The information and statistics set out in this section and other sections of this document were extracted from different official government publications, available sources from public, market research and other sources from independent suppliers, and from the independent industry report prepared by CIC. We engaged CIC to prepare the CIC Report, an independent industry report, in connection with the [**REDACTED**]. *The information from official government sources has not been independently verified by us, the* [**REDACTED**]*, Joint Sponsors,* [**REDACTED**], [**REDACTED**]*, any of the* [**REDACTED**]*, any of their respective directors and advisers, or any other person or parties involved in the* [**REDACTED**]*, and no representation is given as to its accuracy. Accordingly, the information from official government sources contained herein may not be accurate and should not be unduly relied upon.*

THE ANTIVIRAL DRUG MARKET

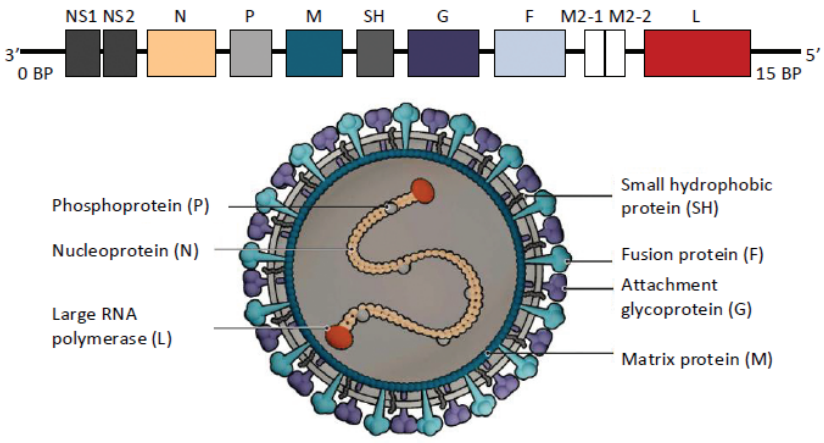
A virus is a pathogen that must parasitize and replicate inside living cells. Viruses are classified into two primary categories based on their genetic material: DNA viruses and RNA viruses. DNA viruses typically contain double-stranded genetic material and replicate within the host cell nucleus using the host's existing DNA replication machinery. This replication process generally exhibits lower error rates, resulting in relatively stable viral genomes. Clinically and commercially relevant DNA viruses include hepatitis B virus (HBV), varicella-zoster virus, monkeypox virus, and variola virus. RNA viruses present distinct characteristics that create both challenges and opportunities in the infectious disease market. These viruses typically contain single-stranded genetic material and replicate primarily within the host cell cytoplasm. The RNA replication process exhibits inherently higher error rates compared to DNA replication, resulting in increased genetic variability and mutation frequency. This elevated mutational capacity enables RNA viruses to demonstrate enhanced adaptability, potentially leading to increased transmission rates, immune evasion, and therapeutic resistance. Representative RNA viruses include HCV, RSV, and influenza.

Respiratory Syncytial Virus (RSV)

RSV is an enveloped RNA virus that is highly prevalent and infectious, which causes respiratory tract illness, especially in vulnerable populations such as children, the elderly and the immunocompromised. Initial infection with RSV is usually in the upper respiratory tract and causes symptoms that can be easily confused with common colds, resulting in a relatively low diagnosis rate. If not properly treated, RSV cases may progress to lower respiratory tract infection (LRTI) with more serious clinical manifestations, and could further lead to chronic respiratory and lung diseases.

RSV infection is the number one cause of LRTI in young children worldwide, infecting 90% of children under two years old with approximately 3.3 million infected and hospitalized children globally each year. In 2024, prevalence of RSV infection in children under five years old reached 91.4 million and 13.4 million globally and in China, respectively. RSV is also estimated to infect 5.5%-5.9% of adults aged 65 years or above globally, as their immune system gradually deteriorates due to aging. In 2024, prevalence of RSV infection in adults aged 65 years or above reached 46.5 million and 12.2 million globally and in China, respectively.

In recent years, direct-acting antiviral drugs are being developed as new therapeutic candidates for RSV, which primarily target the various proteins involved in the viral replication cycle, including attachment glycoprotein (G protein), which mediates viral binding to host cells, the fusion protein (F protein), which enables membrane fusion and viral entry, nucleoprotein (N protein), which supports viral RNA encapsidation and transcription and RNA polymerase (L protein), which drives genome replication and mRNA synthesis. The following diagram illustrates the structure of an RSV.



Source: Drysdale SB, Barr RS, Rollier CS, Green CA, Pollard AJ, Sande CJ. Priorities for developing respiratory syncytial virus vaccines in different target populations. Sci Transl Med. 2020 Mar 18; CIC

Addressable Market Size

Global Market Size

Historically, although there are no approved therapeutic drugs specifically targeting RSV infection, ribavirin, a broad-spectrum antiviral drug not specifically targeting RSV has been approved for RSV treatment. Due to concerns for its potential toxicity, limited and unpredictable efficacy and the inconvenience and high cost associated, the historical RSV therapeutic drug market is relatively small. With the expected approval of therapeutic drugs specifically targeting RSV infection, it is expected that the global RSV therapeutic drug market will significantly increase. The overall global RSV drug market, including therapeutics and prophylactics has experienced rapid development in recent years. According to CIC report, the RSV therapeutics market recorded only US$30.0 million as of 2024 and is projected to reach US$819.0 million in 2026. Thereafter, the RSV therapeutics drug market is expected to expand rapidly to US$8.6 billion in 2035, representing a CAGR of 67.1% from 2024 to 2035. In the U.S., the RSV therapeutics market is projected to expand significantly from US$2.4 million in 2024 to US$2.4 billion in 2030, and further increase to US$3.7 billion in 2035, represent a CAGR of 52.7% from 2024 to 2035.

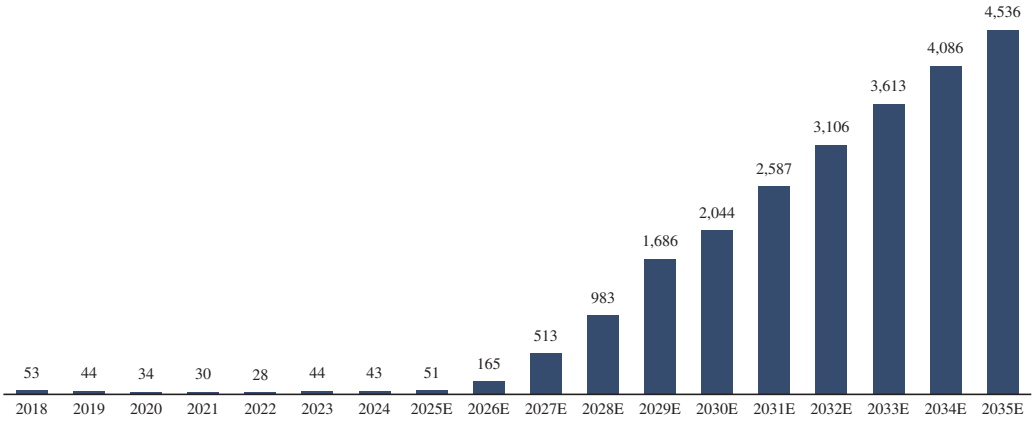
According to the CIC Report, the global RSV prevention drug market (including RSV target drugs, excluding RSV vaccine) reached approximately US$2.7 billion in 2024. Driven by the anticipated launches of new long-acting antibodies the market is projected to maintain steady growth thereafter, reaching approximately US$5.3 billion by 2035, representing a CAGR of 6.3% during 2026 to 2035.

The global RSV prevention drug market, primarily driven by prophylactic antibodies, is already well established with steady growth expected over the next decade. By contrast, the RSV treatment drug market remains at an early stage, with limited current presence but strong growth potential driven by the anticipated launch of direct-acting antiviral drugs. While prevention continues to dominate the RSV market landscape, treatment is expected to emerge as an increasingly important growth driver going forward, representing a substantial potential market opportunity.

China Market Size

The RSV therapeutics drug market in China is projected to expand significantly from RMB43.0 million in 2024 to RMB2.0 billion in 2030, and further increase to RMB4.5 billion in 2035, representing a CAGR of 52.7% from 2024 to 2035, as new and potentially more effective drug RSV antiviral drugs become available in the country.

China Market Size of RSV Treatment Drug (2018-2035E)



Note:

1. RSV therapeutic market includes the RSV target, interferon and ribavirin.

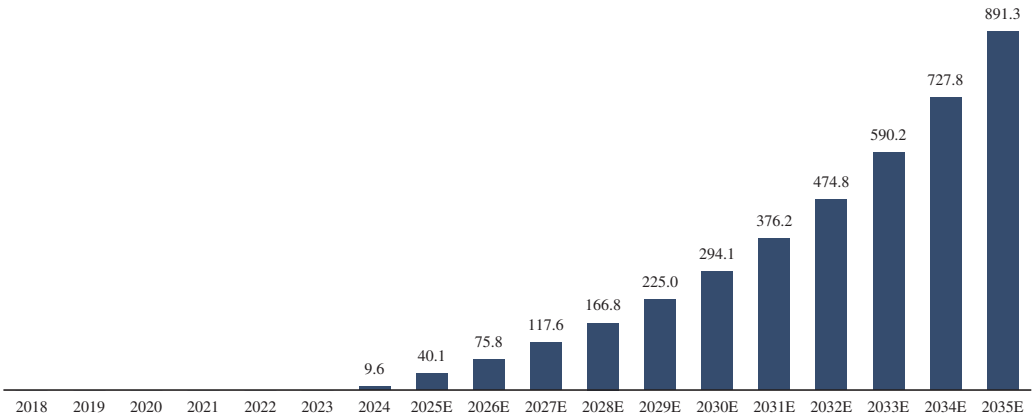
Source: CDE; The Journal of Infectious Diseases, Journal of Clinical Pediatrics

For RSV prophylactic drug market in China, as nirsevimab was the only RSV prevention antibodies approved in China as of the Latest Practicable Date, the RSV antiviral prophylactic drug market in China remained relatively undeveloped with a market size of RMB9.6 million in 2024. According to the CIC Report, the RSV prevention drug market in China is expected to begin expanding from 2025 onwards alongside the anticipated launch of more prophylactic products and is forecasted to grow rapidly over the coming decade, supported by rising diagnosis rates, increasing awareness, and broader accessibility. This represents a substantial untapped market potential.

China Market Size of RSV Prevention Drug (2018-2035E)

CAGR	2018-2024	2024-2035E
China RSV treatment drugs	–	51.0%

million RMB



Note:

1. RSV prophylaxis market includes the RSV target drugs only, excluding RSV vaccines.

Source: The Journal of Infectious Diseases, Journal of Clinical Pediatrics

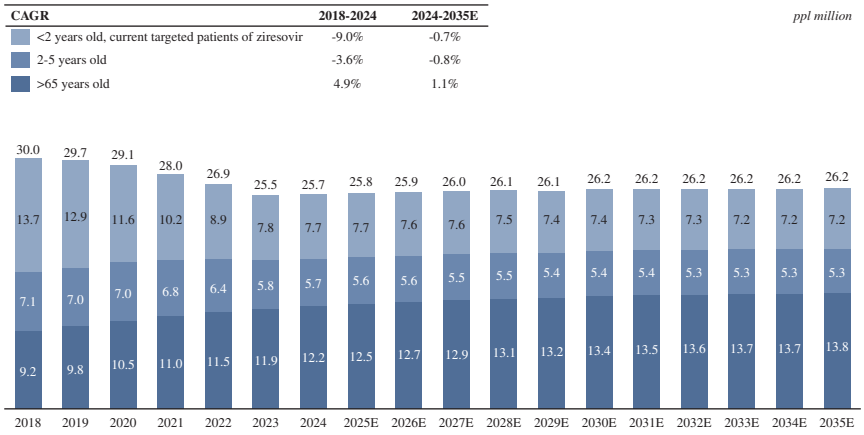
The significant projected growth in both the global and China RSV treatment and prevention drug markets is underpinned by a combination of strong quantitative and qualitative factors. Quantitatively, the diagnosis rate of severe RSV cases among children under two years old is expected to increase from 92% in 2024 to 99% in 2035, as severe lower respiratory tract infections typically present with marked symptoms such as coughing, fever, and shortness of breath, with most cases requiring hospital admission. The treatment rate for children under two years old with severe RSV infection is projected to grow substantially from 3% in 2026 to 56% in 2035, reflecting greater clinical awareness and improved accessibility to effective therapeutics. Similarly, the prevention rate among children under two years old using antibody drugs is anticipated to rise from 1% in 2025 to 32% in 2035, supported by expanding availability and adoption of innovative prophylactic products. Qualitatively, the market's acceleration is driven by (i) a severe unmet public health need, as RSV continues to cause significant hospitalizations and mortalities among high-risk groups including infants and older adults, thereby generating substantial latent demand; (ii) breakthrough product innovation, represented by the transition from limited, poorly tolerated therapies to highly effective and user-friendly preventive options such as single-dose, season-long monoclonal antibodies for infants and newly approved vaccines for older adults and pregnant women, which have opened multi-billion-dollar market segments; and (iii) high-growth market penetration in China, where the large base of newborns and elderly, together with accelerated regulatory approvals and commercialization of innovative imported antibodies and promising domestic antiviral candidates, is rapidly transforming an underserved market into a key driver of global industry expansion. Collectively, these quantitative and qualitative dynamics justify the robust growth trajectory of the RSV treatment and prevention drug markets both globally and in China.

Population and Incidence Rate

The population of young children aged under five years old and elder adults aged 65 years old are considered as the vulnerable population to RSV market, which in aggregate amounted to 1,619.0 million in 2024 globally, which is expected to grow to 1,972.3 million in 2035 at a CAGR of 1.8%. There were 280.2 million people vulnerable to RSV infection in 2024 in China, which is expected to grow to 374.8 million in 2035 at a CAGR of 2.7%. RSV can cause severe symptoms, such as acute lower respiratory tract infections ("**ALRTI**"). Notwithstanding large number of vulnerable population, the incidence of severe RSV cases (referring to ALRTI cases caused by RSV infection) and hospitalization rate for RSV infection are relatively low. Generally, among the above mentioned vulnerable population approximately 20% to 40% of RSV infection cases could develop ALRTI symptoms, and approximately 8% to 10% of these severe RSV infection cases could require hospitalization.

In addition, there were 43.2 million and 5.6 million severe RSV infection cases in young children aged under five years old and elder adults aged 65 years old in 2024 globally and in China, respectively, which are expected to grow to 49.3 million and 6.0 million in 2035 globally and in China, respectively.

Epidemiology of RSV in China, 2018-2035E

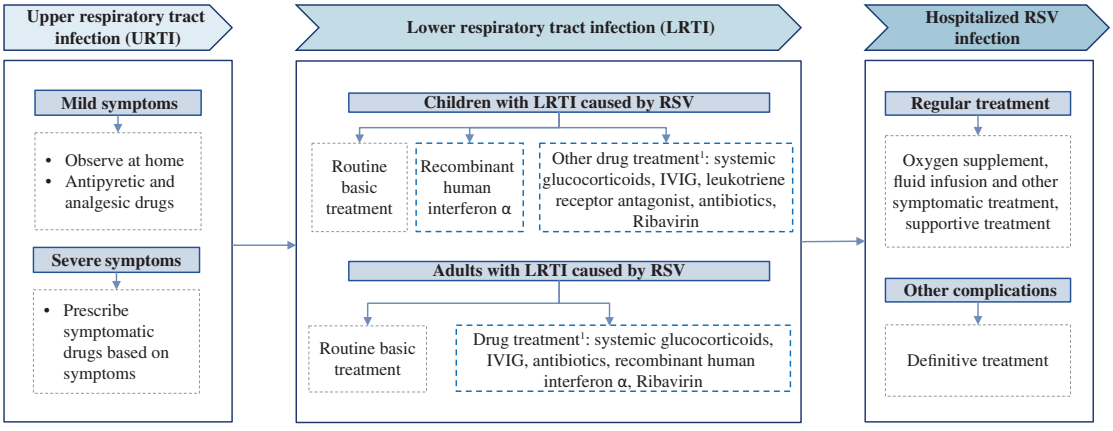


Source: The Journal of Infectious Diseases, Journal of Clinical Pediatrics, CIC

Ziresovir is currently under NDA review for infants and young children aged 1-24 months, representing approximately 30% of the total RSV patient population in China.

Treatment and Prevention Paradigm

Currently, the standard-of-care treatment for RSV is limited only to supportive care, such as oxygen supplement, nasal decongestion, and nutrition and hydration, as well as the use of bronchodilators, epinephrine, and steroids.



Note:

1. All drug treatments for adults are not recommended; except recombinant human interferon α, all other drug treatments are not recommended for children

Source: Influenza Other Respir Viruses, Clin Infect Dis, medRxiv, AAP, Consensus of Experts on the Diagnosis, Treatment, and Prevention of Respiratory Syncytial Virus Infection in Children (2023 Edition), Guidelines for the Treatment and Prevention of Human Respiratory Syncytial Virus Lower Respiratory Tract Infection (2024 Edition), CIC

Ribavirin is an approved drug for RSV infection only for the hospitalized high-risk infants and young children and off-label use for immuno-compromised adult patients with high risks of severe infection. Nevertheless, major clinical practice guidelines in the U.S. and China have recommended against ribavirin, a broad-spectrum antiviral drug not specifically targeting RSV, due to concerns for its potential toxicity, limited and unpredictable efficacy, and the inconvenience and high cost associated with its aerosolized administration, which can cost an average of US$19,000 per day for one patient in the U.S. In China, there are no existing RSV drugs specifically approved for pediatric RSV patients. Interferon is a broad-spectrum drug used in China for off-label treatment of children with RSV bronchiolitis and pneumonia.

To date, there has been three approved RSV prophylactic drugs globally, namely palivizumab, nirsevimab and clesrovimab. Palivizumab, an RSV-specific mAb, is only indicated for selected high-risk infants and young children and is not approved in China. Palivizumab requires once-a-month injection during flu season and the cost of a single dose can range from US$1,455 to US$2,747 depending on the weight of the patient. Despite its limited prophylaxis effect, short prevention duration and narrow patient coverage, palivizumab's annual global sales peaked at US$1.5 billion in the past. Nirsevimab, an extended half-life RSV-specific mAb, is the only approved RSV prophylactic drug in China and the globe, but is primarily recommended for infants who are born during or entering their first RSV season. Nirsevimab is capable of reducing risk of medically attended RSV-related infection and the risk of hospitalization due to RSV infection. With a price of US$520 per dose, it generally requires only one dose for infants' first RSV season. Clesrovimab, a recent FDA approved RSV-specific mAb, is also indicated for infants born during or entering their first RSV season, one single dose of which will have a safety profile and RSV disease incidence rates comparably to monthly use of palivizumab, with one dose pricing US$550.

Treatment paradigm for RSV (China vs the U.S.)

Drug	Mechanism	Target population	Clinical efficacy & safety	NMPA	FDA
Prophylaxis					
Palivizumab	Binding RSV fusion protein on the surface of the virus and blocking a critical step in the membrane fusion process	• Approved only for certain high-risk infants and young children[1] • Limited off-label use for high-risk immuno-compromised adult patients	• Reveals certain level of prophylaxis effect • Very limited prevention duration and patient coverage	○	√
Nirsevimab	Binding to a highly conserved epitope of the RSV prefusion F protein, inhibiting the membrane fusion step in the viral entry process	• Primarily recommended for infants, both those born during or entering their first RSV season	• Reduce the risk of medically attended RSV-related infection and the risk of hospitalization due to RSV infection	√	√
Clesrovimab	Binding to a specific site on the F protein, preventing the virus from fusing with and entering host cells	• Infants born during or entering their first RSV season	• In season 1, a single dose of clesrovimab had a safety profile and RSV disease incidence rates that were generally comparable to monthly palivizumab	○	√
Therapeutics					
Ribavirin	Inhibiting activity of inosine phosphate dehydrogenase to interfere with early viral transcription and increasing mutation accumulation in viral genome	• Approved only for hospitalized high-risk infants and young children • Off-label use for immuno-compromised adult patients with high risks of severe infection	• Broad-spectrum drug with no clinically significant effect • Limited patient coverage and complicated administration • Associated with multiple frequently occurred serious adverse events	×	×
Interferon	A broad-spectrum drug that realize antiviral effect through regulating the immunity's antiviral capacity	• Children with RSV bronchiolitis and pneumonia	• No direct antiviral effect • Adverse effects such as flu-like symptoms	○	N/A[2]

"√" stands for "Recommend"
"×" stands for "Not recommend as routine treatment"
"○" stands for "No approved drug"

Notes:

1. Only accounts for <5% children under 24 months, which could be translated to only <2% among all children under 5 years old.

2. Currently IFN only has been proposed by Chinese experts' consensus as tentative use in RSV.

Source: AAP, BMJ, Therapeutic Advances in Infectious Disease, NMPA, FDA; CIC

Competitive Landscape

RSV Treatment

In recent years, direct-acting antiviral drugs are being developed as new therapeutic candidates for RSV, and some have shown promising results in early clinical trials. These RSV therapeutic candidates primarily target viral proteins involved in the viral replication cycle. The F protein, for example, is a glycoprotein expressed on the surface of the viral membrane. It not only plays a crucial role in virus entry — the first step of viral infection of human cells, but also promotes syncytia formation between infected cells and adjacent healthy cells, a hallmark of RSV transmission. Thus, F protein inhibitors represent a major class of direct-acting anti-RSV therapeutic candidates among the most advanced RSV drug development programs globally. The L protein is an RNA polymerase associated primarily with enzymatic activities required for viral replication, making it another attractive research target. Inhibitors with different mechanisms of action, including those targeting the G protein and N protein, are also being explored, pending results from further pre-clinical and clinical studies. Different RSV antiviral inhibitors can potentially be used in combination treatments, aiming for multiple targets to achieve better therapeutic outcome and overcome the emergence of drug resistance. As of the Latest Practicable Date, there were seven antiviral compounds specifically targeting RSV infection under clinical development globally.

Antiviral Drugs Specifically Targeting RSV Infection under Clinical Development Globally[1]

Trial number	Candidate	MoA	Company	Clinical phase	First posted date	Indication	Location
NCT04231968	**Ziresovir**	**F protein**	**ArkBio**	**NDA**	**2020/01/18**	**RSV for children**	**China**
NCT06942299	**Ziresovir**	**F protein**	**ArkBio**	**II**	**2025/04/24**	**RSV for adults**	**China**
NCT06585150	GS-5245	RdRp	Gilead Sciences	II	2024/09/05	RSV for adults	U.S.
NCT05568706	EDP-938	N protein	Enanta	IIb	2022/10/06	RSV for adults	U.S.
NCT06170242	EDP-323	RdRp (L protein)	Enanta	IIa	2023/12/14	RSV for adults	U.S.
NCT04816721	EDP-938	N protein	Enanta	II	2021/03/25	RSV for children	U.S.
NCT06270511	S-337395	RdRp (L protein)	Shionogi/UBE Corporation	I	2024/02/21	RSV for adults	U.S.
NCT06206720	VV116	RdRp	Vigonvita Life Sciences	II/III	2024/01/16	RSV for children	China
NCT06328400	VV116	RdRp	Vigonvita Life Sciences	I	2024/03/25	RSV for adults	China
CTR20253751	SYH2066	/	CSPC	I	2025/09/19	RSV for adults	China

Source: ClinicalTrials.gov

RSV Prevention

Prophylactic vaccines and antibodies are the primary RSV prevention strategies being developed. Palivizumab, nirsevimab and clesrovimab, all being prophylactic antibodies, are currently the only three approved drugs for RSV prevention globally. However, they are only approved for prevention of RSV infection in a limited group of infants and young children with specific characteristics, and only nirsevimab is approved in China. According to the CIC Report, as of the Latest Practicable Date, there were only four RSV antibodies under clinical development globally.

1 Unless otherwise specified, a clinical trial is considered inactive, and hence not included in this and other pipeline charts, if (1) the latest phase of the clinical trial had been completed over five years ago, and (2) it has not entered into the next phase.

RSV Antibodies under Clinical Development Globally

Trial number	Candidate	MoA	Company	Clinical Phase	First posted date	Indication	Location
CTR20240316	**AK0610**	**F protein**	**ArkBio**	**I**	**2024/02/07**	**Infants**	**China**
NCT06710925	TNM001	F protein	Zhuhai Trinomab	III	2024/11/29	High-risk Infants	China
NCT06083623	TNM001	F protein	Zhuhai Trinomab	IIb/III	2023/10/16	Infants	China
NCT05118386	RSM01	F protein	Gates Medical	I	2021/11/12	Infants	U.S.
NCT06313697	GR2102	F protein	Genrix Bio	I	2024/03/15	Infants	China

Source: ClinicalTrials.gov and CIC

In addition to RSV prophylactic antibodies, prophylactic vaccines are another main RSV prevention strategy under development. Although certain RSV vaccines had been approved as of the Latest Practicable Date, they are currently only approved for use in elderly aged over 65 years old and no RSV vaccines were approved for use in infants and young children. RSV vaccines stimulate the body's immune system to develop long-term protection, and are mainly administered to older adults and pregnant women to indirectly protect infants. In contrast, mAbbased prevention drugs provide immediate, passive immunity by introducing ready-made antibodies, offering rapid and effective protection for high-risk infants and newborns. Recent scientific advances, notably the stabilization of the F-protein in its prefusion form, have accelerated RSV vaccine development and commercialization. According to CIC Report, the RSV vaccine global market is projected to expand significantly from USD2.0 billion in 2024 to USD11.0 billion in 2030, and further increase to USD18.4 billion in 2035 and the RSV vaccine market in China is projected to expand from nil in 2024 to USD0.5 billion in 2030, and further increase to USD2.3 billion in 2035.

Market Drivers and Trends

- *Increasing diagnosis and awareness of RSV infection*. Since the symptoms manifested after RSV infection are very similar to common flu, RSV is often undiagnosed. Moreover, RSV testing and diagnosis techniques, which are well- developed and widely accessible, have been long underutilized due to the absence of targeted treatment. Since the outbreak of COVID-19, public awareness for RSV and other respiratory and lung diseases have been significantly enhanced both in China and globally. Diagnosis rate of RSV infection, the overall market for RSV therapeutic and prophylactic drugs is expected to grow.

- *Growing population vulnerable to RSV infection*. RSV infection is an illness for all ages, young children under 5 years old, elder adults aged 65 and above, and immuno-compromised patients are the most vulnerable population to the virus. In 2024, there were 1,619.0 million people vulnerable to RSV infection globally, which is expected to grow to 1,972.3 million in 2035. Further, as the prevalence of diseases including heart and lung diseases increase, there is expected to be more immuno-compromised patients vulnerable to the RSV. Therefore, the overall population vulnerable to RSV is expected to increase in the foreseeable future, which is expected to drive market growth.

- *Increasing requirement for clinical management quality and medical burden reduction*. Without proper treatment and prognosis, RSV infection can not only worsen health conditions but also lead to long-term complications such as asthma, COPD and cardiovascular diseases. Innovative RSV-targeted antiviral drugs are expected to improve treatment efficiency, safeguard long-term health and life quality, and reduce potential economic and mental burden for patients and families. At the societal level, effective RSV therapies will help stabilize and reduce the strain on national healthcare resources, improve overall health outcomes, and foster a sustainable medical environment. These positive impacts are expected to further drive market growth.

Entry Barriers

RSV drug development is highly complex, especially due to challenges associated with clinical trial in pediatric population. Infants and young children are most vulnerable to RSV infection. Pediatric drug development has a distinctly different, and more stringent, set of standards than adult-use drugs in formulation, PK, toxicology, dosing, safety, clinical trial design and regulatory pathway, requiring a much bigger safety window and a higher level of know-how and expertise. As a result, challenges in the design and clinical development of pediatric drugs have brought major entry barriers to RSV drug development. In addition, the overall R&D process of antiviral drugs is inherently long and resource-intensive, as viruses replicate by relying on human cellular machinery, making it difficult to identify selective drug targets with minimal side effects. Furthermore, despite RSV having been discovered over 60 years ago, the mechanism of viral infection and pathogenesis is still not fully understood, which adds further uncertainty to drug development.

Influenza

Influenza is an acute respiratory infection caused by the influenza virus. Influenza A and B viruses cause annual seasonal epidemics, with Influenza A capable of triggering global pandemics. While most cases are self-limiting, a minority develop severe illness due to complications like pneumonia or worsening underlying conditions, potentially leading to death from ARDS, acute necrotizing encephalopathy, or multiple organ failure. In 2024, the incidence of influenza in China amounted to 25.1 million, which is expected to steadily grow to 51.2 million in 2035 at a CAGR of 6.7%.

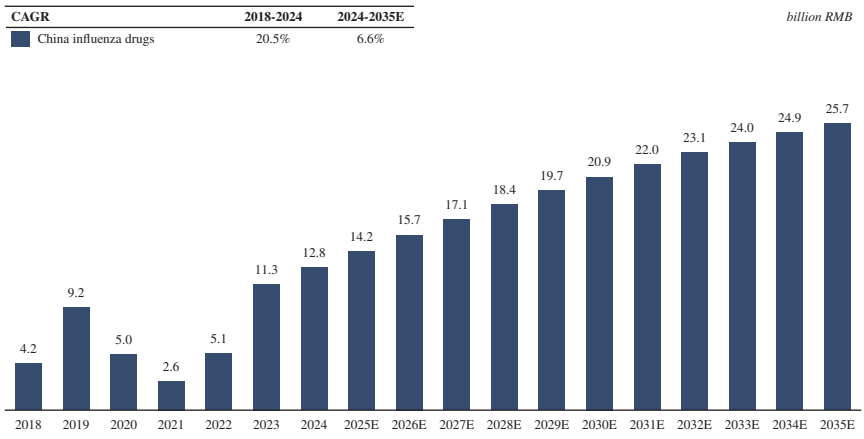
Anti-influenza virus drugs are mainly divided into neuraminidase inhibitors (NAI), hemagglutinin inhibitors, and RNA polymerase inhibitors. NAI selectively inhibits viral neuraminidase, blocking viral particle release from infected cells and preventing intercellular spread/replication. Available NAIs in China show high sensitivity against influenza A(H1N1), A(H3N2), and B strains, with inhibitory effects on H5N1/H7N9 avian influenza. Hemagglutinin inhibitors blocks viral membrane-hose cell fusion, preventing viral entry and replication. The RNA polymerase inhibitors mainly inhibit mRNA synthesis by inhibiting the PA and PB1 subunits of viral ribonucleoprotein.

Treatment	Oseltamivir Phosphate	Zanamivir	Peramivir	Arbidol	Baloxavir Marboxil
Indications	All cases of influenza A, influenza B	When oseltamivir is not available or in special populations such as renal insufficiency, pregnant women, and severe or progressive cases	Severe cases, those who cannot accept inhaled or oral NAIs, and those who have poor response to or resistance to other NAIs	Influenza A and B cases	Common influenza A and B cases aged 12 years and above
Classification	**NAI**	**NAI**	**NAI**	**Hemagglutinin inhibitors**	**RNA polymerase inhibitors**
Type	Oral	Inhalation	Intravenous	Oral	Oral
Half-period	6-10h	3h	7.7-20.8h	10.5h	99.7h
Metabolic pathways	Excreted via kidneys in the form of carboxylic acid	About 90% of the drug is excreted as unchanged substance through the kidneys	Eliminated unchanged from the kidney	Metabolized by the liver and small intestine, excreted mainly in feces as prototype	Mainly excreted via bile and feces

Source: Chinese Journal of Emergency Medicine, Expert consensus on the diagnosis and treatment of influenza in adults (2022 edition), CIC

In 2024, the market size of influenza drugs in China amounted to RMB12.8 billion. Driven by the expected approval of novel influenza drugs, the market is expected to grow to RMB25.7 billion in 2035 at a CAGR of 6.6%.

Market size of influenza drugs in China, 2018-2035E



Source: Chinese Journal of Epidemiology and China Insights Consultancy

THE IDIOPATHIC PULMONARY FIBROSIS MARKET

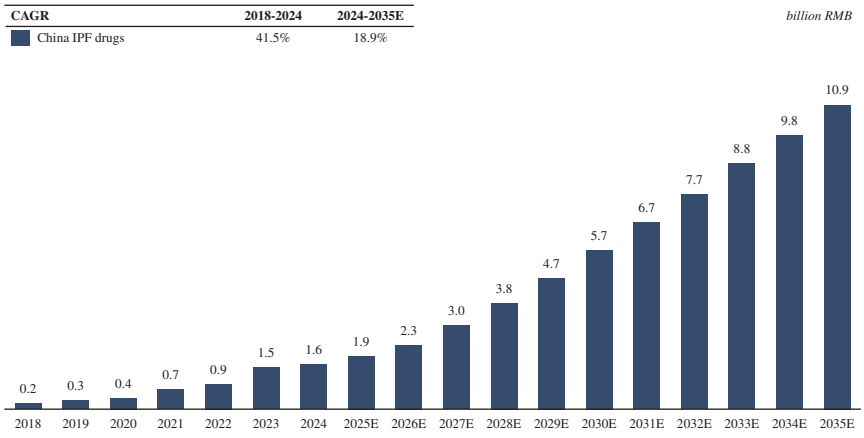
Idiopathic pulmonary fibrosis ("**IPF**") is a specific form of chronic, progressive fibrosing pneumonia of unknown cause. IPF is a rare disease that affected approximately 1.9 million persons worldwide in 2024 and is estimated to account for 33% of all cases of interstitial lung disease (ILD), a group of disorders which commonly feature progressive scarring of lung tissue. On May 11, 2018, IPF became one of the 121 rare diseases designated by the First Catalogue of Rare Diseases in China. Cigarette smoking, respiratory viral infection, and environmental factors, such as exposure to metal and wood dusts, livestock, and hazardous materials, are potential risk factors of IPF.

IPF occurs primarily in older adults, characterized by progressive worsening of dyspnea and lung function. In recent years, mortality from IPF has been increasing steadily worldwide. Given its unpredictable but progressive evolution, the prognosis of IPF remains generally poor, with a median survival time of three to five years from the time of diagnosis and a five-year survival rate estimated at around 20%, even lower than those observed in many types of cancer. According to the CIC Report, the number of patients affected by IPF worldwide is expected to rise to approximately 2.1 million in 2035. There were approximately 325,900 IPF patients in China in 2024, and the number is expected to reach approximately 338,200 in 2035.

Addressable Market Size

According to the CIC Report, the market size of IPF drugs worldwide is expected to increase at a CAGR of 11.1% from US$5.8 billion in 2024 to US$18.5 billion in 2035. The market size of IPF drugs in China is expected to increase at a CAGR of 18.9% from RMB1.6 billion in 2024 to RMB10.9 billion in 2035.

China IPF Drugs Market Size (2018-2035E)



Source: The Lancet; National Bureau of Statistics and CIC

Treatment Paradigm

The therapeutic market for IPF is defined by a dual-track approach comprising pharmacological intervention and supportive care. While the primary standard of care focuses on disease-modifying drugs designed to slow fibrosis and preserve lung function, the ecosystem is equally supported by non-pharmaceutical strategies, including oxygen therapy and surgical options, which address symptom management and quality of life. This comprehensive framework highlights a diverse clinical environment where advanced biological agents and physiological support systems operate in tandem to manage disease progression.

Drug therapy				
Treatment	**Mechanism**	**Indication**	**Advantage**	**Disadvantage**
Pirfenidone	Pirfenidone is a pleiotropic molecule, which has demonstrated to downregulate transforming growth factor-β1 (TGF-β1) cellular effects. However, its anti-fibrotic mechanism remains unclear.	IPF patients with mild to moderate lung dysfunction	• Can significantly slow down forced vital capacity (FVC) decline and reduce the risk of death.	• Side effects include photosensitivity, fatigue, skin rash, stomach discomfort and anorexia. • Only effective for mild to moderate fibrosis. • Can only slow disease progression and is poorly tolerated.
Nintedanib	Is a multi-target tyrosine kinase Inhibitor, which can inhibit platelet-derived growth factor receptor, vascular endothelial growth factor receptor and fibroblast growth factor receptor.	IPF patients with mild to moderate lung dysfunction	• Can significantly reduce the absolute decline in FVC and reduce the risk of death.	• Side effects include diarrhea, liver damage and kidney damage. • Only effective for mild to moderate fibrosis. • Can only slow disease progression and is poorly tolerated.
Non-drug therapy				
Treatment	**Mechanism**	**Indication**	**Advantage**	**Disadvantage**
Oxygen therapy	Increase the oxygen partial pressure gradient between plasma and tissue.	IPF patients with resting hypoxemia	• Can improve hypoxia in IPF patients and significantly improve the prognosis.	• May limit patients' activities of daily living. • Patients may have a fear of hypoxia after long-term oxygen therapy.
Mechanical Ventilation	Use mechanical devices to replace, control or change spontaneous breathing exercises.	IPF patients with respiratory failure	• Improve lung function and blood gas analysis indicators. • Improve hypoxia.	• Does not perform well in the treatment. • The 2011 American guideline on IPF do not recommend for most IPF patients.
Pulmonary Rehabilitation	Including respiratory physiotherapy, muscle training, nutritional support, mental therapy and education.	The specific indications need further study	• Reduce symptoms of dyspnea. • Reduce the number of acute exacerbations.	• The long-term benefits are still unclear. • Complexity of pulmonary rehabilitation.
Lung Transplant	A surgical procedure to replace a diseased or failing lung with a healthy lung.	End-stage IPF and respiratory failure stage	• One of the main treatments for various end-stage lung diseases. • Improve the quality of life and increase the survival rate.	• Lack of transplanted organs. • Rejection after transplantation. • High cost.

Source: An Official ATS/ERS/JRS/ALAT Statement: Idiopathic Pulmonary Fibrosis: Evidence-based Guidelines for Diagnosis and Management, Chinese Experts' Consensus Statement on Diagnosis and Treatment of IPF, CIC

There are currently only three drugs approved for IPF in the U.S. and China. All of these have certain clinical limitations with side effect, which could lead to discontinuation of the treatment.

Treatment	Mechanism	Originator company	Approval year	Approval indications	Price	Sales Revenue in 2024 (bnUSD)	Market Share
Pirfenidone	TGF-β	Genentech Inc	2014 (FDA)	IPF	U.S.: US$2,530 (267 mg*270) US$8,350 (534 mg*90)	5.2	90.3%
	TGF-β	Gyre Therapeutics	2013 (NMPA)		China: RMB750 (100 mg*54)		
Nintedanib	Multi-target	Boehringer Ingelheim	2014 (FDA)	IPF	U.S.: US$13,210 (100 mg*60) US$13,210 (150 mg*60)	0.6	9.7%
			2017 (NMPA)		China: RMB1,768 (100mg*60) RMB2,568 (150 mg*60)		
Nerandomilast	PDE4B	Boehringer Ingelheim	2025 (NMPA, FDA)	IPF	U.S.: US$250 (10 mg)	n/a	n/a

Source: FDA, NMPA and CIC

Competitive Landscape

The approval of pirfenidone and nintedanib has fueled IPF drug discovery and development. Currently, there is a growing portfolio of candidates that target different pathways involved in the complex pathogenesis of IPF. Among the candidates, second generation pirfenidone drugs share a similar chemical scaffold and have similar mechanisms of action as pirfenidone. Second-generation pirfenidone drug candidates aim to improve the safety profile of pirfenidone, especially side effects such as GI intolerance and phototoxicity that could result in discontinued use of the drug, and to achieve better efficacy and patient compliance.

According to the CIC Report, as of the Latest Practicable Date, there were 28 compounds for IPF under clinical development in China.

Pipelines of IPF drugs in China

Trial number	Candidate	MoA	Company	Clinical Phase	First posted date	Indication
CTR20221183	**AK3280**	**TGF-β**	**ArkBio**	**II**	**2022/05/30**	**IPF**
CTR20223210	**AK0707**	**AMFR**	**ArkBio**	**I**	**2022/12/22**	**IPF**
CTR20234124	BMS-986278-01	LPAR1	Bristol-Myers Squibb	III	2023/12/28	IPF
CTR20242619	BI 1015550	PDE4B	Boehringer Ingelheim Pharma	III	2024/08/02	IPF
CTR20200904	Jaktinib Hydrochloride	JAK inhibitor	Suzhou Zelgen Pharmaceutical	II	2020/07/23	IPF
CTR20210132	Yinfenidone (HEC585)	TGF-β	Guangdong HEC Pharmaceutical	II	2021/01/26	IPF
CTR20230121	SHR-1906	CTGF	Guangdong Hengrui Pharmaceutical	II	2023/01/13	IPF
CTR20230327	Sufenidone/SC1011	/	Wuxi Zhikang Hongren	II	2023/02/23	IPF
CTR20232403	TDI01	ROCK2	Beijing Tide Pharmaceutical	II	2023/08/21	IPF
CTR20242929	BI 1819479	PLA2G4A	Boehringer Ingelheim Pharma	II	2024/08/26	IPF
CTR20243858	BI 1839100	/	Boehringer Ingelheim Pharma	II	2024/10/22	IPF
CTR20250017	HSK44459	PDE4B	Sichuan Haisco Pharmaceutical	II	2025/01/14	IPF
CTR20230776	INS018_055	TNIK	Insilico Medicine; Shanghai Syntheall Pharmaceutical	IIa	2023/03/21	IPF
CTR20232439	HW021199	ENPP2	Hubei Bio-Pharmaceutical; Wuhan Renfulikang Pharmaceutical	IIa	2023/08/16	IPF
CTR20252760	SV001	/	Shanghai Xunyao Biotechnology	IIa	2025/07/16	IPF
CTR20211366	ZSP1603	FGFRs, PDGFR-β, ERK, VEGFR, TGF-β1	Guangdong Zhongsheng Pharmaceutical	Ib/IIa	2021/08/03	IPF
CTR20202462	FTP-198	ENPP2	Haisco Pharmaceutical	I	2020/12/03	IPF
CTR20222268	AC-003	RIPK1	Accro Bioscience (Suzhou)	I	2022/09/14	IPF
CTR20222970	XYP-001	/	Joincare Pharmaceutical	I	2022/11/15	IPF
CTR20231360	TB-B002D	/	Shenzhen Turier Biotech	I	2023/05/06	IPF
CTR20231721	9MW3811	IL11	Mevivo (Shanghai) Biotechnology	I	2023/06/07	IPF
CTR20233474	LQ3	/	Sichuan Yasi Pharmaceutical Technology	I	2023/11/01	IPF
CTR20241106	HLX6018	LRRC32, TGF-β	Shanghai Henlius Biopharmaceutical	I	2024/04/01	IPF
CTR20250402	HRS-9813	ENPP2	Guangdong Hengrui Pharmaceutical	I	2025/02/07	IPF
CTR20250856	QR056251	ROCK1, ROCK2	Wuhan Laine Technology Development	I	2025/03/11	IPF
CTR20251928	JK1033	/	Tianjin Jikun Pharmaceutical	I	2025/05/16	IPF
CTR20230999	PMG1015	AREG	Pulmongene	Ib	2023/04/11	IPF
CTR20242243	XQ-001	/	Chengdu Beite Xinqi Biomedical	Ia	2024/06/27	IPF

Source: CDE, CIC

Market Drivers and Trends

- *Rise in patient population*. Increase in the number of aging populations has been witnessed worldwide. According to a WHO report, the number of people above 65 is expected to reach 1.5 billion by 2050, which is estimated to constitute about 16% of the world population. Increase in elderly individuals is expected to result in rise in incidence and prevalence of lung disorders, which in turn increases the risk for lung fibrotic diseases. Cigarette smoking is another significant factor contributing to lung fibrosis. Moreover, studies have shown that COVID-19 patients are prone to develop IPF and other lung fibrosis. The outbreak and global spreading of COVID-19 is hence another factor contributing to the growth in patient population. The widespread adoption of chemotherapy and ADC therapies has contributed to an increased IPF, thereby expanding the patient population.

- *Unsatisfactory current treatments driving development of new drugs*. The three approved treatments for IPF to date, have clinical limitations. As a result, there are significant unmet needs in the treatment of IPF. Recent progress in the clinical development of IPF drugs continues to stimulate further research efforts and potential market growth.

- *National rare disease list coverage may drive rapid approval process*. In May, 2018, IPF became one of the 121 rare diseases designated by the First List of Rare Diseases in China. The list was published by the PRC government to facilitate greater awareness of rare diseases and introduce incentives for research and development of orphan drugs. As a result, drugs that target IPF treatment is potentially eligible for fast-track launch by leveraging the rare disease designation in China.

- *Improvement in diagnosis capabilities and public awareness*. Historically, IPF diagnosis rates have been low due to a limited understanding of the disease and limited clinical guidance. With a growing understanding of the complex pathogenesis of IPF, and an increasing number of official guidelines and expert consensus being formulated, diagnosis rate for IPF is increasing, which is expected to drive the market for IPF treatments.

Entry Barriers

IPF is a rare disease affecting approximately 1.9 million individuals worldwide in 2024. Therefore, the development of treatment for IPF suffers from the hurdle's characteristic of rare diseases, where the small number of patients limit the feasibility of adequately powered trials. Moreover, given that the pathogenesis of IPF remains unclear, the development of IPF drugs requires in-depth research and development experience and know-how, as well as access to a wide network of KOLs and patients. As a result, medical research, and clinical development for IPF face longstanding obstacles which take considerable commitment, expertise, and financial resources to overcome. Furthermore, the presence of comorbidities increases disease heterogeneity, adding to the complexity and uncertainty of IPF drug development.

THE ADHD DRUG MARKET

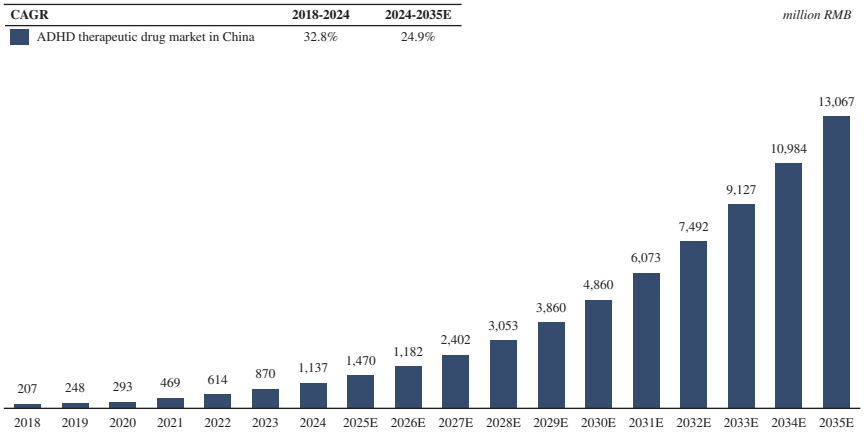
Overview

Attention deficit/hyperactivity disorder (ADHD) is one of the most prevalent neurodevelopmental disorders in children, with symptoms that often persist into adolescence and adulthood. It is characterized by inattention, hyperactivity, impulsivity, and in some cases emotional dysregulation or impaired executive function. ADHD also persists into adolescence and adult life, with up to 65% of children with ADHD continue to experience symptoms as adults in different age periods. Prevalence of ADHD in China has been on the rise in recent years, with approximately 45% being children and adolescent aged from six to 17. There were approximately 34.0 million ADHD patients in China in 2024, which is expected to grow at a CAGR of 1.3% and reach 39.2 million in 2035.

Market Size

Drug therapies and non-drug therapies have been used for the treatment for ADHD. While medication is not a permanent cure for ADHD, but it may help the patients to concentrate better and be less impulsive, through stimulants targeting at the receptors of the brain chemical dopamine and non-stimulants targeting at the brain chemical norepinephrine. Non-drug therapies primarily consist of approaches such as social skills training, psychoeducation, cognitive behavioral therapy, and digital therapeutics, which aim to improve daily functioning and coping strategies. Currently, due to the lack of awareness of ADHD drugs, China's ADHD therapeutic drug market only has a market share of RMB1.1 billion in 2024. As the awareness of ADHD continues to grow and more drugs are expected to be approved for the treatment of ADHD, the ADHD drug market in China is expected to reach RMB13.1 billion in 2035, representing a CAGR of 24.9% from 2024 to 2035.

Market size of ADHD Drugs in China, 2018-2035E



Source: BMC Psychiatry and China Insights Consultancy

Treatment Paradigm

The therapeutic landscape for ADHD is characterized by a multimodal approach that integrates pharmacological interventions with diverse non-drug therapies to manage symptoms rather than provide a permanent cure. Pharmacotherapy serves as the primary clinical pillar, utilizing rapid-onset stimulants as the first-line treatment to target dopamine receptors, while delayed-onset non-stimulants offer an alternative for patients unresponsive to or unsuitable for controlled substances. Complementing this medical regimen is a robust suite of supportive interventions, ranging from behavioral therapies and psychoeducation that strengthen coping mechanisms to innovative FDA-authorized technologies, including external nerve stimulation devices and game-based digital therapeutics designed to improve attention function in pediatric populations.

Drug therapy: Medication is not a permanent cure for ADHD but may help to concentrate better, be less impulsive, feel calmer, and learn and practice new skills.					
Treatment	**Mechanism**	**Onset**	**Effectiveness**	**Line of treatment**	**Classification**
Stimulants	Mainly target receptors of the brain chemical dopamine	Rapid onset	• High. Improves attention and reduces impulsivity and hyperactivity in 70 to 80 percent of patients	• First-line of drug treatment	• Schedule II, risk of abuse and dependence
Non-stimulants	Unlike stimulants which increase the amount of neurotransmitters like dopamine in the brain, non-stimulants like Atomoxetine targets the brain chemical norepinephrine	Delayed onset	• Less effective. Improves attention and reduces impulsivity and hyperactivity in 50 to 70 percent of patients	• Often prescribed when a person either shows no response to stimulants, has a history of drug abuse, or experiences severe side effects from stimulant medication	• Non-Scheduled

Non-drug therapy (Other possible treatments include social skills training, cognitive behavioral therapy (CBT), and diet.)	
Treatment	**Description**
Behavior therapy	It provides support for cares of children with ADHD and may involve teachers as well as parents. Behavior therapy usually involves behavior management, which uses a system of rewards to encourage children to try to control their ADHD. The goals of behavior therapy are to learn or strengthen positive behaviors and eliminate unwanted or problem behaviors
Psychoeducation	Psychoeducation means ADHD patients will be encouraged to discuss ADHD and its effects. It can help children, teenagers and adults make sense of being diagnosed with ADHD, and can help them to cope and live with the condition
Parent training and education programs	If children have ADHD, specially tailored parent training and education programs can help parents learn specific ways of talking to their children, and playing and working with them to improve their attention and behavior
Medical device	In April 2019, FDA approved the prescription-only device, called the Monarch external Trigeminal Nerve Stimulation (eTNS) System. It is indicated for patients ages 7 to 12 years old who are not currently taking prescription ADHD medication and is the first non-drug treatment for ADHD granted marketing authorization by the FDA. The device generates low-level electrical stimulation which moves through a wire to a small patch placed on the child's forehead, sending signals to areas of the brain related to attention, emotion and behavior
Digital therapeutics	In June 2020, FDA permitted marketing of the first game-based digital therapeutic device to improve attention function in children with ADHD. The prescription-only game-based device, called EndeavorRx, is indicated for pediatric patients ages 8 to 12 years old with primarily inattentive or combined-type ADHD who have demonstrated an attention issue

Source: CDC, NHS, Chinese Journal of Pediatrics, CIC

Competitive Landscape

According to CIC Report, there are 19 FDA approved ADHD treatment branding drugs.

FDA Approved ADHD Treatment Drugs

Class		Brand Name	Generic Name	Indication population	Approval year	Company	Price in 2025
Stimulants	**Methylphenidate**	Relexxii	Methylphenidate hydrochloride-extended-releases (tablet)	6 to 65 years old	2022	Alora[1]	$11.65 per tablet/18mg
		Jornay PM	Methylphenidate hydrochloride-extended-releases (capsule)	≥ 6 years old	2018	Ironshore	$14.47 per tablet/20mg
		Azstarys[(1)]	Serdexmethylphenidate and dexmethylphenidate (capsule)	≥ 6 years old	2021	Commave	$14.25 per capsule/5.2mg - 26.1mg
		QuilliChew ER	Methylphenidate hydrochloride-extended-releases (capsule; chewable)	≥ 6 years old	2015	NextWave	$12.05 per tablet
		CotemplaXR-ODT	Methylphenidate (tablet)	≥ 6 years old	2017	NEOS	$17.16 per tablet
		Daytrana	Methylphenidate (patch)	≥ 6 years old	2006	Noven	$5.91 per patch
		Focalin XR	Dexmethylphenidate hydrochloride-extended-release (capsule)	≥ 6 years old	2005	Novartis	$5.03 per capsule/5mg
		Ritalin LA	Methylphenidate hydrochloride-extended-release (capsule)	6 to 12 years old	2002	Novartis	$12.79 per capsule/20mg
		Adderall XR	dextroamphetamine sulfate, dextroamphetamine saccharate, amphetamine sulfate and amphetamine aspartate-extended-release (capsule)	≥ 6 years old	2001	Takeda[2]	$7.25 per capsule/15mg
	Amphetamine	Arynta	Lisdexamfetamine dimesylate (solution)	≥ 6 years old; BED	2025	Azurity	/
		Xelstrym	Dextroamphetamine-extended-release (patch)	≥ 6 years old	2022	Hisamitsu[3]	$16.88 per film/4.5mg
		Mydayis	Amphetamine aspartate; amphetamine sulfate; dextroamphetamine saccharate; dextroamphetamine sulfate (capsule)	≥ 6 years old	2017	Takeda	$16 per capsule
		Dyanavel XR	Amphetamine-extended-releases (suspension; tablet)	≥ 6 years old	2021	Tris	$3.07 per mL (2.5mg/mL) Or $19.6 per tablet/20mg
		Adzenys XR-ODT	Amphetamine-extended-releases (tablet)	≥ 6 years old	2016	NEOS	/
		Vyvanse	Lisdexamfetamine dimesylate (capsule; tablet; chewable)	≥ 6 years old; BED	2021	Takeda[2]	$13.28 per capsule/10mg
	Non-stimulants	Onyda XR	Clonidine hydrochloride-extended-release (suspension)	≥ 6 years old	2024	Tris	$8.51 per mL (0.1mg/mL)
		Qelbree	Viloxazine hydrochloride-extended-release (capsule)	≥ 6 years old	2021	Supernus	$12.92 per capsule/200mg
		Intuniv	Guanfacine-extended-release (tablet/kit)	6-17 years old	2009	Takeda[2]	$9.86 per tablet/2mg
		Strattera	Atomoxetine hydrochloride (capsule)	≥ 6 years old	2002	Eli Lilly and Co	$13.52 per capsule/25mg

(1) We licensed Azstarys® (AK0901) from Commave in December 2021 and obtained its NDA approval from the NMPA in December 2025 approval by NMPA in China.

Notes:

1 In 2021, Alora acquired Osmotica's legacy business.

2 Shire was acquired by Takeda in 2019.

3 In 2009, Hisamitsu fully acquired Noven.

Source: CHADD's National Resource Center on ADHD, FDA and CIC

As of the Latest Practicable Date, there were 15 approved ADHD therapeutic drugs in China. However, the majority of available ADHD medications belong to older-generation products or generic formulations of previously approved molecules.

NMPA Approved ADHD Treatment Drugs

Group	Product Name	Ingredient	NRDL coverage	Treatment cost	Formulation	Indication	Main Company/ Manufacturer	First Approval Year	
Stimulant	Concerta	Methylphenidate Hydrochloride	Class B	$2.71 per tablet/18mg	Extended-release Tablet	ADHD patients in 6 years old and above	Janssen	2005 (children)	2021 (adult)
	优宁睿			n/a	Chewable/Oral Suspension		Tris/Pediatrix	2023	
	Methylphenidate Hydrochloride Tablets			$1.37 per tablet/10mg	Tablet		Suzhou Diyi Pharma	2020[1]	
				n/a			CR Double-crane	2020[1]	
							Tonghua Renmin Pharma	2020[1]	
							Diaoyutai Medicine Group Jilin Changqing Pharma	2025	
	立方			n/a	Extended-Release Tablet		Hefei Lifeon Pharma	2025	
	爱智达	Serdexmethylphenidate Chloride and Dexmethylphenidate Hydrochloride	n/a	n/a	Capsule		ArkBio	2025	
Non-stimulant	Strattera	Atomoxetine Hydrochloride	Class B	$97.14 100mL	Capsule	ADHD patients in 6-17 years old	LILLY	2007	
	正丁			$1.43 per capsule/25mg			Jiangsu Chia Tai Fenghai Pharma	2013	
	Atomoxetine Hydrochloride capsule			n/a	Oral solution		Topfond Pharma	2012	
							Huahai Pharma	2024	
	利妥思			$1.28 per capsule/25mg	Capsule		Shandong Bestcomm Pharma	2021	
	思清源			$0.81 per capsule/25mg			Hefei Cosource Pharma	2021	
	百思平			$0.51 per capsule/25mg			BAIAO PHARM	2023	
	Strattera			$4.49 per capsule/25mg	Oral solution		LILLY	2018	
	佰建益			$16.43 100mL			Shandong Bestcomm Pharma	2021	
	恒思			n/a			Lunan Pharma	2025	
	Guanfacine Hydrochloride Sustained-release Tablets	Guanfacine hydrochloride		n/a	Sustained-release Tablets		Baili Pharma	2025	

Note:

1. Such first approval year represents the latest approval year according to NMPA, and there is no or almost no production or sales between 2015-2020.

Source: NMPA and CIC

Growth Drivers and Future Trends

We believe the following are the major growth drivers and future trends for China's ADHD drug market.

- ***Growing awareness of mental illness***. As the new generation has become the mainstay of the society in China, the national average educational level has been improved, which leads to an increased awareness of mental diseases compared with the previous generation. As a result of the growing awareness of mental illness, more people will be diagnosed and treated, which will drive the growth of China's ADHD drug market.

- ***Favorable government policies.*** In recent years, China's government has implemented a number of favorable policies to prioritize mental health — particularly ADHD. In 2017, ADHD medications were listed in the Second Batch of Encouraged Children's Drug R&D and Registration List, accelerating approvals for domestic first generic and innovative drugs. Key initiatives include the inclusion of ADHD medications in the Second Batch of Encouraged Children's Drug R&D and Registration List, which accelerates the approval of domestic first-generics and innovative drugs, as well as the China Children's Development Program (2021-2030), which encourages pediatric drug innovation, streamlines approval processes, and expands pediatric medication coverage.

CHRONIC OBSTRUCTIVE PULMONARY DISEASE DRUG MARKET

Chronic obstructive pulmonary disease ("**COPD**") is a chronic inflammatory lung disease and the world's third leading cause of death, with an estimated three million deaths recorded worldwide in 2024, equivalent to approximately 5% of global deaths in the same year. It is characterized by persistent respiratory symptoms and airflow limitation due to airway and/or alveolar abnormalities, usually caused by cigarette smoking, respiratory viral infection, and significant exposure to noxious particles or gases.

There were approximately 509.8 million COPD patients worldwide in 2024, which is expected to increase to 582.3 million in 2035, representing a CAGR of 1.2%, largely attributable to a large base of smokers and aging population. Prevalence of COPD in China has also been on the rise in recent years, especially among the elderly. There were approximately 122.1 million COPD patients in China in 2024, which is expected to grow at a CAGR of 1.6% and reach 145.2 million in 2035.

According to the CIC Report, the market size of COPD drugs worldwide is expected to increase at a CAGR of 7.4% from RMB22.0 billion in 2024 to RMB48.3 billion in 2035. The market size of COPD drugs in China is expected to increase at a CAGR of 15.1% from RMB2.9 billion in 2024 to RMB13.7 billion in 2035.

There is currently no cure for COPD, and the existing treatment drugs mainly rely on bronchodilators, which can modulate airway, smooth muscle but only relieve the symptoms of COPD and delay disease progression. Anti-inflammatory agents such as inhaled corticosteroids (ICS) are also commonly used to reduce the severity of exacerbations, but have shown no clinical evidence in modifying the long-term decline in lung function and disease progression.

Bronchodilator: increase FEV and/or change other spirometric variables. The current first choice for stable COPD				
Treatment	**Mechanism**	**Adverse effects**	**Administration**	**Duration of action**
Beta$_2$ agonists	• The principal action of beta$_2$ agonists is to relax airway smooth muscle by stimulating beta$_2$ adrenergic receptors, which increases cyclic AMP and produces functional antagonism to bronchoconstriction	• Can produce resting sinus tachycardia and has the potential to precipitate cardiac rhythm disturbances in susceptible patients	• Inhalant	Short-acting: 4-6 hours (SABA) Long-acting: 12-24 hours (LABA)
Anti-muscarinic drugs	• Anti-muscarinic drugs block the bronchoconstrictor effects of acetylcholine on M3 muscarinic receptors expressed in airway smooth muscle • **Current first line treatment for COPD**	• Dryness of mouth		Short-acting: 4-6 hours (SAMA) Long-acting: 12-24 hours (LAMA)
Methylxanthines	• Controversy remains about the exact effects of xanthine derivatives. They may act as non-selective phosphodiesterase inhibitor	• Toxicity is dose-related. Most of the benefit occurs only when near-toxic doses are given		Variable, up to 24 hours
Anti-inflammatory agents				
Treatment	**Mechanism**	**Adverse effects**	**Administration**	**Duration of action**
Inhaled corticosteroids (ICS)	• It can inhibit the release of inflammatory mediators, enhance the response of beta receptor of smooth muscle cells, etc.	• ICS use is associated with higher prevalence of oral candidiasis, hoarse voice and pneumonia	• Inhalant	/
Phosphodiesterase-4 (PDE-4) inhibitors	• The principal action of PDE-4 inhibitors is to reduce inflammation by inhibiting the breakdown of intracellular cyclic AMP	• Diarrhea, nausea, reduced appetite, weight loss, abdominal pain, sleep disturbance and headache	• Oral	24 hours

Source: GOLD 2025, CIC

Higher life expectancy and rising aging population are expected to propel the prevalence of COPD, which in turn drives the development of COPD drugs. There is growing evidence of higher prevalence of COPD in the elderly, as age-associated changes in the structure and function of the lung may increase a patient's susceptibility to COPD. A large base of smokers also contributes to a higher risk of COPD. Moreover, the COVID-19 outbreak has brought worldwide attention to respiratory and lung diseases. As a result, more routine health check-ups and precautionary measures are expected to be taken in the future for the screening for COPD, which will potentially increase diagnosis rates.

SOURCE OF INFORMATION

In connection with the [**REDACTED**], we have commissioned CIC, a market research and consulting company and an Independent Third Party, to conduct research and analysis of, and to produce a report on, the respiratory and drug disease market and other potential markets for our drug candidates (the "**CIC Report**"). The CIC Report has been prepared by CIC independent of the influence of our Group and other interested parties. We have agreed to pay CIC a total fee of approximately RMB1.5 million for the preparation and use of the CIC Report for the [**REDACTED**] and the Company's previous listing attempts, and we believe that such fees are consistent with the market rate. CIC is a consulting firm founded in Hong Kong and provides professional industry consulting services across multiple industries. CIC's services include industry consulting, commercial due diligence and strategic consulting.

In compiling and preparing the report, CIC conducted both primary and secondary research using a variety of resources. Primary research involved interviewing key industry experts and leading industry participants. Secondary research involved analysing data from various publicly available data sources, including but not limited to the National Bureau of Statistics, National Medical Products Administration, Food and Drug Association, National Health Commission of the PRC, the International Monetary Fund, and World Health Organization. The market projections in the CIC Report are based on the following key assumptions: (i) the overall social, economic and political environment in China is expected to remain stable during the forecast period; (ii) China's economic and industrial development 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 respiratory and lung disease drug market and other potential markets for our drug candidates during the forecast period, such as the growing prevalence of respiratory and lung disease, improving diagnosis and awareness of respiratory and lung disease, increasing number of new drugs, supportive government programs and policies, increasing research and development expenditures and improved affordability of drugs; and (iv) there is no extreme force majeure or industry regulation in which the market may be affected dramatically or fundamentally.