventative Migraine Drugs in China

Drug Name	Target	Company	Phase in China	RoA	Dosing Frequency	Approved /NDA Submission Date of Preventive Migraine Indication in China	FDA-approved Preventive Migraine Indication
Fremanezumab	CGRP	NeuroGen	Approved	Subcutaneous injection	Monthly/Quarterly	2026/06	Preventive treatment of migraine in adults, and the preventive treatment of episodic migraine in pediatric patients who Are 6 to 17 years of age and who weigh 45 kg or more
Erenumab	CGRPR	Novartis	Approved	Subcutaneous injection	Monthly	2023/09	Preventive treatment of migraine in adults
Galcanezumab	CGRP	Eli Lilly	Approved	Subcutaneous injection	Monthly	2024/01	Preventive treatment of migraine in adults
Eptinezumab	CGRP	Lundbeck; Alder	BLA	Intravenous infusion	Quarterly	2025/10	Preventive treatment of migraine in adults
Atogepant	CGRPR	Merck; AbbVie	NDA	Oral	Daily	2026/01	Preventive treatment of migraine in adults
Rimegepant	CGRPR	Pfizer	NDA	Oral	Every Other Day	2026/03	Preventive treatment of episodic migraine in adults

Note: The competitive landscape above only includes products that are under BLA/NDA and marketed.

Source: NMPA, CDE, FDA, Frost & Sullivan Analysis

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Pain Management

Pain is a complex clinical manifestation arising from a diverse array of injuries, surgical procedures, and underlying chronic diseases such as cancer and arthritis. It encompasses a broad spectrum of physiological and neuropathological processes, and is typically classified by duration — acute versus chronic — or by underlying etiology, including nociceptive, neuropathic, and nociplastic mechanisms. Physiologically, pain is fundamentally mediated by CNS, as it occurs when peripheral sensory receptors detect noxious stimuli and transmit these signals to the brain for processing. When driven by maladaptive mechanisms such as central sensitization, pain can become chronic, persisting long after normal tissue healing and severely impairing a patient’s quality of life. Globally, pain disorders affect an estimated 20% to 30% of the adult population, imposing a profound socioeconomic burden through extensive healthcare utilization, diminished workplace productivity, and deteriorated overall well-being.

Treatment Paradigm

Pain management in China follows a multi-category pharmacological framework, reflecting the heterogeneous nature of pain mechanisms across acute, chronic, nociceptive and neuropathic conditions. Pain management medications are generally classified into four main categories: non-analgesics, opioid analgesics, local anesthetics, and other pharmacological agents such as corticosteroids and antidepressants. Among non-opioid analgesics, emerging dual-mechanism drugs are designed to combine analgesic and anti-inflammatory effects while enabling long-acting pain control. By concurrently targeting nociceptive/inflammatory and neuropathic pain signals, such products may provide more sustained analgesia than single-mechanism agents; for example, naproxen/pregabalin conjugates have demonstrated durable pain suppression in acute pain studies, potentially addressing the short duration of pregabalin’s standalone analgesic effect. Clinical guidelines increasingly emphasize multimodal analgesia, incorporating agents with complementary mechanisms to enhance efficacy while reducing opioid exposure.

Comparison Analysis of Pain Management Options

	Class	Drugs	Mechanism	Indications
Non-opioid Analgesics	NSAIDs	Ibuprofen, Naproxen, Aspirin, Celecoxib	Inhibit COX-1/COX-2 enzymes, reducing prostaglandin synthesis	Mild to moderate pain with inflammation, e.g., musculoskeletal pain, arthritis
	Acetaminophen	Paracetamol	Reduce prostaglandin production in CNS to relieve pain and fever	Mild pain such as headaches or muscle aches
	Dual-mechanism analgesics	NG1706	Target both inflammatory and neural signaling pathways to reduce pain	Postoperative pain; cancer pain
Opioid Analgesics	Opioids	Morphine, Oxycodone, Fentanyl, Codeine	Bind to opioid receptors in CNS, inhibit pain signal transmission and alter pain perception	Moderate to severe acute or cancer-pain
Local Anesthetics	Local Anesthetics	Bupivacaine, Levobupivacaine, Ropivacaine	Block voltage-gated sodium channels, inhibiting nerve impulse conduction	Regional, spinal, epidural, or peripheral nerve blocks, perioperative and postoperative analgesia
Other Pharmacological Options	Antidepressants	Amitriptyline, Nortriptyline, Duloxetine	Modulate serotonin and norepinephrine, enhance descending pain inhibition	Neuropathic pain
	Corticosteroids	Prednisone, Dexamethasone	Suppress immune activity and reduce inflammation	Pain with inflammation, e.g., rheumatoid arthritis
	Anticonvulsants	Gabapentin, Pregabalin	Modulate calcium channels to reduce excitatory neurotransmitter release	Neuropathic pain

Source: Literature Review, Frost & Sullivan Analysis

While numerous analgesic therapies are currently available, the treatment of complex pain conditions remains constrained by significant clinical limitations. The current market presents substantial opportunities for novel therapeutics that can address the following critical shortcomings:

- Limited mechanistic coverage and efficacy:** Traditional analgesics typically target a single pain mechanism, which is often insufficient for multifactorial conditions like post-surgical, osteoarthritis, and cancer pain. To achieve relief, patients are frequently prescribed multiple concurrent medications, leading to increased treatment complexity, greater pill burden, and suboptimal overall effectiveness.

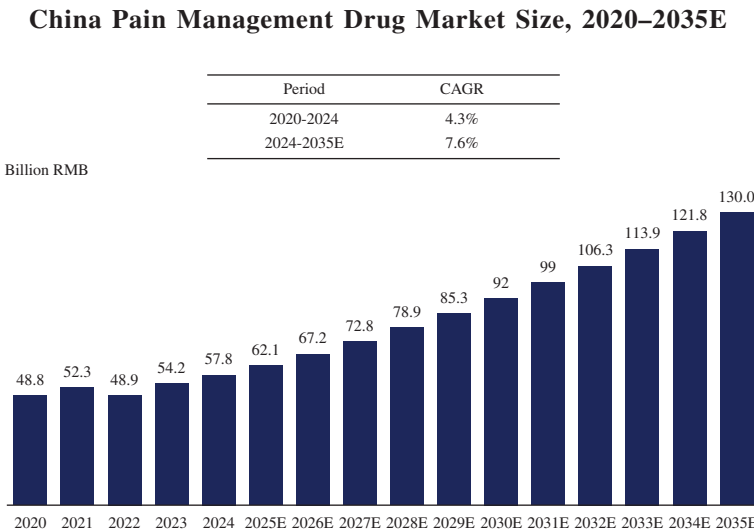
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- Safety concerns and narrow applicability:** Many standard treatments, particularly opioids, carry profound risks of addiction and dependence. They are also associated with severe adverse events, including gastrointestinal disturbances (e.g., nausea, constipation) and central nervous system issues (e.g., sedation, respiratory depression). These safety profiles render current options unsuitable for high-risk individuals, leaving a substantial treatment gap for patients with opioid intolerance or a history of substance use disorder.
- Stability and synergy issues:** Current medications often exhibit significant pharmacokinetic variability, resulting in inconsistent drug exposure that complicates treatment regimens. Furthermore, combination therapies frequently lack true pharmacological synergy; they may only provide additive or even diminished effects while simultaneously increasing the risk of adverse events and drug-drug interactions. This highlights a pressing need for more predictable, well-coordinated pharmacological strategies.

The pain management landscape is undergoing a significant transformation driven by regulatory support, clinical advancements, and formulation innovations aimed at overcoming the severe limitations of traditional opioid therapies. In response to the persistent challenges of opioid addiction and adverse side effects, regulatory bodies such as the FDA are actively encouraging and accelerating the development of targeted, non-opioid analgesics. Concurrently, clinical practice is increasingly adopting multi-mechanism analgesic strategies — utilizing dual- or multi-target formulations that act on both central and peripheral pathways — to enhance overall efficacy while further reducing reliance on opioids. This strategic shift is heavily supported by significant formulation innovations, particularly perioperative local infiltration injections, which deliver concentrated pain relief directly to the surgical site. By minimizing systemic drug exposure, these advanced, localized formulations reduce adverse side effects, facilitate earlier patient mobilization, and ultimately drive improved postoperative recovery outcomes and broader market growth.

Market size

The pain management drug market in China grew from approximately RMB48.8 billion in 2020 to RMB57.8 billion in 2024, representing a CAGR of 4.3%. It is expected to reach RMB130.0 billion by 2035, representing a CAGR of 7.6% from 2024 to 2035.



Source: Company Annual Report, Frost & Sullivan Analysis

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Market Drivers and Future Trends

We believe the following key trends will shape the future trajectory and growth of the pain management drug market.

- **Regulatory tailwinds accelerating non-opioid development:** In response to the persistent public health challenges of opioid addiction and associated adverse events, regulatory agencies, including the FDA, have adopted highly supportive stances to encourage the advancement of non-opioid pain therapies. Consequently, targeted therapeutics designed to address neuropathic and inflammatory pain are benefiting from accelerated development and approval pathways. By positioning these therapies as safer, non-addictive alternatives, regulators are effectively catalyzing a major growth segment within the broader analgesics market.
- **Shift toward multi-mechanism and opioid-sparing modalities:** The standard of care in postoperative pain management is rapidly shifting toward dual- or multi-target formulations (e.g., celecoxib combined with bupivacaine, or tramadol-based combinations). By acting simultaneously on central and peripheral neural pathways while providing anti-inflammatory benefits, these multi-mechanism strategies offer superior clinical profiles. They significantly enhance overall analgesic efficacy, dramatically lower postoperative opioid consumption, and improve patient safety margins compared to traditional, single-mechanism drugs.
- **Advancements in targeted delivery and long-acting formulation innovation:** There is increasing market demand for advanced delivery mechanisms, particularly perioperative local infiltration injections. These innovative formulations deliver concentrated analgesia directly to the surgical site, thereby minimizing systemic drug exposure and mitigating off-target side effects. From a health economics and outcomes perspective, this localized approach facilitates earlier patient mobilization, accelerates postoperative recovery times, and enhances overall patient comfort — key metrics that drive adoption among healthcare providers and surgical centers. In addition, existing innovative therapies have shown that long-acting analgesia is achievable, providing sustained pain relief for up to 72 hours while further supporting postoperative pain control, reducing reliance on systemic analgesics and opioids, and improving recovery outcomes.

Postoperative Pain

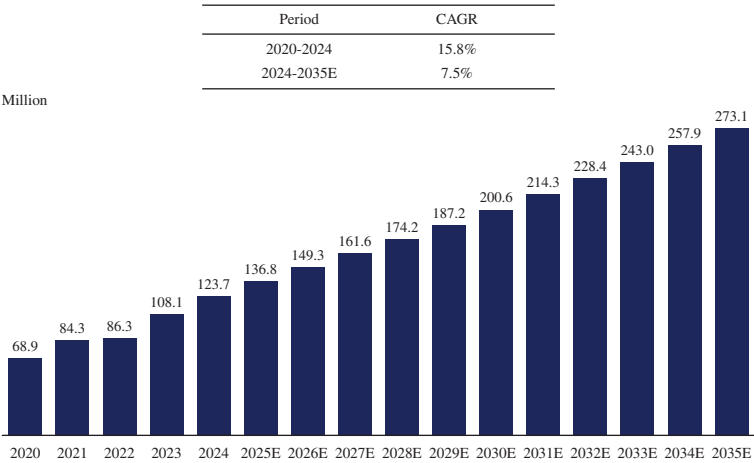
Postoperative pain refers to the acute pain that occurs immediately after surgery and typically lasts from several days up to one week, although recovery may take longer in procedures involving extensive tissue trauma or joint replacement. It includes both somatic and visceral pain and can range from mild discomfort to severe pain that disrupts sleep, mobility and daily activities. Clinically, postoperative pain is associated with a wide spectrum of short-term complications — such as cardiovascular, respiratory, gastrointestinal and urinary disturbances — as well as long-term consequences including sleep disorders, psychological stress and, in some cases, progression to chronic pain. Effective and continuous analgesia is therefore a central component of perioperative management, with current practice relying on multimodal regimens comprising local anesthetics, NSAIDs, COX-2 inhibitors, acetaminophen, opioids and neuropathic pain agents to achieve adequate pain control while minimizing adverse effects.

Prevalence

In China, postoperative acute pain is highly prevalent and increasing in line with rising surgical volumes. The number of postoperative acute pain cases grew from approximately 68.9 million in 2020 to 123.7 million in 2024, representing a CAGR of 15.8%. This figure is projected to reach about 273.1 million cases by 2035, with a CAGR of 7.5% from 2024 to 2035. The substantial and growing patient population underscores the clinical importance of improving postoperative pain management strategies.

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Incidence of Postoperative Acute Pain in China, 2020-2035E



Source: Literature Review, Frost & Sullivan Analysis

Treatment Paradigm

The contemporary treatment paradigm for postoperative pain has shifted from traditional opioid-centric protocols toward multimodal analgesia. Current clinical guidelines and expert consensus advocate combining non-opioid analgesics — specifically NSAIDs or COX-2 inhibitors — with local anaesthetics. This mechanism-complementary approach achieves balanced and effective pain control while mitigating the risks of opioid-related adverse events. Within this clinical framework, the paradigm is defined by two key pillars:

- Synergistic, multi-mechanism formulations:** The integration of anti-inflammatory agents and local anesthetics represents a major therapeutic advancement. For example, combining celecoxib (which reduces inflammation and peripheral sensitization via selective COX-2 inhibition) with bupivacaine (which provides sustained local blockade of nerve signal transmission) yields superior, prolonged pain control compared to administering either agent individually. Because both components act directly at the site of surgical injury, their complementary mechanisms drastically reduce the need for systemic rescue opioids.
- Targeted delivery via infiltration injection:** To maximize the efficacy of these multi-mechanism formulations, the paradigm increasingly favors localized delivery. Infiltration injection has emerged as a cornerstone clinical modality, enabling the direct administration of concentrated analgesia precisely at the surgical site. This targeted approach minimizes systemic drug exposure and associated side effects.

Cancer Pain

Cancer pain is a complex and multifactorial condition arising from the cancer itself and/or its treatment. It encompasses nociceptive pain caused by tumor invasion of bones, nerves or other tissues, as well as neuropathic pain resulting from nerve injury or compression. Cancer pain can range from mild discomfort to severe, debilitating pain that significantly impairs sleep, mobility, daily functioning and overall quality of life. Effective management of cancer pain is therefore a key component of comprehensive oncology care and is generally guided by pain severity and underlying cause. Current treatment options typically include nonsteroidal anti-inflammatory drugs, opioids and adjuvant analgesics, with weak opioids or low-dose strong opioids often used for moderate pain and strong opioids for severe

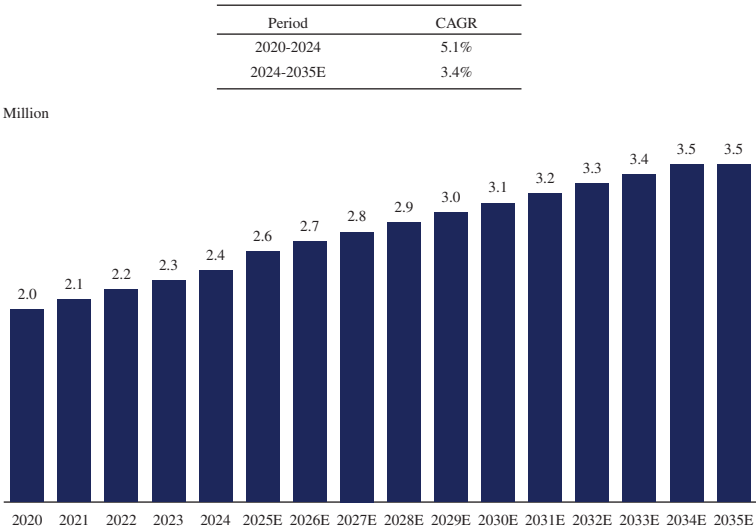
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pain, while tricyclic antidepressants or anticonvulsants may be employed to address cancer-related neuropathic pain and bisphosphonates may be considered for pain associated with bone metastases. Multimodal analgesic regimens are commonly adopted to optimize pain control while minimizing treatment-related adverse effects.

Prevalence

In China, the prevalence of cancer pain increased from approximately 2.0 million patients in 2020 to 2.4 million patients in 2024, representing a CAGR of 5.1%. It is projected to further rise to 3.1 million patients by 2030 and 3.5 million patients by 2035, reflecting a CAGR of 3.4% from 2024 to 2035. The steady growth of the cancer pain patient population in China underscores the continued clinical need for effective pain management therapies.

China Prevalence of Cancer Pain, 2020-2035E



Source: Literature Review, Frost & Sullivan Analysis

Treatment Paradigm

In China, the current pharmacological treatment landscape for cancer pain is largely defined by two major drug classes, namely NSAIDs and opioids. NSAIDs, including paracetamol, diclofenac, ibuprofen, meloxicam and celecoxib, are widely used for their antipyretic, analgesic and anti-inflammatory properties and may reduce pain intensity and opioid requirements in certain settings. Opioids, such as morphine, fentanyl, oxycodone, sufentanil and codeine, continue to play a central role in the management of moderate to severe cancer pain given their potent analgesic activity. In practice, these therapies are selected according to pain severity, route of administration, patient condition and tolerability, and are often incorporated into multimodal analgesic regimens.

Schizophrenia

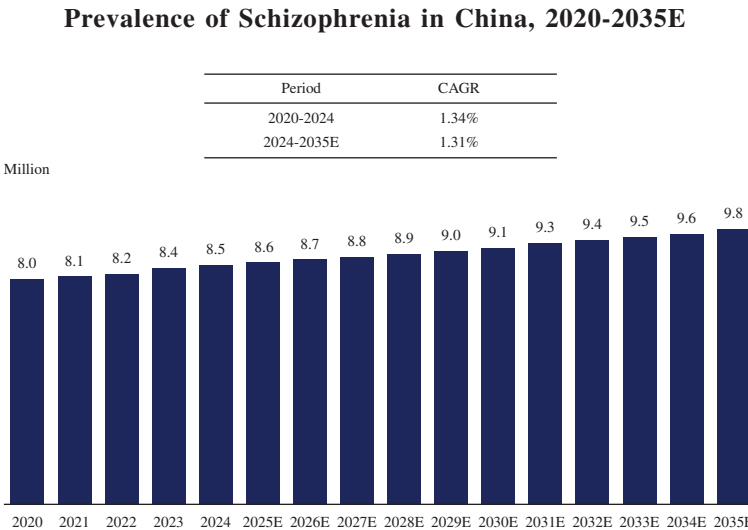
Schizophrenia is a chronic, severe, and highly debilitating mental disorder characterized by profound disturbances in thought, perception, and behavior. Clinically, the disease manifests across three primary domains: positive symptoms (such as hallucinations, delusions, and disorganized speech or behavior), negative symptoms (including diminished emotional expression, avolition, and social withdrawal), and cognitive impairment. The complexity and severity of these symptoms severely impact patient functioning and quality of life.

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The pathogenesis of schizophrenia is multifactorial, driven by a complex interplay of genetic predisposition, environmental influences, and neurobiological abnormalities. Twin and family studies indicate that genetic factors contribute substantially to disease risk, while environmental factors — such as prenatal complications, early-life adversities, psychosocial stressors, and cannabis use — further compound susceptibility. On a neurobiological level, the disorder is strongly associated with the dysregulation of dopamine and glutamate neurotransmission pathways. Furthermore, it is linked to distinct structural and functional brain abnormalities, including enlarged cerebral ventricles and reduced grey matter volume, which underscore the physical neurological impact of the disease.

Prevalence

In China, the schizophrenia patient population increased from 8.0 million in 2020 to 8.5 million in 2024, and is projected to reach 9.8 million by 2035, driven by ongoing demographic and diagnostic trends. Globally, schizophrenia represents a substantial healthcare burden, accounting for a significant number of years of life lost due to disability.



Source: Literature Review, Frost & Sullivan Analysis

Treatment Paradigm

Despite historical advancements in pharmacotherapy, the current treatment landscape for schizophrenia remains constrained by significant unmet medical needs. Conventional first-generation antipsychotics primarily target positive symptoms but offer inadequate relief for debilitating negative symptoms and cognitive impairment. While second-generation agents provide improved general tolerability, they continue to present clinically limiting side effects, such as extrapyramidal symptoms and hyperprolactinemia, which severely impact patient quality of life. Furthermore, although third-generation partial dopamine agonists offer incremental improvements in metabolic safety and cognitive function, their clinical utility remains largely restricted to adjunctive or maintenance therapy. Compounding these pharmacological limitations is the profound challenge of consistent medication compliance; disease-inherent factors — including impaired patient insight, cognitive deficits, and mistrust of treatment — frequently disrupt adherence, ultimately driving high rates of disease relapse and suboptimal long-term clinical outcomes.

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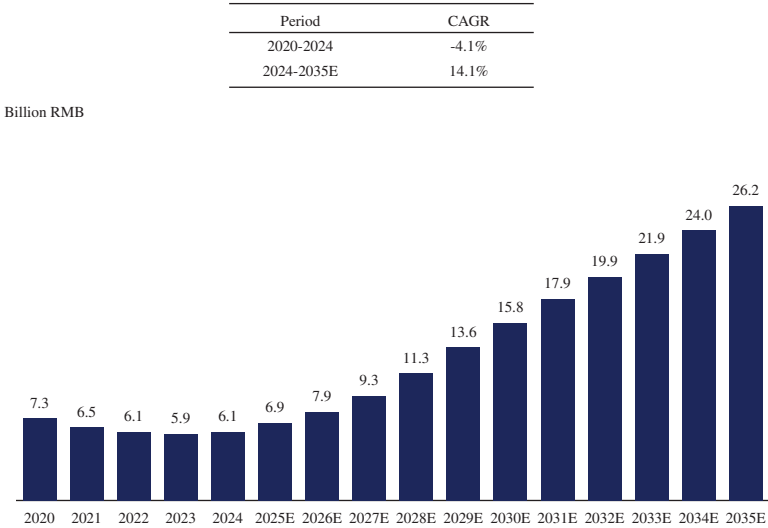
	First-Generation	Second-Generation	Third-Generation
• Representative Drugs	• Chlorpromazine, Haloperidol, Perphenazine	• Risperidone, Olanzapine, Clozapine, Quetiapine	• Brexpiprazole, Cariprazine, Aripiprazole
• Primary Mechanism of Action (“MoA”)	• Primarily D2 receptor antagonists; block dopamine in mesolimbic pathway	• Block D2 dopamine receptors and 5-HT2A serotonin receptors, which reduces dopamine activity in some brain regions while modulating serotonin pathways	• Act as partial agonists at D2 and D3 dopamine receptors and 5-HT1A serotonin receptors, and as antagonists at 5-HT2A receptors, stabilizing dopamine activity in different brain regions
• Clinical Benefits	• Effective for Positive Symptoms (Hallucinations, Delusions)	• Effective for both Positive and Negative Symptoms (Apathy, Withdrawal)	• Effective for both; improves cognition; fewer side effects; oral films benefits patients with swallowing difficulties or poor adherence
• Limitations	• Severe Extrapyramidal Symptoms (EPS) (Tremors, Stiffness), Tardive Dyskinesia	• Metabolic Syndrome (Weight gain, High blood sugar/lipids), Sedation	• Lower prolactin burden and lighter metabolic profile, but akathisia still require monitoring
• Clinical Use	• Used in selected acute or maintenance settings	• First-line choice	• Suitable for maintenance and adjunctive therapy

Source: Literature Review, Frost & Sullivan Analysis

Market Size

In China, the market size of schizophrenia treatment drugs decreased from RMB7.3 billion in 2020 to RMB6.1 billion in 2024, primarily attributable to the adoption of VBP scheme in China. According to Frost & Sullivan, the market size is projected to reach RMB26.2 billion by 2035, with a CAGR of 14.1% from 2024 to 2035, driven by the growing treatment demand and the introduction of novel therapeutic options.

Market Size of Schizophrenia in China, 2020-2035E



Source: Company Annual Report, Frost & Sullivan Analysis

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Competitive Landscape

As of the Latest Practicable Date, two brexpiprazole oral film products had been marketed in China, with an additional eight brexpiprazole oral film products under NDA review.

Competitive Landscape of Brexpiprazole Oral Films in China

Drug Name	Company	Phase	Marketed Date/ NDA Submission Date	Region
醒明®	QILU	Marketed	2026/03	China
派立安®	Kelun	Marketed	2026/03	China
NG1807/SXF-102	NeuroGen	NDA	2024/08	China
BCM475	Bocimed	NDA	2024/09	China
N2106	Wisdom	NDA	2025/03	China
HKG-319	China National Pharmaceutical Group Shanxi Rfl	NDA	2025/04	China
HZ021	Heze	NDA	2025/04	China
Brexpiprazole oral film	Yujian	NDA	2025/07	China
Brexpiprazole oral film	Pu'an	NDA	2025/10	China
BIOS2210	Bio-Sincerity	NDA	2025/11	China

Source: NMPA, CDE, Frost & Sullivan Analysis

Agitation

Agitation is a disruptive neuropsychiatric symptom prevalent across CNS disorders, most notably in Alzheimer’s disease and other dementias. It is characterized by emotional distress, restlessness and impulsive or aggressive behaviors that are difficult to manage. Its pathogenesis is complex, stemming from a neurobiological imbalance between diminished top-down cortical control and heightened limbic-driven emotional responses, which is driven primarily by underlying neurodegenerative pathologies such as cortical atrophy and protein aggregation, alongside neurotransmitter dysregulation, and which can be exacerbated by environmental stressors or adverse medication effects. Agitation accelerates patient cognitive and functional decline, increases the risk of falls and hospitalizations, places significant stress on caregivers, and contributes to higher healthcare costs through increased resource utilization and earlier long-term care admissions. The prevalence of agitation increased from 5.0 million in 2020 to 5.8 million in 2024, and is expected to reach 8.3 million by 2035. Currently, there are no marketed drugs in China specifically approved for agitation associated with dementia due to Alzheimer’s disease, whereas only two therapies have received FDA approval worldwide: Rexulti, which was approved for this indication in May 2023; and Auvelity, which received FDA approval for this indication in April 2026.

OVERVIEW OF THE ALLERGIC DISEASES DRUG MARKET IN CHINA

Allergic diseases are chronic, non-infectious inflammatory conditions caused by an overactive immune response to otherwise harmless environmental triggers, such as pollen, dust mites, pet dander, and certain foods. These triggers, known as allergens, fall broadly into four major categories — inhalant, food, drug, and venom allergens — which can elicit reactions ranging from mild cutaneous symptoms to severe systemic responses. In atopic individuals, exposure to these allergens can lead to IgE-mediated hypersensitivity reactions that affect multiple organ systems, including the upper airway, skin, and respiratory tract. Common allergic disorders include allergic rhinitis (“AR”), urticaria (hives), allergic asthma, atopic dermatitis, and food allergies. The World Health Organization identifies allergic diseases as among the most prevalent chronic conditions globally, highlighting their increasing clinical and public health relevance.

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Generally, allergic diseases can be categorized into four major hypersensitivity types: Type I (immediate, IgE-mediated), Type II (cytolytic, antibody-mediated), Type III (immune complex-mediated), and Type IV (delayed-type, T-cell-mediated). Among these, Type I reactions are the most relevant to major allergic diseases such as AR and urticaria. In Type I hypersensitivity, mast cell degranulation triggered by allergen-specific IgE leads to the rapid release of mediators such as histamine, leukotrienes, and cytokines, causing acute symptoms that include sneezing, nasal congestion, wheals, and pruritus.

Type I hypersensitivity, which represents the primary pathogenic mechanism underlying AR and urticaria, proceeds through two sequential phases: an initial sensitization phase followed by an effect or phase that is triggered upon re-exposure to the same allergen. During sensitization, initial allergen exposure stimulates antigen presentation and Th2-driven immune responses, inducing B cells to produce allergen-specific IgE antibodies. These IgE molecules bind to high-affinity FcεRI receptors on mast cells and basophils, priming them for future reactions. Upon re-exposure to the same allergen, the cross-linking of IgE on sensitized cells triggers rapid activation and degranulation, releasing inflammatory mediators that drive early-phase responses such as urticaria and AR symptoms. The subsequent recruitment of eosinophils and the release of secondary mediators contribute to late-phase inflammation, sustaining symptoms and exacerbating chronic disease.

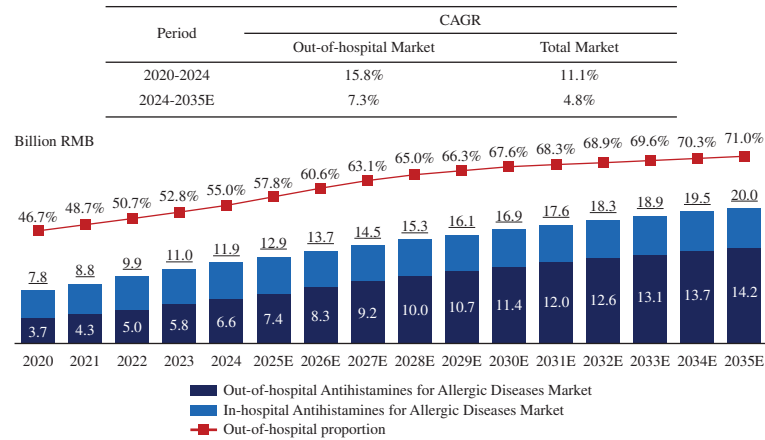
Prevalence

In China, the number of patients with allergic diseases reached 0.6 billion in 2024. The patient population is expected to continue increasing, reaching 0.8 billion by 2035, representing a CAGR of 3.2% from 2024 to 2035.

Market Size

The total antihistamines for allergic diseases market in China grew from RMB7.8 billion in 2020 to RMB11.9 billion in 2024, representing a CAGR of 11.1%. Driven by the rising prevalence of allergic diseases, expanding access to therapies and growing patient demand, the total market is projected to expand to RMB20.0 billion in 2035, representing a CAGR of 4.8% from 2024 to 2035. In particular, the out-of-hospital antihistamines for allergic diseases market grew from RMB3.7 billion in 2020 to RMB6.6 billion in 2024, and is expected to reach RMB14.2 billion in 2035, representing a CAGR of 15.8% from 2020 to 2024 and a CAGR of 7.3% from 2024 to 2035, primarily driven by the rising prevalence of allergic diseases and broader access to diagnosis and treatment.

China Antihistamines for Allergic Diseases Market Size, Breakdown by Channels, 2020-2035E



Source: Company Annual Report, Frost & Sullivan Analysis

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Entry Barriers for the Allergic Disease Drug Market

New entrants to the allergic disease drug market face significant entry barriers, primarily driven by stringent regulatory and quality requirements, the dominance of established brands, and the complexities of securing market access and distribution networks.

- **Manufacturing and quality compliance.** The production of pharmaceutical-grade allergy medications requires strict adherence to GMP and rigorous quality control standards encompassing facility design, production processes, and batch release. Establishing compliant manufacturing capabilities and robust supply chains necessitates substantial capital investment, specialized technical expertise, and extensive regulatory know-how, thereby limiting successful market entry to companies with proven operational capabilities.
- **Brand leadership and competitive landscape.** The allergic disease drug market is highly competitive and often dominated by multinational corporations and long-established domestic brands. These incumbents benefit from deep-rooted physician trust, extensive clinical evidence, and mature distribution infrastructures. Consequently, new entrants face significant challenges in overcoming entrenched brand recognition and patient loyalty. Achieving meaningful market penetration typically requires substantial, sustained investments in clinical data generation, academic marketing, and physician education.
- **Market access and distribution networks.** Successful commercialization relies heavily on securing placement in hospital formularies, pharmacy distribution networks, and medical insurance reimbursement systems. These procurement and distribution channels are typically dominated by incumbent players with long-standing institutional relationships and proven track records. New market entrants often lack the resources and historical relationships required to build these networks efficiently, which can significantly impede initial product uptake and limit early market share acquisition.

Market Drivers and Future Trends

We believe the growth of China’s allergic disease drug market will be driven by the following factors and trends.

- **Rising prevalence of allergic diseases.** The increasing incidence rates of conditions such as allergic rhinitis, urticaria, and asthma serve as primary catalysts for market growth. This trend is largely fueled by macro-environmental factors — including rapid industrialization, air pollution, and climate change — as well as shifting lifestyle patterns that heighten allergen exposure and immune sensitivities. The continuously expanding patient base generates sustained, long-term demand for effective therapeutics.
- **Increasing disease awareness and improved diagnostic capabilities.** Public and clinical awareness of allergic conditions continues to rise, supported by the broader availability and adoption of advanced diagnostic tools, such as allergen-specific IgE testing and skin prick tests. A higher recognition of allergic symptoms among both adult and pediatric populations encourages earlier medical consultation and intervention, thereby increasing overall treatment rates and driving market expansion.
- **Healthcare accessibility and expansion of out-of-hospital channels.** Ongoing improvements in healthcare infrastructure enable a growing number of patients to obtain timely diagnosis and treatment. The rapid development of e-commerce pharmacies, digital health platforms and direct-to-patient service models further facilitates access to allergy medications, particularly for acute conditions requiring swift intervention. The proliferation of these out-of-hospital channels is expected to continue improving patient reach and drive incremental market growth.

INDUSTRY OVERVIEW

Indication

Allergic Rhinitis

Allergic rhinitis (“AR”) is a common chronic respiratory disease characterized by sneezing, itching of the eyes, nose and throat, rhinorrhoea, and nasal congestion, typically accompanied by positive IgE test results for specific aeroallergens. The condition is driven by allergen-induced Th2 immune responses, which stimulate the production of allergen-specific IgE and sensitize mast cells. Upon re-exposure to the same allergen, IgE-mediated activation of mast cells and basophils triggers the release of inflammatory mediators, resulting in acute symptoms. Persistent eosinophilic infiltration and the secretion of cytokines such as IL-4 and IL-5 contribute to the maintenance of chronic inflammation and symptom recurrence.

In China, the prevalence of AR has remained high and continued to increase steadily in recent years. The number of patients affected by AR reached 245.5 million in 2024. Driven by rising allergen exposure, urbanization and increased awareness and diagnosis rates, the patient population is expected to further expand to 274.2 million by 2035.

Chronic Urticaria

Urticaria is a prevalent dermatological condition characterized by the recurrent presentation of wheals and pruritus. Chronic urticaria (“CU”), clinically defined by the persistence of symptoms for a duration exceeding six weeks, is primarily classified into two sub-types: chronic spontaneous urticaria (“CSU”) and chronic inducible urticaria (“CIndU”). CSU, which accounts for the majority of CU cases, is frequently associated with autoimmune mechanisms involving the IgG- or IgE-mediated activation of mast cells. This activation leads to the rapid release of histamine and other pro-inflammatory mediators. These underlying pathogenic processes drive the recurrent and persistent nature of the condition, ultimately resulting in a substantial clinical and economic burden on both patients and healthcare systems. According to F&S, the number of patients in China affected by chronic urticaria reached 39.2 million in 2024, and is expected to reach 42.2 million by 2035.

As of the Latest Practicable Date, 15 originator drugs had been approved for CU in China.

REPORT COMMISSIONED BY FROST AND SULLIVAN

In connection with the [REDACTED], we have engaged Frost & Sullivan to conduct a detailed analysis and prepare an industry report on the major markets for which our drug candidates are positioned. Frost & Sullivan is an independent global market research and consulting company which was founded in 1961 and is based in the United States. We have agreed to pay Frost & Sullivan a total fee of approximately RMB400,000 for the preparation of the Frost & Sullivan Report, and we believe that such fees are consistent with the market rate. The payment of such amount is not contingent upon our successful [REDACTED] or on the results of the Frost & Sullivan Report. Except for the Frost & Sullivan Report, we did not commission any other industry report in connection with the [REDACTED].

The market projections in the Frost & Sullivan Report were based on the following key assumptions: (i) the overall social, economic and political environment globally is expected to remain stable during the forecast period; (ii) the economic and industrial development globally is likely to maintain a steady growth trend over the next decade; (iii) related key industry drivers are likely to continue driving the growth of the market during the forecast period; and (iv) there is no extreme force majeure or industry regulation in which the market may be affected dramatically or fundamentally. The reliability of the Frost & Sullivan Report may be affected by the accuracy of the foregoing key assumptions.