Pharmaceutical Market Research

Confidential For Project Sailing

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For and on behalf of
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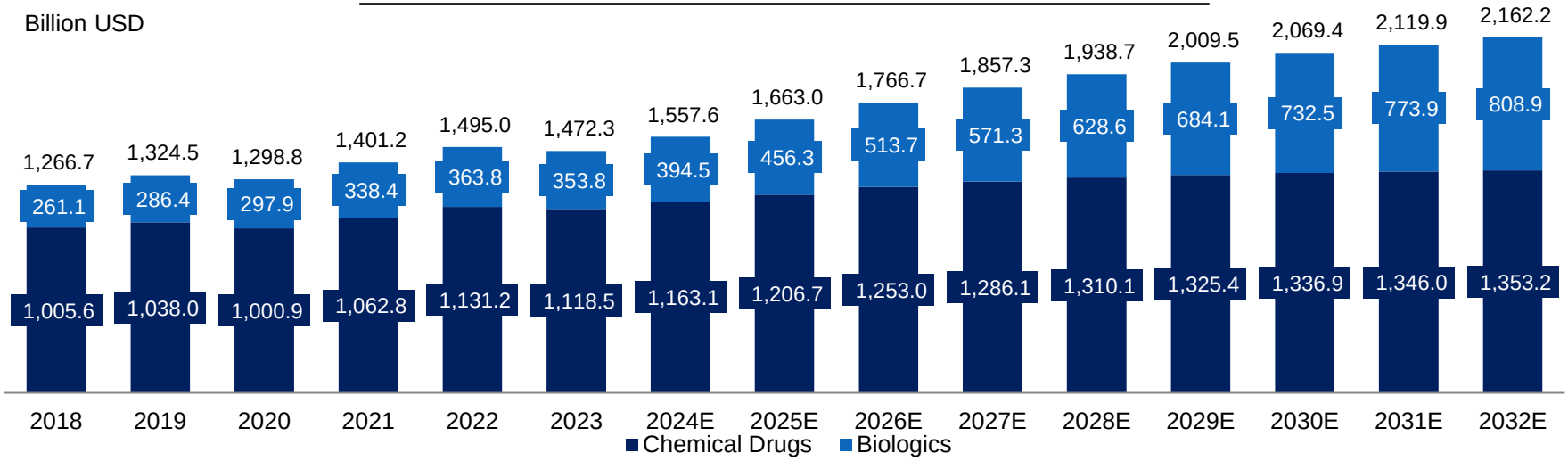
Global Pharmaceutical Market, 2018-2032E

- Global pharmaceutical market is composed of two segments, namely chemical drugs and biologics. Driven by aging population, rising health awareness and life expectancy, as well as increasing R&D expenditure, the global pharmaceutical market was USD1,472.3 billion in 2023, and is expected to reach to USD1,938.7 billion and USD2,162.2 billion in 2028 and 2032 respectively, representing a CAGR of 5.7% from 2023 to 2028, 2.8% from 2028 to 2032.
- The chemical drugs took USD1,118.5 billion market size in 2023, and is expected to reach to USD1,310.1 billion and USD1,353.2 billion respectively in 2028 and 2032.
- Chemical drugs are drugs produced by chemical synthesis, and the molecular weight is generally below 1000Da, which can also be regarded as small molecular drugs.
- Biological drugs are a series of therapeutic products made of organisms, tissues, cells, body fluids, etc., and the molecular weight is generally above 1000Da, that is, macromolecular drugs. Compared with chemical drugs, the production technology of biological drugs is more complicated and has higher technical barriers. The development of biopharmaceuticals has given birth to the application of various new technologies.

Global Pharmaceutical Market, 2018-2032E

Period	CAGR		
	Chemical Drugs	Biologics	Total
2018-2023	2.2%	6.3%	3.1%
2023-2028E	3.2%	12.2%	5.7%
2028E-2032E	0.8%	6.5%	2.8%



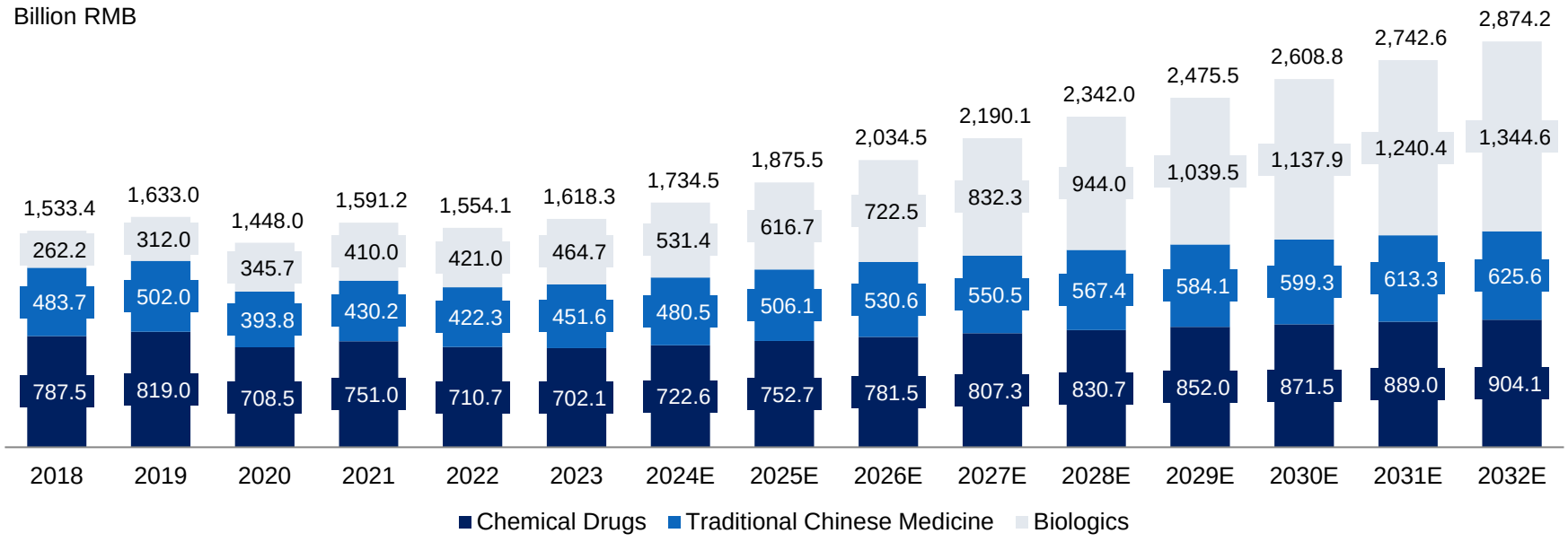
Source: Annual Reports of Listed Medical Companies, NMPA, CDE, NRDL, MOHRSS, FDA, Frost & Sullivan Analysis

China Pharmaceutical Market, 2018-2032E

- China pharmaceutical market, accompanying with the growth of economy and healthcare demand, increased from RMB 1,533.4 billion in 2018 to RMB1,618.3 billion in 2023 with CAGR of 1.1%. China pharmaceutical market will further increase to RMB2,342.0 billion in 2028 and RMB2,874.2billion in 2032, with CAGR of 7.7%, 5.3% respectively.

China Pharmaceutical Market, 2018-2032E

Period	CAGR			
	Chemical	TCM	Biologics	Total
2018-2023	-2.3%	-1.4%	12.1%	1.1%
2023-2028E	3.4%	4.7%	15.2%	7.7%
2028E-2032E	2.1%	2.5%	9.2%	5.3%



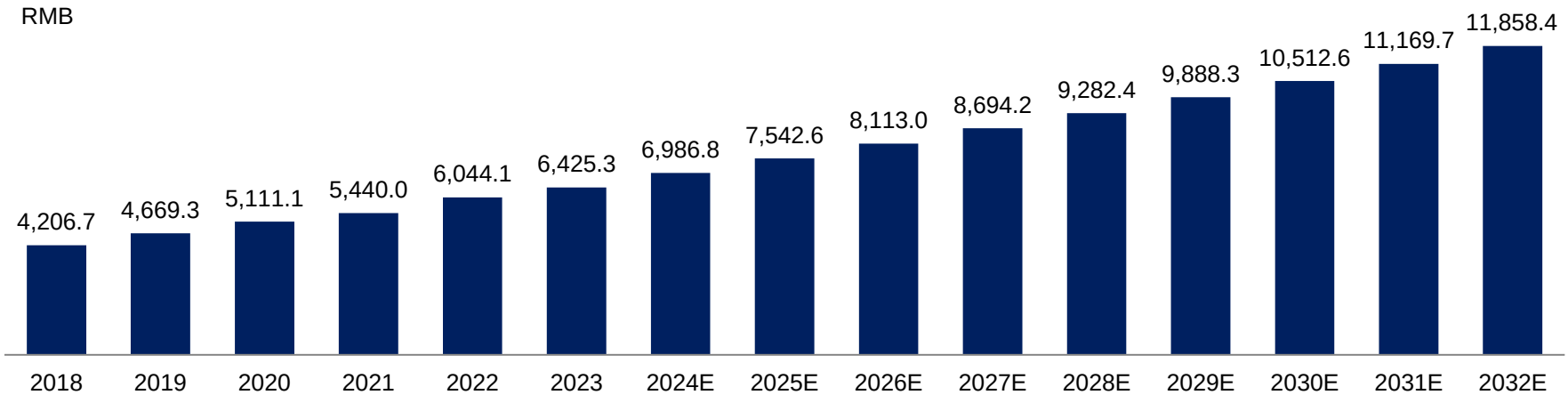
Source: Annual Reports of Listed Medical Companies, NMPA, CDE, NRDL, MOHRSS, Frost & Sullivan Analysis

Per Capita Healthcare Expenditure in China, 2018-2032E

- The per capita healthcare expenditure in China has grown rapidly in recent years.
- From 2018 to 2023, the per capita healthcare expenditure has grown from RMB 4,206.7 to RMB 6,425.3, representing a CAGR of 8.8% in this period. And the per capita healthcare expenditure is expected to reach RMB 9,282.4 and 11,858.4 in 2028 and 2032 respectively, representing a CAGR of 7.6% from 2023 to 2028 and 6.3% from 2028 to 2032.

Per Capita Healthcare Expenditure in China, 2018-2032E

Period	CAGR
2018-2023	8.8%
2023-2028E	7.6%
2028E-2032E	6.3%



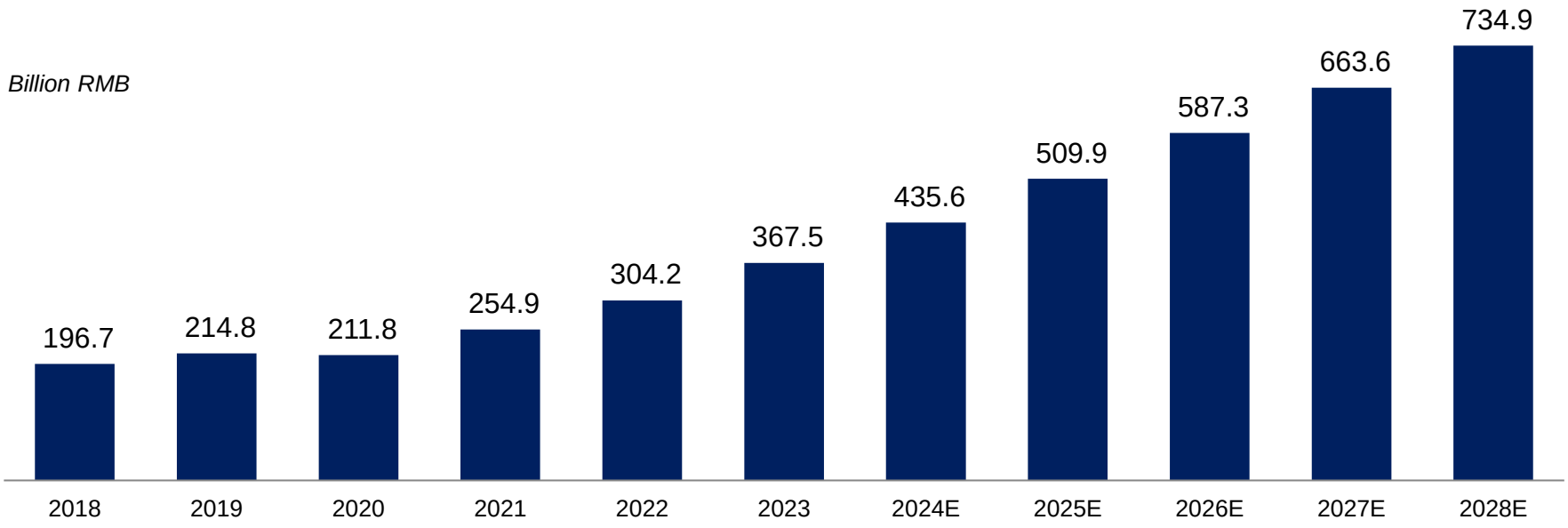
Source: NHC, WHO, Frost & Sullivan Analysis

China NME Drug Market, 2019-2032E

- China NME drug market size has increased from RMB 196.7 billion to RMB 367.5 billion from 2019 to 2023, at a CAGR of 13.3%. The size is expected to continue to grow at a rapid rate, reaching RMB 734.9 billion in 2028.

China NME Drug Market, 2018-2028E

	CAGR
2019-2023	13.3%
2023-2032E	14.9%



Source: Frost & Sullivan Analysis

Accelerating Globalization Evidenced by Notable BD Deals in 2024H1

- According to incomplete statistics, 34 license-out deals occurred in the first half of 2024. The top 10 deals had a combined upfront payment of $720 million and a total deal value of $20.21 billion. The total deal value of Top 10 deals for 2024H1 has reached the annual levels of the previous two years.
- In 2024, Chinese pharmaceutical companies have engaged in 68 cross-border out-licensing transactions, with an aggregate deal value over US$42.3billion. The increasing number of transactions (including out-licensing and M&A transactions) centered on innovative drug assets underscores the global market's growing recognition of innovation from China.
- From 2021 to 2024, Chinese companies had participated in approximately 40% of total number of M&A transactions and out-licensing deals involving ADCs.
- Since the end of 2023, Chinese biotech companies such as Gracell Biopharma, Synreno Pharmaceuticals, Biogen Pharmaceuticals, and Pufang Biopharma have been successively acquired by overseas pharmaceutical companies such as AstraZeneca, Novartis, Nuvation Bio, and Genmab. In M&A events, innovative technologies and products become the focus of competition among all parties. Companies with innovative technologies and products can often obtain higher valuations and better development prospects. To a certain extent, these M&A deals also represent the continued strengthening of China's innovative drug research and development capabilities.
- It is more cost-effective for Chinese pharmaceutical companies to conduct R&D in China. Specifically, the efficiency of Chinese pharmaceutical companies in the preclinical stage is 1-2 times that of overseas pharmaceutical companies. In the preclinical stage, from mechanism confirmation to PCC stage, Chinese pharmaceutical companies only need 12-20 months, while overseas companies need 24-36 months, which means that Chinese pharmaceutical companies have a 30%-50% efficiency improvement in this stage. In the clinical stage, the cost of a new drug developed by a Chinese pharmaceutical company is about RMB 200-300 million, while the average cost developed by overseas pharmaceutical company is about US$800 million. This shows that Chinese pharmaceutical companies have lower clinical research and development costs in China, and can efficiently promote clinical research and accumulate clinical data. Therefore, overseas companies are willing to cooperate with Chinese companies in the form of mergers and acquisitions, licensing, etc. to jointly develop new drugs and help domestic companies successfully go overseas.

2024H1 Top 10 License-out Deals in Pharmaceuticals

Licensor	Licensee	Target	Type of Drugs	Phase	Total Deal Value (USD Million)
	Hercules CM	GLP1R, GIPR	Chemical Drug, Peptide, TBD	Phase II, Phase III, Preclinical	6,035
	Novartis	AGT	siRNA	Phase I, Phase I/IIa	4,165
	AbbVie	TL1A	Antibody	Preclinical	1,710
	Takeda Pharmaceutical	Bcr-Abl, KIT, FGFR1, FLT3, PDGFRA	Chemical Drug	Approved	1,300
	Day One Biopharmaceuticals	PTK7	**ADC**	Preclinical	1,207
	Roche Pharmaceuticals	MET	**ADC**	Clinical Application	1,050
	Avenzo Therapeutics	CDK2	Chemical Drug, TBD	Phase I/II, Preclinical	1,000
	Glenmark	PD-L1	Monoclonal Antibody	Approved	700.8
	ArriVent Biopharma	Undisclosed	**ADC**	Preclinical	615.5
	AstraZeneca	Undisclosed	Monoclonal Antibody	Preclinical	604

Note: "Phase" referred to the clinical stage at which the licensing deal was disclosed.

Source: Insights Database, Public Information, Frost & Sullivan Analysis

Overview of Top 5 China Biopharmaceutical Companies

Company	Descriptions
Hengrui Medicine	The company was founded in 1970s and listed on the Shang Hai Stock Exchange in 2000. As an innovative, internationally oriented pharmaceutical group, it is committed to the research, production, and promotion of high-quality medicines. The company focuses on new drug development in the fields of oncology, metabolic and cardiovascular diseases, immunology and respiratory diseases, and neuroscience. The company is regarded as one of the most innovative leading pharmaceutical companies in China.
CompanyA/中国生物制药	The company was listed on the Hong Kong Stock Exchange in 2000. It is a leading innovative research and R&D-driven pharmaceutical group in China, with businesses covering the entire industry chain of pharmaceutical R&D platforms, intelligent production and a strong sales system. Its products include a variety of biological drugs and chemical drugs, and it has an advantageous position in the four major therapeutic areas of tumors, liver diseases, pulmonary embolism systems, and surgery/analgesia.
CompanyB/石药	The company was listed on the Hong Kong Stock Exchange in 1994. It has three major business segments: innovative drugs, general medicines and raw materials. It is mainly engaged in the development, production and sales of pharmaceuticals and related products.
CompanyC/翰森制药	The company was listed on the Hong Kong Stock Exchange in 2019, focusing on anti-tumor, anti-infection, central nervous system diseases, metabolic diseases and autoimmune diseases. It has efficient large-molecule and small-molecule innovative drug discovery capabilities, and its research and development layout covers monoclonal antibodies, ADC drugs, SiRNA, bispecific antibodies and fusion protein products.
CompanyD/三生制药	The company was listed on the Hong Kong Stock Exchange in 2015. It mainly focuses on the fields of nephrology, hematology and tumors, autoimmunity, hair and skin, and has extensive experience in the research and development, production and marketing of biologics.

Source: Literature Review, Frost & Sullivan analysis

Top 5 China Biopharmaceutical Companies by Revenue from NME Innovative Drugs

Rank	Company	Revenue from NME innovative drugs, RMB billion	Number of NME drugs	Number of NME drug candidates
1	Hengrui Medicine	8-9	19*	90+
2	CompanyA/中国生物制药	7-8	8	60+
3	CompanyB/石药	7-8	3	40+
4	CompanyC/翰森制药	6-7	7	50+
5	CompanyD/三生制药	6-7	7	20+

Note: *Includes recaticimab (approved by the NMPA on January 8, 2025)

Source: Literature Review, Frost & Sullivan analysis

Global Incidence of Major Cancer Types, 2018-2032E

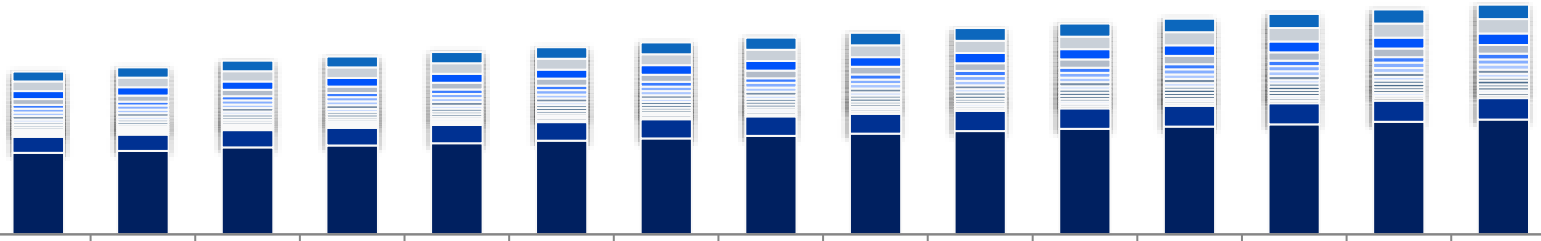
- The global incidence of cancer was 20.8 million cases in 2023 and is projected to grow at a CAGR of 2.4% to reach 23.4 million in 2028.
- Cancer is the leading cause of mortality worldwide, resulting in approximately 10 million deaths globally each year.
- Globally, the incidence of lung cancer, breast cancer, colorectum cancer and prostate cancer are much higher than others, occupying 41% of the total cancer incidence in 2023.
- Globally there is around 250 thousand new NSCLC diagnosed patients and 5-year survival rate is below 10% for NSCLC patients with extensive disease, compared with 69% all types of cancer in the US.

Incidence of Top 10 Cancer Types Globally, 2023-2028E

Period	CAGR									
	Lung	Breast	Colorectum	Prostate	Stomach	Liver	Thyroid	Lymphoma	Cervix Uteri	Bladder
2023-2028E	2.8%	3.1%	2.5%	2.9%	2.7%	2.6%	1.4%	2.1%	1.2%	3.1%

Global Incidence of Major Cancer Types, 2018-2032E

Thousands



	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Lung	2,219	2,280	2,343	2,410	2,481	2,552	2,625	2,698	2,772	2,848	2,924	3,000	3,076	3,152	3,227
Breast	2,089	2,134	2,261	2,301	2,348	2,408	2,474	2,546	2,624	2,710	2,803	2,898	2,995	3,095	3,196
Colorectum	1,801	1,849	1,881	1,928	1,981	2,032	2,083	2,134	2,187	2,240	2,294	2,348	2,402	2,457	2,513
Prostate	1,276	1,316	1,414	1,451	1,497	1,552	1,604	1,655	1,704	1,750	1,794	1,837	1,881	1,925	1,969
Stomach	871	894	917	942	969	995	1,023	1,050	1,078	1,106	1,135	1,163	1,192	1,220	1,249
Head and Neck	870	890	909	930	952	974	996	1,019	1,041	1,063	1,086	1,108	1,131	1,153	1,175
Liver	782	801	822	843	866	889	913	936	960	984	1,009	1,033	1,058	1,082	1,106
Thyroid	774	786	798	809	821	833	845	857	868	880	892	904	915	926	938
Lymphoma	590	603	627	640	655	671	687	702	717	731	745	760	774	788	802
Cervical	570	580	604	616	626	640	651	661	669	675	679	683	686	689	692
Bladder	549	565	573	588	606	622	639	658	678	700	723	747	770	794	819

Source: Globocan, IARC ,Frost & Sullivan analysis

Incidence of Major Cancer Types in China, 2018-2032E

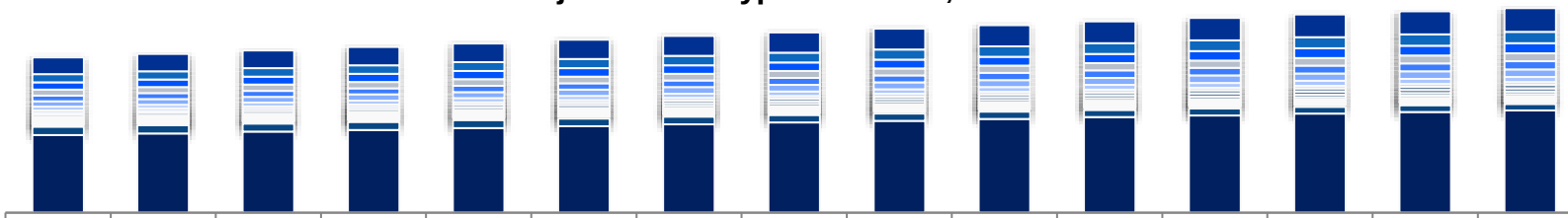
- In China, the incidence of cancer was 4.9 million cases in 2023 and is projected to grow at a CAGR of 2.0% to reach 5.4 million in 2028.
- China has a high rate of cancer incidence, accounting for 23.7% of all new cancer cases globally in 2023. In addition, in the same year, there were nearly 2.6 million cancer deaths in China.
- Among all types of cancers, lung cancer, colorectal cancer, thyroid cancer, liver cancer, and stomach cancer are the top 5 in China, together they can hold a proportion more than 50% of each year's new patients. The incidence of lung cancer, colorectal cancer and stomach cancer has higher CAGRs than others. The increasing smoking population and pollutions are the risk factors of lung cancer, and the latter two are associated with unhealthy diet. Additionally, there is also evident growth of the incidence of lymphoma and etc.al in the past few years, which is projected to further increasing in the near future.

Incidence of Top 10 Cancer Types in China, 2023-2028E

Period	CAGR									
	Lung	Colorectum	Thyroid	Liver	Stomach	Breast	Esophagus	Cervix Uteri	Prostate	Pancreas
2023-2028E	2.6%	2.5%	2.1%	2.1%	2.7%	2.2%	2.9%	0.7%	3.8%	2.8%

Thousands

Incidence of Major Cancer Types in China, 2018-2032E

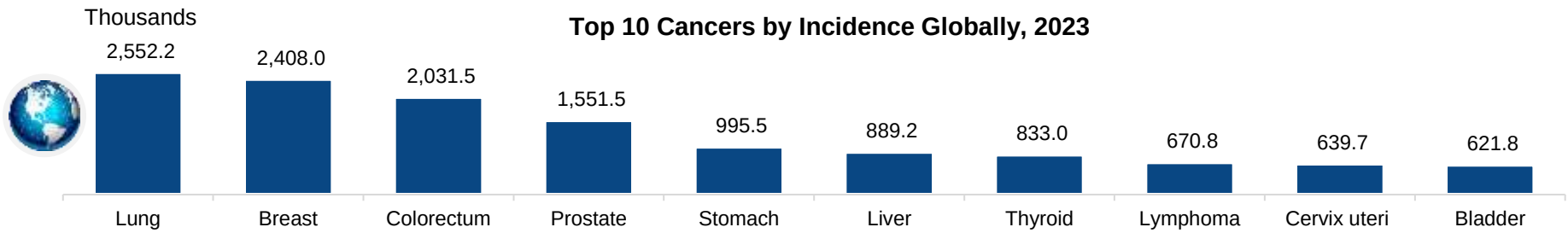


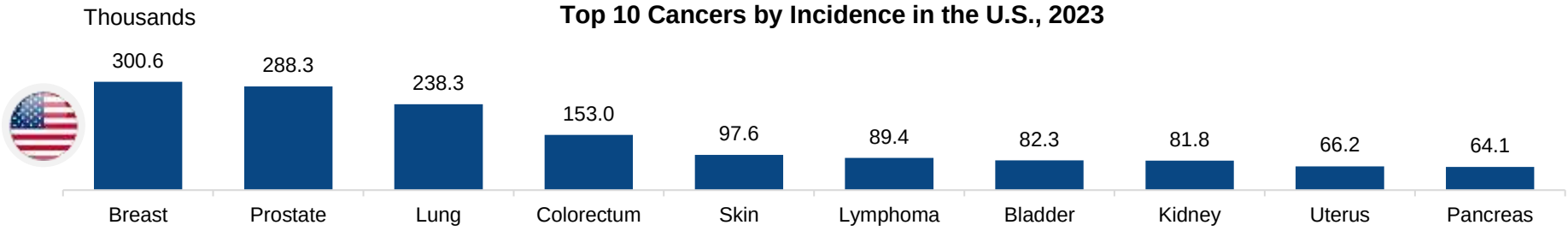
	2018	2019	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Lung	951	977	1,003	1,031	1,061	1,090	1,120	1,149	1,179	1,208	1,237	1,266	1,294	1,321	1,347
Colorectum	465	477	490	503	517	531	545	559	573	588	602	615	629	642	654
Thyroid	423	435	446	456	466	476	487	497	508	518	529	540	552	563	575
Liver	335.9	343.4	351.2	359.3	367.6	376.0	384.3	392.7	401.1	409.5	417.8	426.0	434.0	441.8	449.4
Stomach	321	330	339	348	359	369	379	390	400	411	421	432	442	452	461
Breast	321	330	339	348	357	365	374	382	390	398	407	414	422	429	436
Esophagus	199	205	211	217	224	231	238	245	252	259	267	274	280	287	294
Cervical	144	146	148	149	150	152	153	154	155	156	157	158	159	159	160
Prostate Cancer	117	121	125	129	134	140	145	151	156	162	168	174	180	186	192
Head and Neck	133	136	139	142	146	149	152	155	159	162	165	168	171	174	177
Pancreas	106	109	112	115	119	122	126	130	133	137	141	144	148	152	155

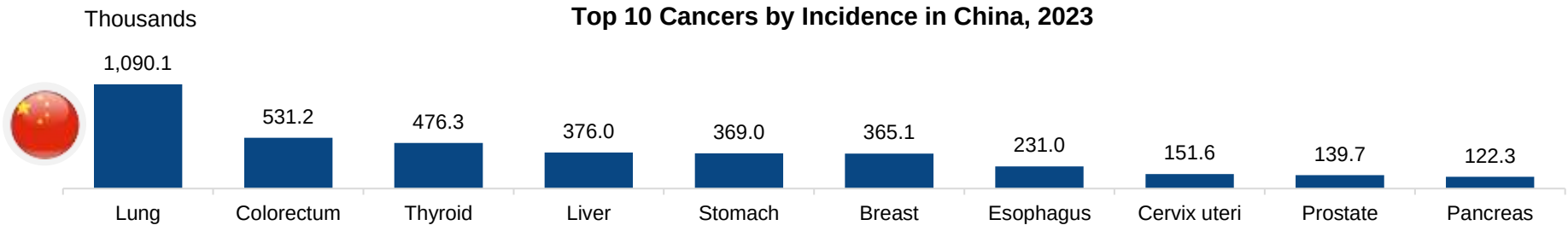
Source: Globocan, NCCR, Frost & Sullivan analysis

Top 10 Cancers by Incidence, 2023

- The top 5 cancers by incidence globally in 2023 are lung cancer, breast cancer, colorectal cancer, prostate cancer and stomach cancer.
- The increasing smoking population are the risk factors of lung cancer in China. And the higher incidence of stomach and colorectal cancer are associated with unhealthy diet, eating habits and manner in China.
- The incidence of cancer in China is very high, accounting for 24% of the global new cancer cases. However, the 5-year survival in China is only 43.7%, which is a big gap compared with 69% in the United States. Therefore, there is a greater unmet clinical need for cancer patients in China.







Note: Head and neck cancer is a collective term for cancers that occur in various parts of the head and neck, so it is not included in the ranking of single cancer incidence.

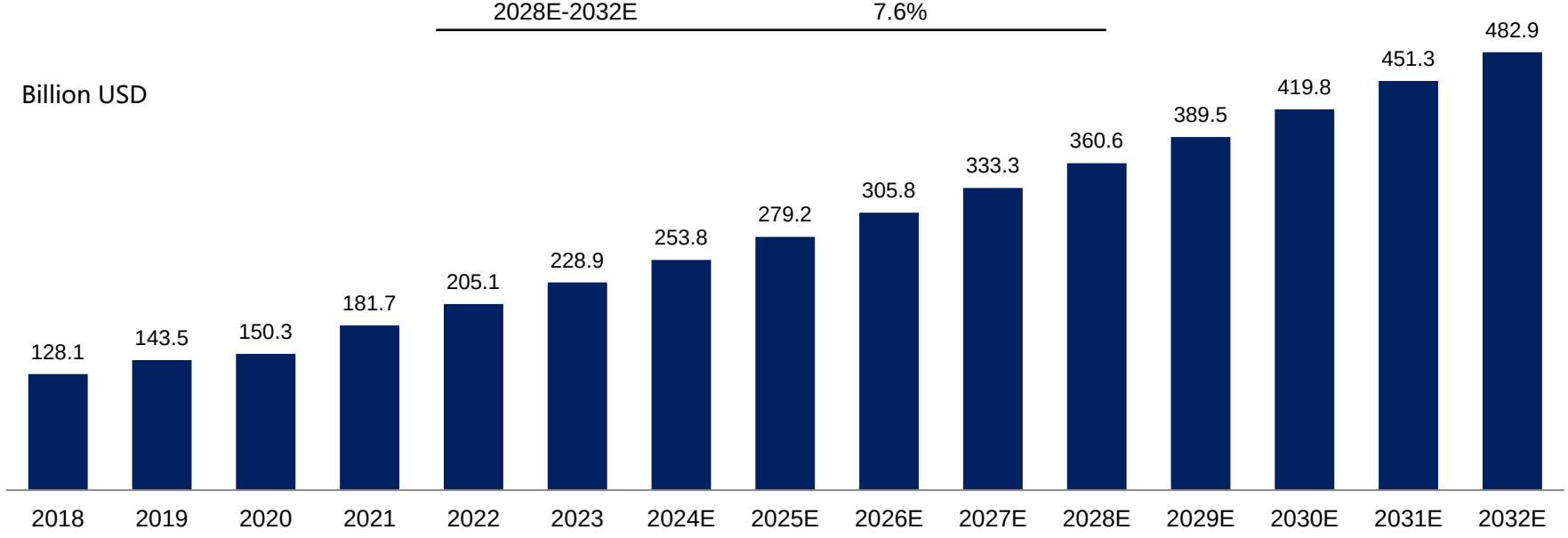
Source: Globocan, IARC, NCCR, Frost & Sullivan analysis

Global Oncology Drug Market, 2018-2032E

- The global oncology drug market grew from US$128.1 billion in 2018 to US$228.9 billion in 2023 at a CAGR of 12.3% and is projected to reach US$360.6 billion in 2028 and US$482.9 billion in 2032 at a CAGR of 9.5% from 2023 to 2028 and 7.6% from 2028 to 2032.

Global Oncology Drug Market, 2018-2032E

Period	CAGR
2018-2023	12.3%
2023-2028E	9.5%
2028E-2032E	7.6%



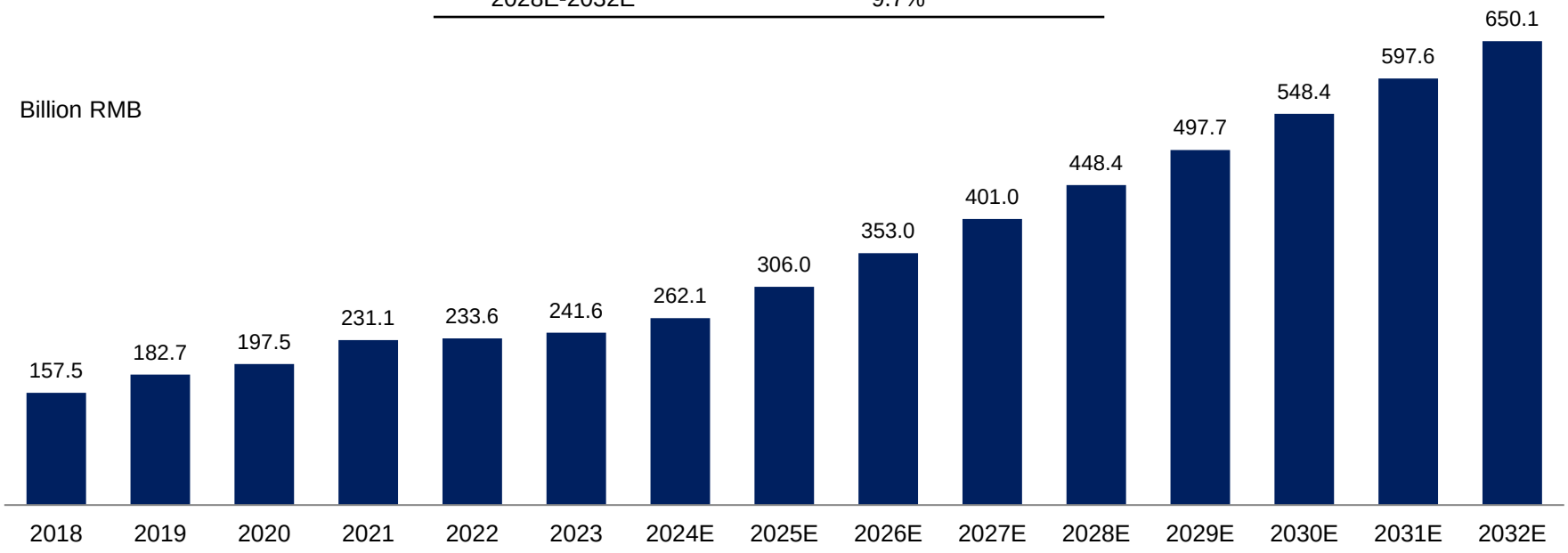
Source: Frost & Sullivan Analysis

China Oncology Drug Market, 2018-2032E

- The China oncology drug market grew from RMB157.5 billion in 2018 to RMB241.6 billion in 2023 at a CAGR of 8.9% and is projected to reach RMB448.4 billion in 2028 and RMB650.1 billion in 2032 at a CAGR of 13.2% from 2023 to 2028 and 9.7% from 2028 to 2032.

China Oncology Drug Market, 2018-2032E

Period	CAGR
2018-2023	8.9%
2023-2028E	13.2%
2028E-2032E	9.7%



Source: Frost & Sullivan Analysis

Evolution of Treatment of Oncology

- Over the past century, the oncology treatment paradigm has shifted from conventional broad-spectrum treatments to precision treatments. Targeted therapies (including small molecule targeted therapies and antibody-based targeted therapies) and immunotherapies offer oncology patients more accurate prognosis and better chances of survival.
- Currently, oncology drugs approved for clinical application are generally able to meet basic treatment needs, while research and development for novel modalities, combination among different drug categories will be better fulfilling the clinical needs of efficacy and safety, as well as providing resolutions to drug resistance.
- The applications of novel technologies such as PROTACs are able to provide solutions to address “undruggability”. For antibody-based targeted therapies, an increasing number of ADCs have demonstrated promising results in various cancer types. Bi/multi-specific T cell engagers have also been developed for the treatment of haematological malignancies.

	Current Options	Innovative Options Under Development	General R&D Trend
Targeted Therapy			
Targeted Therapy, Small-molecule	• Kinase Inhibitors Targeting: • VEGFR1/2/3 • PARP1/2/3 • CDK4/6 • AR/ER • …	• Kinase Inhibitors Targeting: • VEGFR2 • PARP1 • CDK4, CDK6 • AR/ER-PROTAC • KRAS • FGFR • PDGFR • Radio Ligand Therapy • …	• Improve target selectivity and affinity, reduce off-target toxicity • New technologies to turn the ‘undrugable' targets into promising targets
Targeted Therapy, Antibody-based	• Monoclonal antibody (mAb) • …	• Bi/(Multi)specific antibody • Antibody Drug Conjugates (ADC) • …	• New modalities to improve efficacy and safety • Development of novel targets with better efficacy
Immunotherapy	• PD-1/L1 mAb • CTLA-4 mAb • …	• PD-1 based Bi/(Multi)specific antibody • CTLA-4 based Bi/(Multi)specific antibody • TGF-β based antibody • …	• New modalities to improve efficacy and safety • Development of novel targets with better efficacy
Chemotherapy	• Topoisomerase inhibitors • Alkylating agents • …	• Development of new formulations • …	• Combination with other treatments

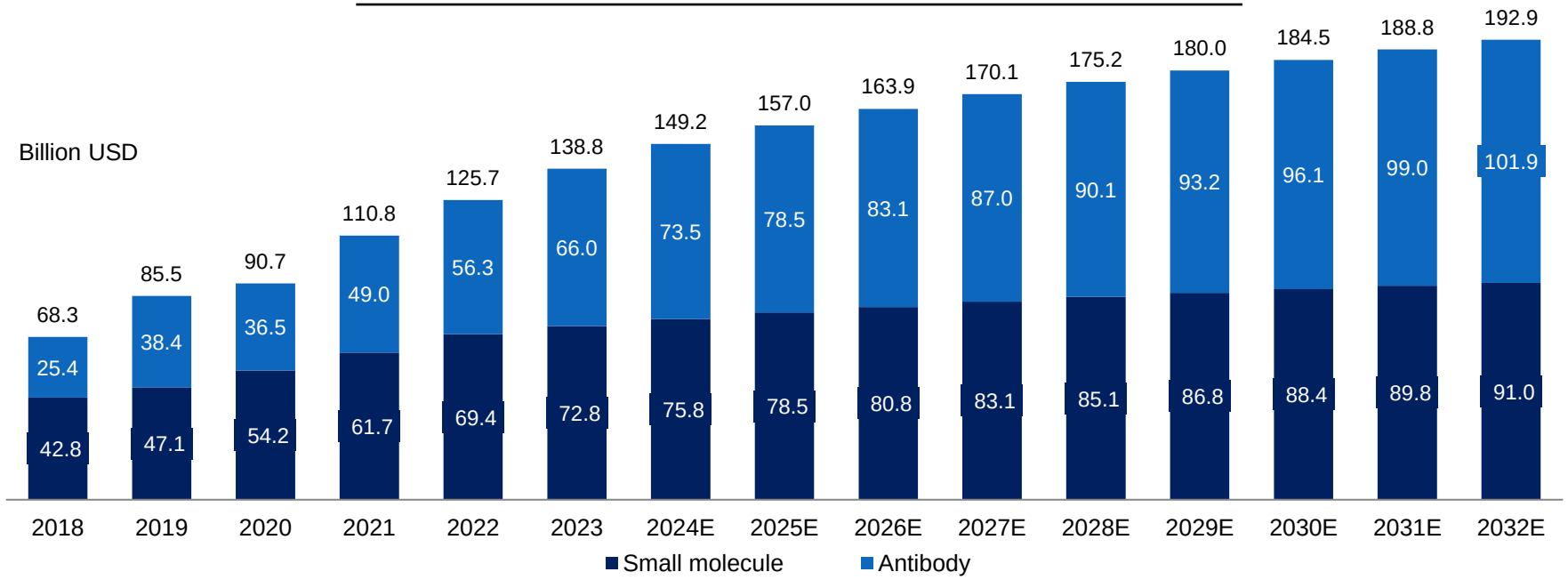
Source: Frost & Sullivan Analysis

Global Targeted Drugs Market, 2018-2032E

- Global targeted drug market amounts to USD138.8 billion in 2023, with a CAGR of 15.2%. The targeted drug market is expected to reach US$175.2 billion in 2028 and US$192.9 billion in 2032 at a CAGR of 4.8% from 2023 to 2028 and 2.4% from 2028 to 2032.

Global Targeted Drugs Market, 2018-2032E

Period	CAGR		
	Small molecule	Antibody	Total
2018-2023	11.2%	21.0%	15.2%
2023-2028E	3.2%	6.4%	4.8%
2028E-2032E	1.7%	3.1%	2.4%



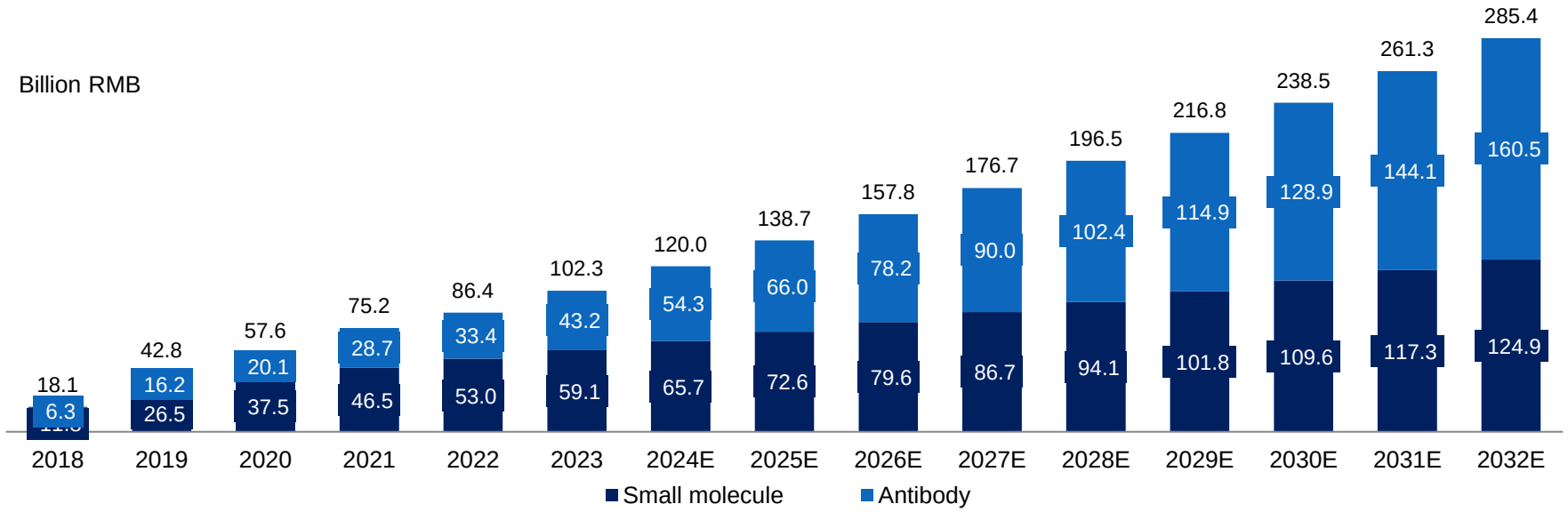
Source: Frost & Sullivan Analysis

China Targeted Drugs Market, 2018-2032E

- The China targeted drug market has grown from RMB18.1 billion in 2018 to RMB102.3 billion in 2023, with a CAGR of 41.5%. It is expected to reach RMB196.5 billion in 2028 and RMB285.4 billion in 2032 at a CAGR of 13.9% from 2023 to 2028 and 9.8% from 2028 to 2032.

China Targeted Drugs Market, 2018-2032E

Period	CAGR		
	Small molecule	Antibody	Total
2018-2023	38.1%	47.0%	41.5%
2023-2028E	9.7%	18.8%	13.9%
2028E-2032E	7.3%	11.9%	9.8%



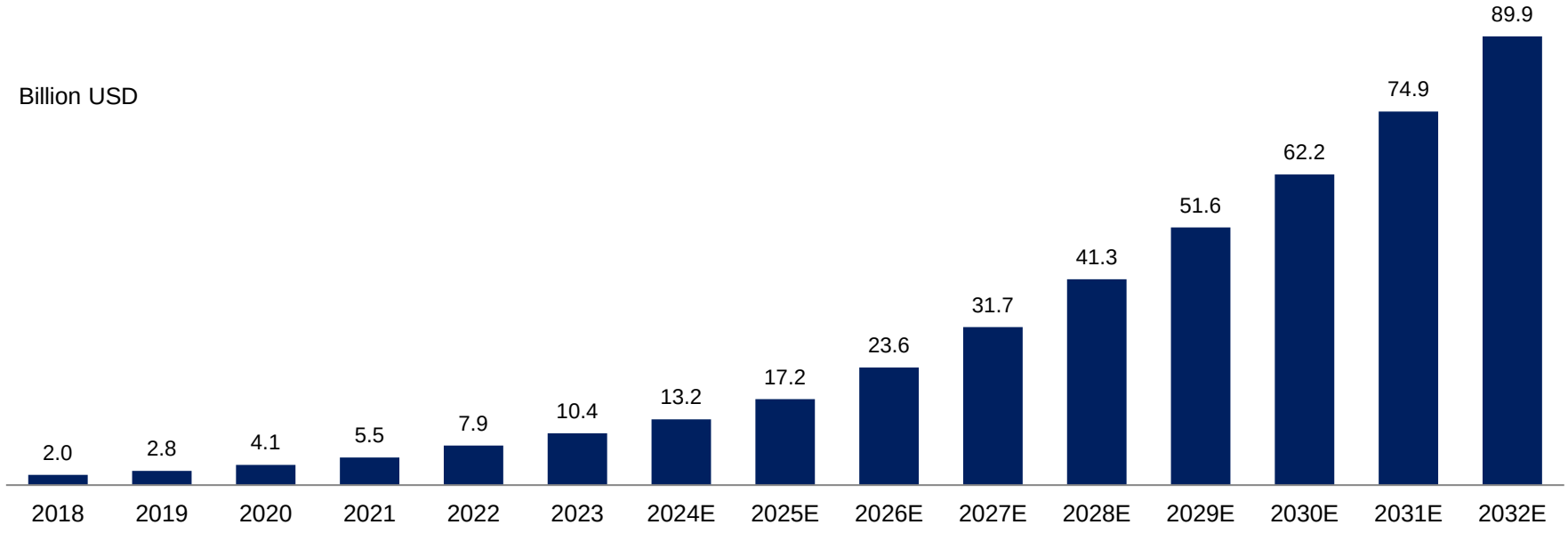
Source: Frost & Sullivan Analysis

Global Oncology ADC Market, 2018-2032E

- The global oncology ADC market has grown rapidly in the past few years, from USD 2.0 billion in 2018 to USD 10.4 billion in 2023, with a CAGR of 38.6%. It is expected to reach US$41.3 billion in 2028 and US$89.9 billion in 2032 at a CAGR of 31.8% from 2023 to 2028 and 21.5% from 2028 to 2032.

Global Oncology ADC Market, 2018-2032E

Period	CAGR
2018-2023	38.6%
2023-2028E	31.8%
2028E-2032E	21.5%



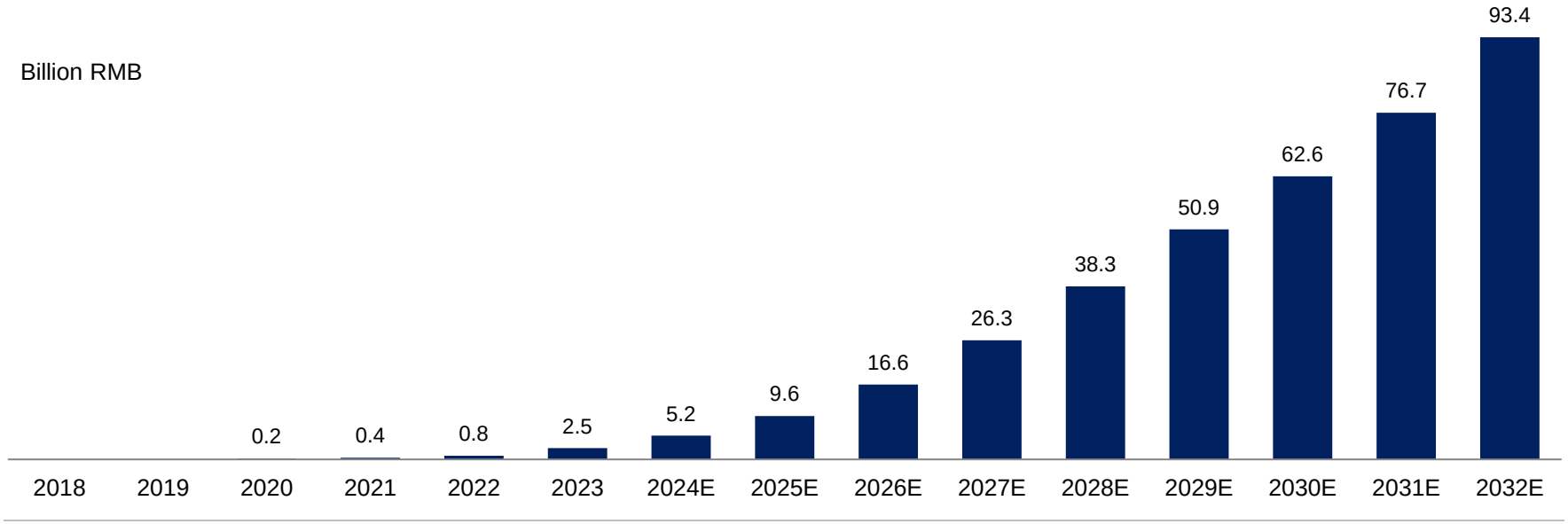
Source: Frost & Sullivan Analysis

China Oncology ADC Market, 2018-2032E

- The China oncology ADC market has grown rapidly in the past few years, from RMB0.2 billion in 2020 to RMB2.5 billion in 2023, with a CAGR of 149.0%. It is expected to reach RMB38.3 billion in 2028 and RMB93.4 billion in 2032 at a CAGR of 72.6% from 2023 to 2028 and 25.0% from 2028 to 2032.

China Oncology ADC Market, 2018-2032E

Period	CAGR
2020-2023	149.0%
2023-2028E	72.6%
2028E-2032E	25.0%



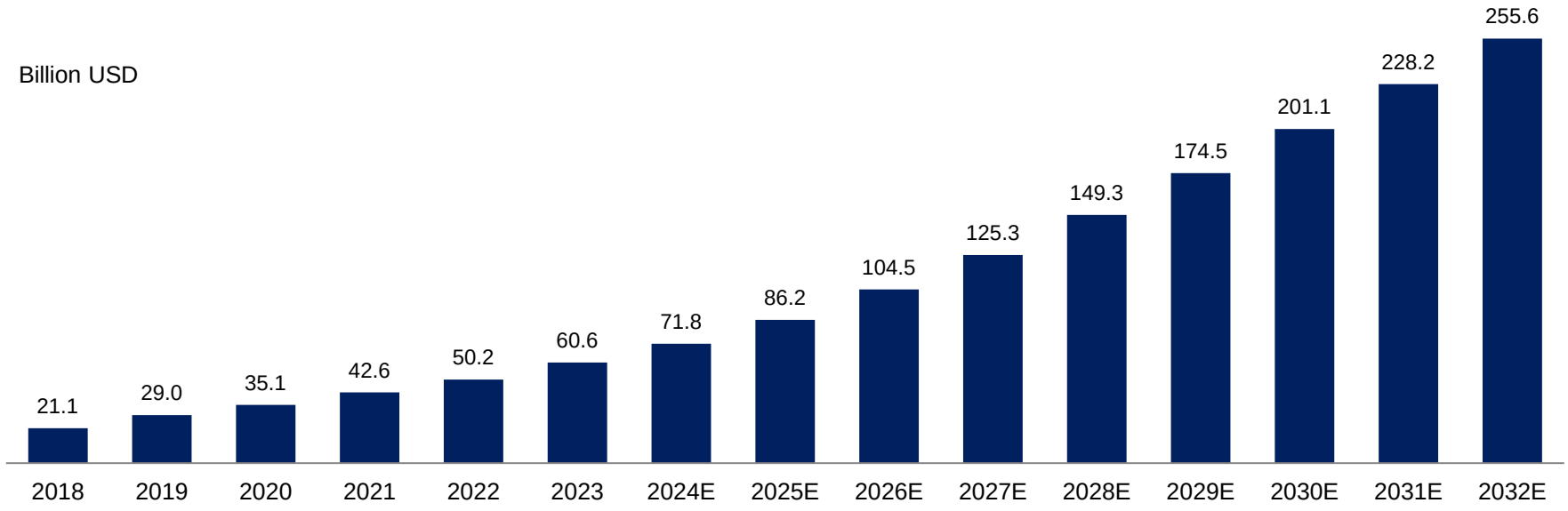
Source: Frost & Sullivan Analysis

Global Immuno-Oncology Drug Market, 2018-2032E

- Immuno-Oncology therapies are emerging cancer therapies in global market, including the therapies of cytokines, therapeutic cancer vaccine, checkpoint antibodies and adoptive cell transfer therapies. In 2023, global Immuno-Oncology therapies market has reached US$ 60.6 billion, growing from US$ 21.1 billion in 2018. It is expected to reach US$149.3 billion in 2028 and US$255.6 billion in 2032 at a CAGR of 19.8% from 2023 to 2028 and 14.4% from 2028 to 2032.

Global Immuno-Oncology Drug Market, 2018-2032E

Period	CAGR
2018-2023	23.5%
2023-2028E	19.8%
2028E-2032E	14.4%



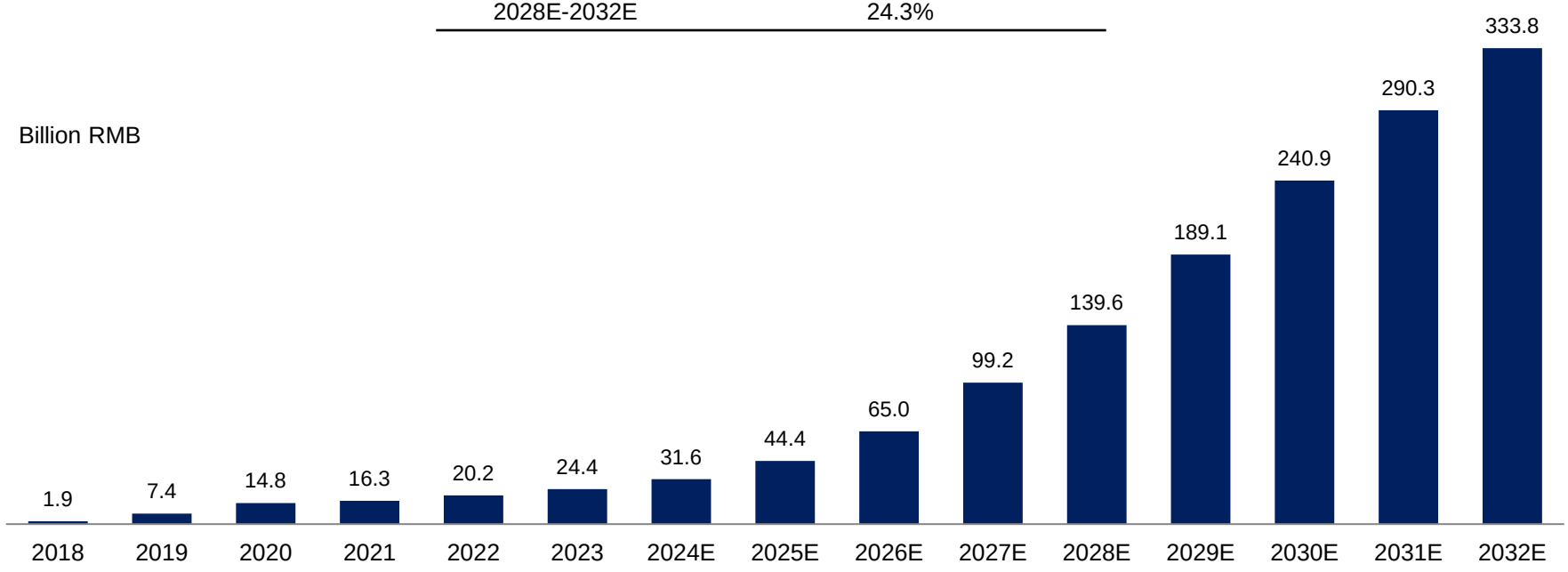
Source: Frost & Sullivan Analysis

China Immuno-Oncology Drug Market, 2018-2032E

- Immuno-Oncology therapies are emerging cancer therapies in global market, including the therapies of cytokines, therapeutic cancer vaccine, checkpoint antibodies and adoptive cell transfer therapies. In 2023, China Immuno-Oncology therapies market has reached RMB24.4 billion, growing from RMB1.9 billion in 2018. It is expected to reach RMB139.6 billion in 2028 and RMB333.8 billion in 2032 at a CAGR of 41.7% from 2023 to 2028 and 24.3% from 2028 to 2032.

China Immuno-Oncology Drug Market, 2018-2032E

Period	CAGR
2018-2023	66.4%
2023-2028E	41.7%
2028E-2032E	24.3%



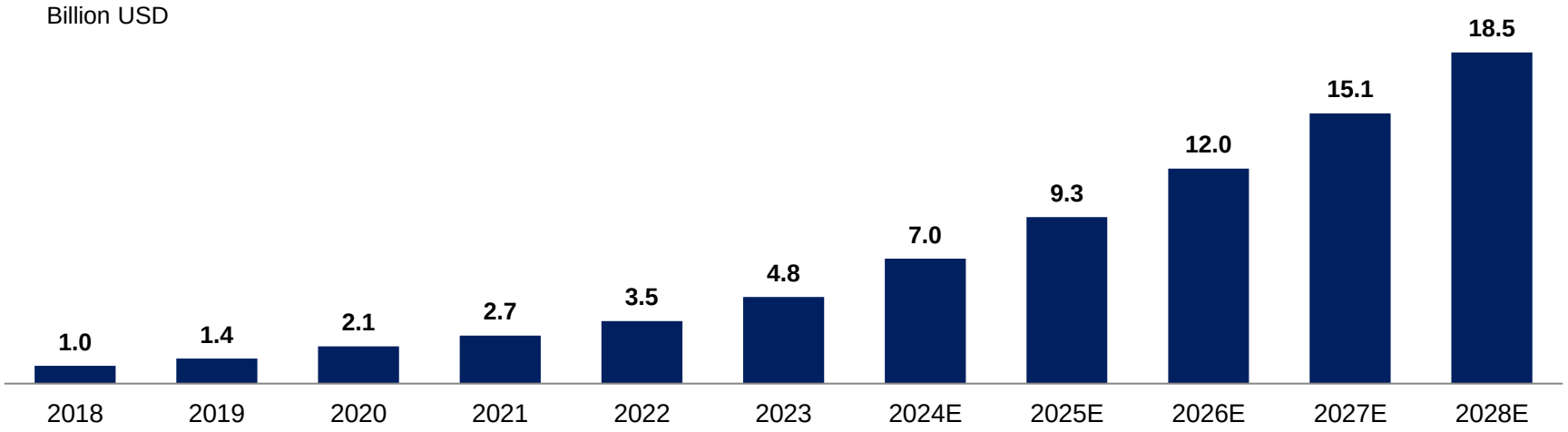
Source: Frost & Sullivan Analysis

Global HER2 ADCs Market Size, 2018-2028E

- Global HER2 ADCs market is estimated to increase from USD 4.8 billion in 2023 to 18.5 billion in 2028, with a CAGR of 30.8%.

Global HER2 ADCs Market Size, 2018-2028E

Period	CAGR
2018-2023	37.1%
2023-2028E	30.8%



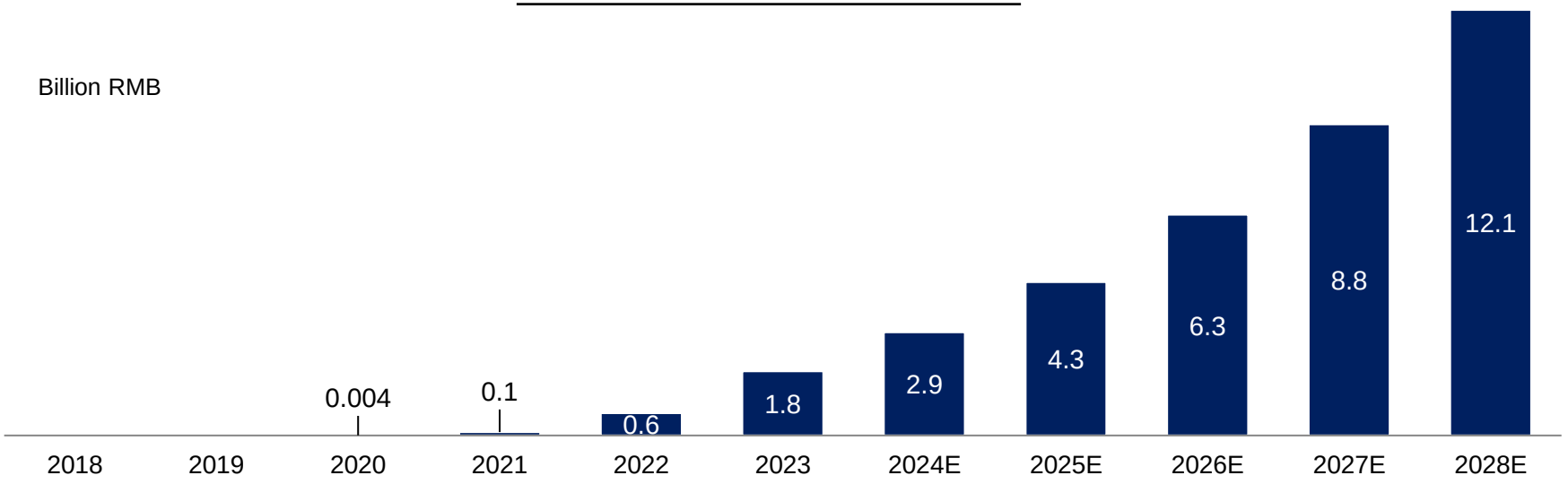
Source: Frost & Sullivan analysis

China HER2 ADCs Market Size, 2018-2028E

- Until 2020, the first ADC targeting HER2 was approved for marketing in China. It is the beginning for nationally developed ADC drugs. HER2 ADCs market in China reached RMB 1.8 billion in 2023 Chinese HER2 ADCs market will further increase to RMB 12.1 billion in 2028.

China HER2 ADCs Market Size, 2018-2028E

Period	CAGR
2020-2023	657.1%
2023-2028E	46.0%



Source: Frost & Sullivan analysis

Global Marketed HER2-ADC Drugs Targeting Solid Tumors

Drug Name	Company	Indications	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Kadcyla® (Adotrastuzumab emtansine; T-DM1)	Roche	HER2+ Breast cancer	2013-02	2021-06	2,223.7
		HER2+ EBC	2019-05	2020-01	
Enhertu® (Trastuzumab deruxtecan; DS8201)	Daiichi Sankyo /AstraZeneca	HER2+ Breast cancer	2019-12	NA	3,754.0
		HER2+ GC or GJA	2021-01	2024-08	
		HER2+ Breast cancer	2022-05	2023-2	
		HER2-low Breast cancer	2022-08	2023-07	
		HER2m NSCLC			
		HER2+ Solid tumors	2022-08	2024-10	
			2024-04	NA	
Aidixi® (Disitamab Vedotin)	RemeGen	HER2-overexpression GC	NA	2021-06	NA
		HER2-overexpression UC		2022-01	

Note: 1. This table was last updated on 2025-05-05. 2. EBC: Early breast cancer; GC/GJA: Gastric cancer; UC: urothelial carcinoma

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of HER2 ADC Drug Pipelines Targeting Solid Tumors

Drug Name	Company	Indications	Highest Phase	CDE Acceptance Date / First Posted Date	Country*
Trastuzumab botidotin	Kelun Pharmaceutical	HER2+ Breast cancer	NDA	2023-05	China
SHR-A1811	**Hengrui Medicine**	**NSCLC**	**NDA**	**2024-09**	**China**
MRG002	Miracogen	Urothelial carcinoma	Phase III	2023-01	China
FS-1502	Fosun Pharmaceutical	HER2-positive Unresectable locally advanced or metastatic breast cancer	Phase III	2023-02	China
BNT323	Duality Biologics Pharmaceutical	HER2-low Breast cancer	Phase III	2023-08	China, US, France, Canada, etc.
JSKN003	Alphamab Oncology	HER2-low Breast cancer	Phase III	2023-10	China
BL-M07D1	Biokin Pharmaceutical	Locally advanced or metastatic breast cancer	Phase III	2024-03	China
TQB2102	Chia Tai-tianqing Pharmaceutical	HER2-low Locally advanced or metastatic breast cancer	Phase III	2024-08	China
IBI354	Innovent	Advanced ovarian cancer Primary peritoneal cancer Fallopian tube cancer	Phase III	2025-02	China
ARX788	Zhejiang Medicine	HER2+ Breast cancer	Phase II/III	2020-06	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate, and only the trial sites including China are listed in the above table.*

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of Nectin-4 ADC Drugs Targeting Solid Tumors

- Nectin-4 ADC is a targeted therapy designed to deliver a cytotoxic payload specifically to cancer cells overexpressing Nectin-4, a type I transmembrane cell adhesion molecule associated with tumor progression and poor prognosis. By binding to Nectin-4, the ADC enables selective internalization and release of the cytotoxic agent, effectively killing cancer cells while minimizing damage to normal tissues.Nectin-4 ADC has shown potential in treating various malignancies.

➢ Marketed Nectin-4 ADC Drugs Targeting Solid Tumors

Drug Name	Company	Indications	FDA Approval	NMPA Approval	Sales in 2023 (million USD)	Sales in 2024Q1-Q3 (million USD)
Padcev® (Enfortumab vedotin)	Pfizer, Seagen, Astellas Pharma, Baxter International	Urothelial Cancer/Bladder cancer	2019-12	2024-08	1,178	1,892

➢ Clinical Pipeline of Nectin-4 ADC Drugs Targeting Solid Tumors

Drug Name	Company	Highest Phase	First Posted Date	Indications	Country*
9MW2821	Shanghai Institute of Materia Medica Chinese Academy of Sciences, Mabwell, Jiangsu Maiweikang New Drug Development	Phase III	2023-12	Urothelial cancer, Bladder cancer	China
SHR-A2102	**Hengrui Medicine**	**Phase III**	**2024-12**	**Urothelial Cancer, Bladder cancer**	**China**
BAT8007	Bio-Thera Solutions	Phase I	2022-12	Solid tumor, Urothelial Cancer, Non-small cell lung cancer, Prostate cancer, Esophageal squamous cell carcinoma, Hepatocellular carcinoma, Epithelial Ovarian cancer	China
SKB410	Sichuan Kelun-Biotech Biopharma, Merck Sharp & Dohme	Phase I	2023-04	Solid tumor	China
ADRX-0706	Adcentrx, Shanghai Defeng Pharma	Phase I	2023-09	Solid tumor, Urothelial Cancer, Non-small cell lung cancer, Breast cancer, Pancreatic cancer, Cervical cancer, Head and neck squamous cell carcinom, Epithelial Ovarian cancer	China, US

Note: 1. This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate, and only the trial sites including China are listed in the above table.*

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of AR-PROTAC Drug Pipelines Targeting Prostate Cancer

- AR-PROTAC is a bifunctional molecule designed to selectively degrade the androgen receptor (AR) by leveraging the ubiquitin-proteasome system. It consists of a ligand that binds to AR and a ligand that recruits an E3 ubiquitin ligase, facilitating targeted protein degradation.
- By eliminating AR rather than merely inhibiting its activity, AR PROTACs offer a novel therapeutic approach to androgen-driven cancers, such as prostate cancer, with potential advantages in overcoming resistance to traditional AR inhibitors.

➢ **Clinical Pipeline of AR-PROTAC Drug Targeting Prostate Cancer**

Drug Name	Company	Indications	Highest Phase	First Posted Date	Country*
Gridegalutamide	Celgene	Castration-resistant prostate cancer	Phase III	2025-01	China, US, Canada, Brazil, etc.
HRS-5041	**Hengrui Medicine**	**Prostate cancer**	**Phase II**	**2024-12**	**China**
		Prostate cancer	**Phase I/II**	**2024-08**	**China**
HP518	Hinava Pharma	Castration-resistant prostate cancer	Phase I/II	2023-11	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate, and only the trial sites including China are listed in the above table.*

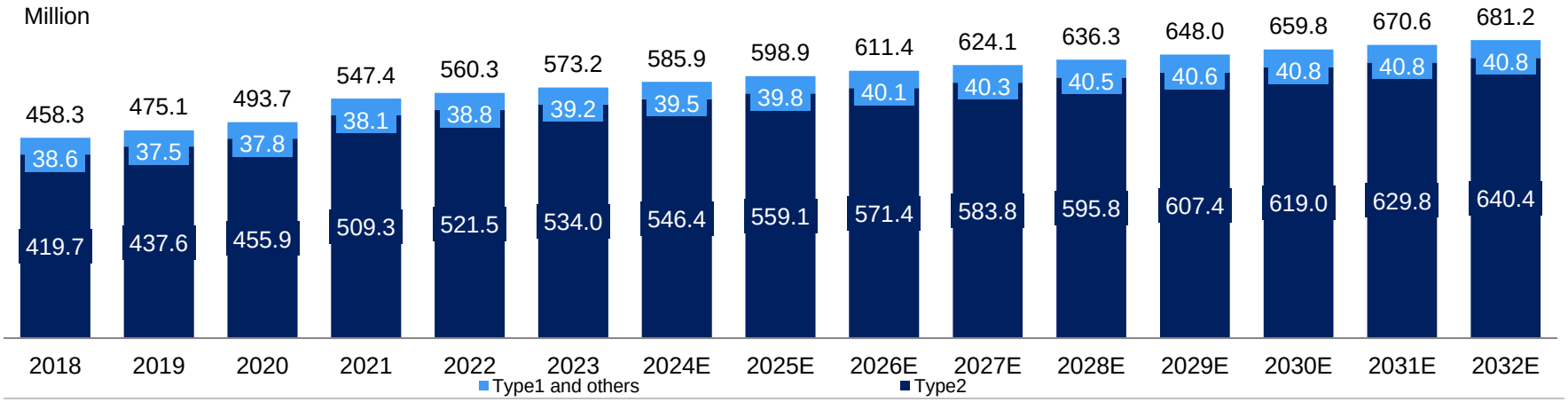
Source: FDA, NMPA, Frost & Sullivan

Global Prevalence of Diabetes, 2018-2032E

- The number of diabetic patients in the world has been increasing for many years, and most of them are type 2 diabetes patients.
- The number of diabetes patients in the world has increased from 458.3 million in 2018 to 573.2 million in 2023, with a CAGR of 4.6%. As a result of the combined effects of socio-economic, demographic, environmental and genetic factors, it is estimated that the number of diabetes patients in the world will reach about 636.3 million in 2028 and 681.2 million in 2032.

Global Prevalence of Diabetes, 2018-2032E

Period	CAGR		
	Type 2	Type 1 and others	Total
2018-2023	4.9%	0.3%	4.6%
2023-2028E	2.2%	0.7%	2.1%
2028E-2032E	1.8%	0.2%	1.7%



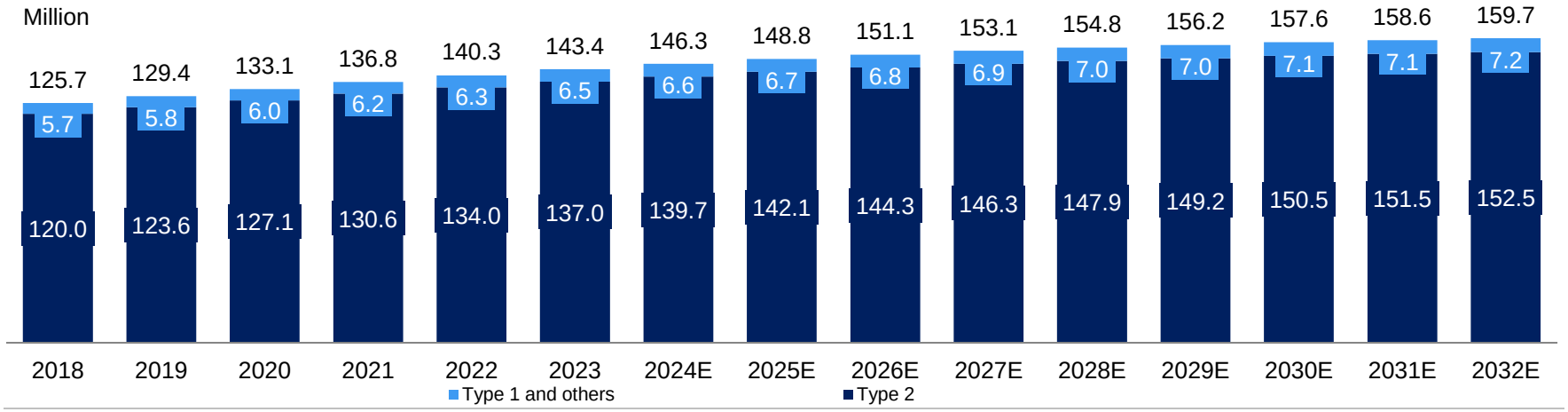
Source: WHO, IDF, ADA, Frost & Sullivan analysis

Prevalence of Diabetes in China, 2018-2032E

- The number of diabetes patients in China has been increasing for many years, and most of them are type 2 diabetes.
- The number of diabetes patients in China has increased from 125.7 million in 2018 to 143.4 million in 2023, with a CAGR of 2.7%. As a result of the combined effects of socio-economic, demographic, environmental and genetic factors, it is estimated that the number of diabetic patients in China will reach about 154.8 million in 2028 and 159.7 million in 2032.

Prevalence of Diabetes in China, 2018-2032E

Period	CAGR		
	Type 2	Type 1 and others	Total
2018-2023	2.7%	2.7%	2.7%
2023-2028E	1.5%	1.5%	1.5%
2028E-2032E	0.8%	0.8%	0.8%



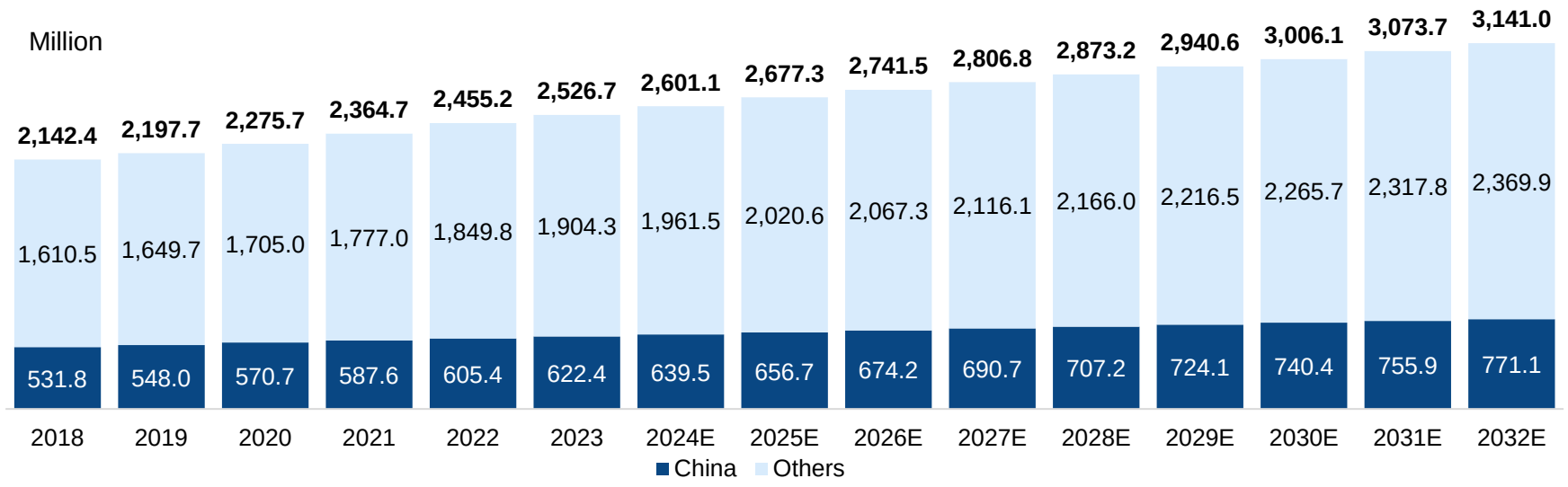
Source: WHO, IDF, ADA, Frost & Sullivan analysis

Global Prevalence of Obesity/Overweight, 2018-2032E

- In recent years, the number of patients with obesity/overweight in the world has increased rapidly, from 2,142.4 million to 2,526.7 million in 2018 and 2023, with a CAGR of 3.4%, due to factors such as changes in dietary structure and lifestyle. It is predicted that the number of patients with obesity/overweight in the world will continue to increase, reaching 2,873.2 million in 2028, with a CAGR of 2.6% from 2023 to 2028, 3,141.0 million in 2032 with a CAGR of 2.3% from 2028 to 2032.
- In recent years, the number of patients with obesity/overweight in China has increased rapidly, from 531.8 million to 622.4 million in 2018-2023, with a CAGR of 3.2%, due to factors such as changes in dietary structure and lifestyle. It is predicted that the number of patients with obesity/overweight in China will continue to increase, reaching 707.2 million in 2028, with a CAGR of 2.6% from 2023 to 2028, 771.1 million in 2032 with a CAGR of 2.2% from 2028 to 2032.

Global Prevalence of Obesity/Overweight, 2018-2032E

Period	China	Global
2018-2023	3.2%	3.4%
2023-2028E	2.6%	2.6%
2028E-2032E	2.2%	2.3%



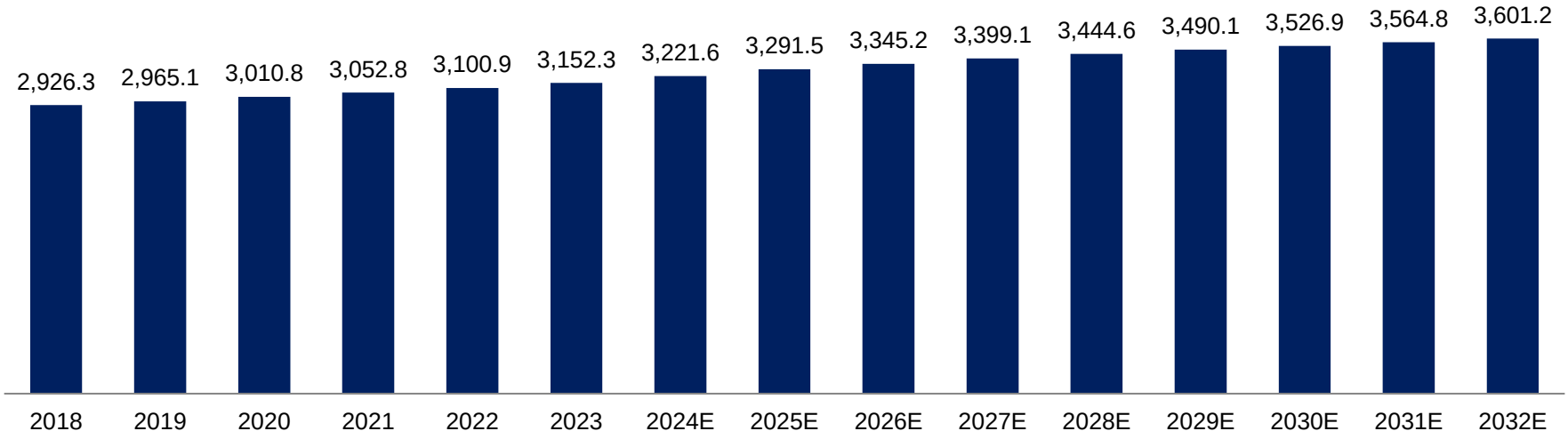
Source: Frost & Sullivan Analysis

Global Prevalence of Dyslipidemia, 2018-2032E

- The global prevalence of dyslipidemia has been incresing in recent years. In 2023, the prevalence of dyslipidemia reached 3,152.3 million in the worldwide. The number is expected to reach 3,444.6 million in 2028 and 3,601.2 million in 2032 at a CAGR of 1.8% from 2023 to 2028 and 1.1% from 2028 to 2032.

Global Prevalence of Dyslipidemia，2018-2032E

Period	CAGR
2018-2023	1.5%
2023-2028E	1.8%
2028E-2032E	1.1%



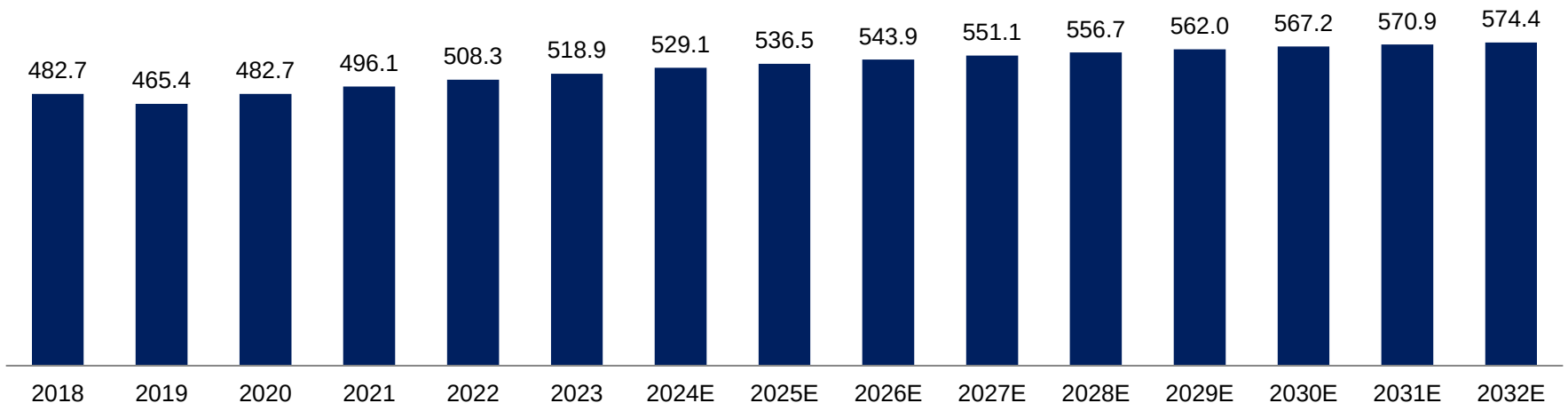
Source: Frost & Sullivan Analysis

China Prevalence of Dyslipidemia, 2018-2032E

- The prevalence of dyslipidemia in China has been incresing in recent years. In 2023, the prevalence of dyslipidemia reached 518.9 million in China. The number is expected to reach 556.7 million in 2028 and 574.4 million in 2032 at a CAGR of 1.4% from 2023 to 2028 and 0.8% from 2028 to 2032.

China Prevalence of Dyslipidemia, 2019-2032E

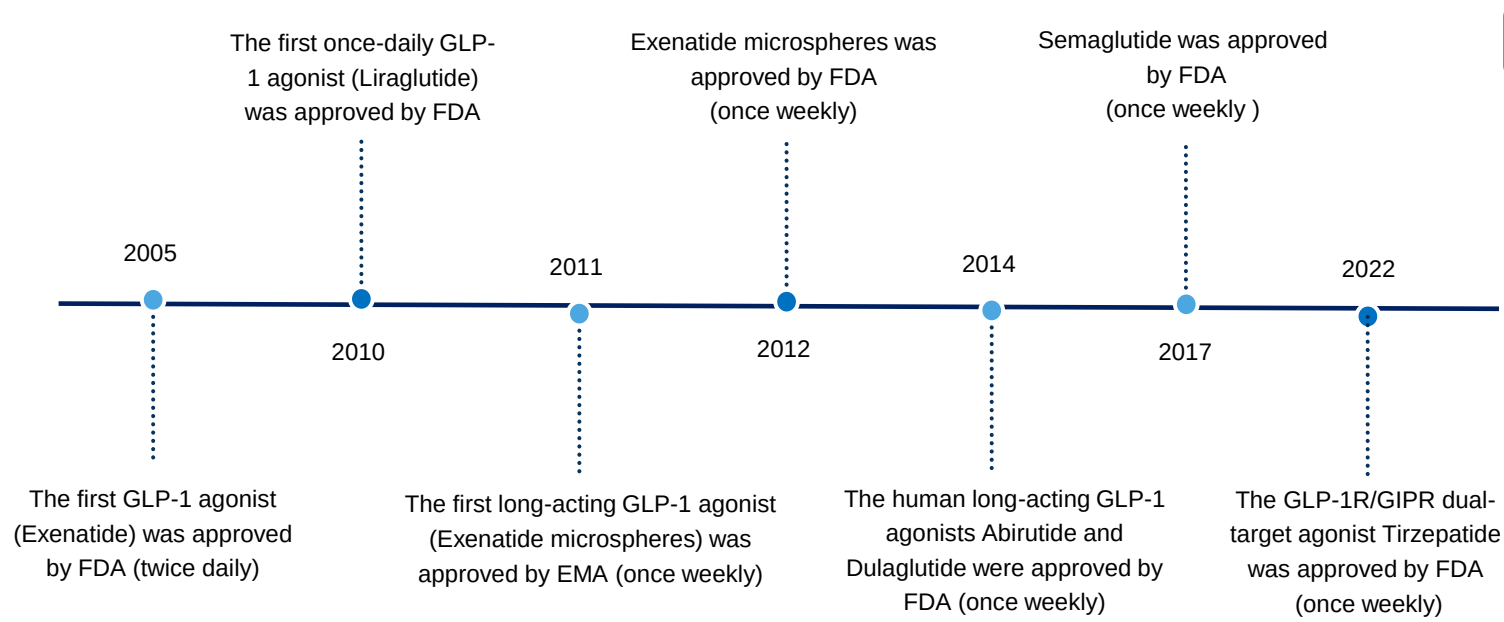
Period	CAGR
2018-2023	1.5%
2023-2028E	1.4%
2028E-2032E	0.8%



Source: Frost & Sullivan Analysis

Development History of GLP-1 Receptor Agonists

- GLP-1 drug development has experienced the development from animal source to human source, from short-acting to long-acting, depending on its excellent safety and patient compliance, human long-acting GLP-1 drugs have become the development trend.



Major Future Trends of GLP-1

- Wider application of oral tablet dosage form
- Development of super long-acting dosage form
- Approval of multi-targeted GLP-1 antagonists
- Weight loss without muscle loss

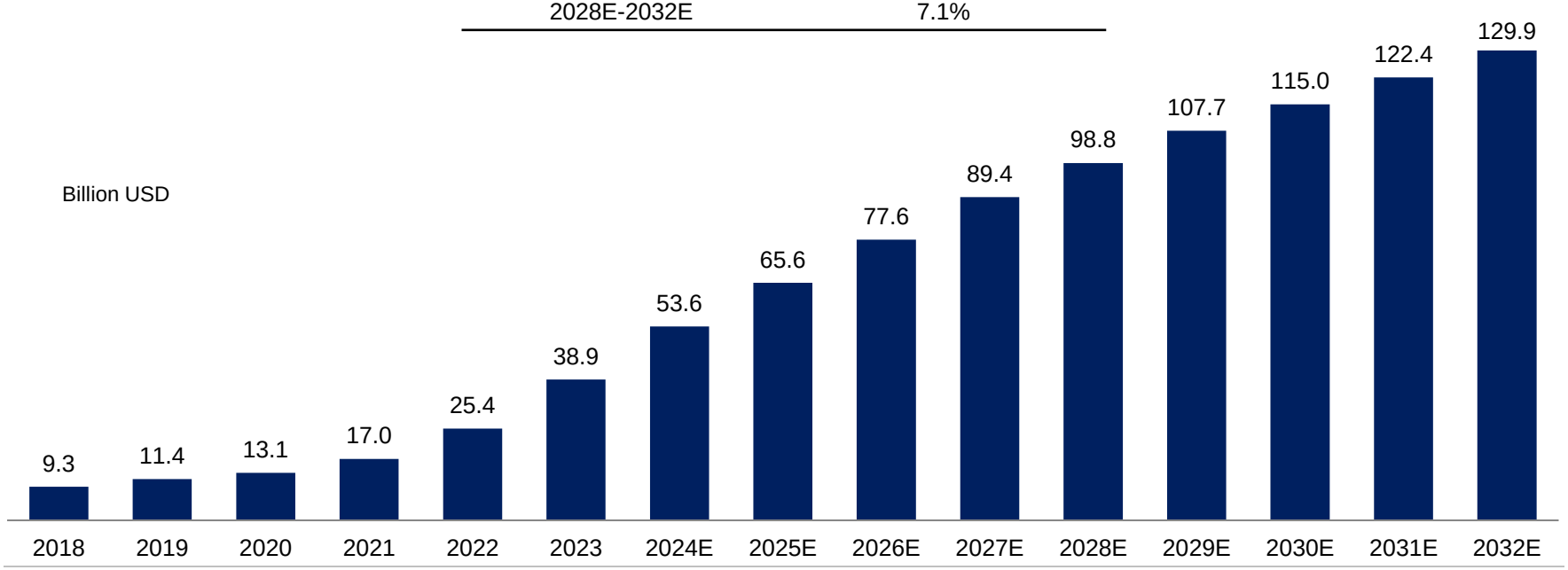
Source: Frost & Sullivan analysis

Global GLP-1 Drug Market, 2018-2032E

- In 2023, the global GLP-1 drug market is USD38.9 billion. It is estimated that the global GLP-1 drug market will grow to USD98.8 billion in 2028 and USD129.9 billion in 2032.

Global GLP-1 Drug Market, 2018-2032E

Period	CAGR
2018-2023	33.2%
2023-2028E	20.5%
2028E-2032E	7.1%



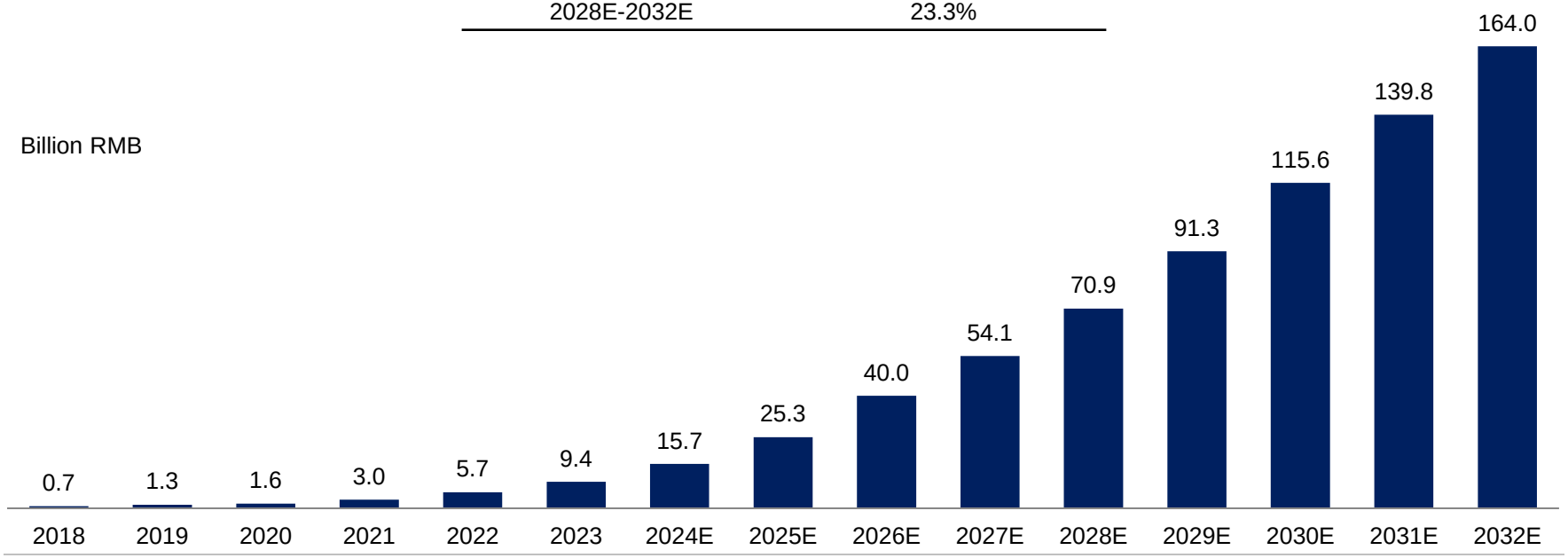
Source: Annual Report, Frost & Sullivan Analysis

GLP-1 Drug Market in China, 2018-2032E

- In 2023, the GLP-1 drug market in China is RMB9.4 billion. It is estimated that the GLP-1 drug market in China will grow to RMB70.9 billion in 2028 and RMB164.0 billion in 2034.

GLP-1 Drug Market in China, 2018-2032E

Period	CAGR
2018-2023	67.5%
2023-2028E	49.7%
2028E-2032E	23.3%



Source: Annual Report, Frost & Sullivan Analysis

Global Competitive Landscape of GLP-1/GIP Dual Receptor Agonist Drug Targeting Obesity and Type 2 Diabetes (Injection)

- GLP-1 and GIP receptor dual agonists activate both glucagon-like peptide-1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP) receptors, thus enhancing insulin secretion, suppressing appetite, and improving metabolic regulation.
- These dual agonists have demonstrated significant benefits in reducing body weight, blood glucose, blood pressure, and triglycerides in clinical studies, while maintaining a favorable safety profile, making them a promising therapy for type 2 diabetes and obesity management.
- As of the Latest Practicable Date, tirzepatide was the only marketed injection GLP-1/GIP receptor dual agonist drug worldwide.

➢ **Marketed GLP-1/GIP Dual Receptor Targeting Obesity and Type 2 Diabetes (Injection)**

Drug Name	Company	Indications	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Mounjaro® (Tirzepatide)	Eli Lilly	Type 2 Diabetes	2022-05	2024-05	11,540.1
Zepbound® (Tirzepatide)		Obesity	2023-11	2024-07	4,925.7

➢ **Clinical Pipeline GLP-1/GIP Dual Receptor Targeting Obesity and Type 2 Diabetes (Injection)**

Drug Name	Company	Indications	Highest Phase	First Posted Date	Country*
HRS9531	**Hengrui Medicine**	**Obesity**	**Phase III**	**2024-05**	**China**
		Type 2 Diabetes	**Phase III**	**2024-10**	**China**
		Type 2 Diabetes	**Phase III**	**2024-11**	**China**
BGM0504	Borui Xinchuang Biopharmaceutical	Obesity	Phase III	2024-10	China
HS-20094	Hansoh Pharmaceutical	Obesity	Phase III	2024-10	China
RAY1225	Zhongsheng Ruichuang Biological Technology	Obesity	Phase III	2025-03	China
THDBH120	Dongbao Zixing (Hangzhou) Biopharmaceutical	Obesity	Phase II	2024-12	China
HDM1005	Zhongmei Huadong Pharmaceutical	Obesity	Phase II	2025-01	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate, and only the trial sites including China are listed in the above table.*

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of GLP-1 Drug (Oral) Targeting Obesity and Type 2 Diabetes

- GLP-1 receptor agonists are a class of drugs designed to mimic the action of glucagon-like peptide-1 (GLP-1), a hormone that regulates blood sugar levels by enhancing insulin secretion, suppressing glucagon release, and slowing gastric emptying.
- They are particularly beneficial for treating patients with type 2 diabetes who have impaired GLP-1 secretion, offering improved glycemic control and potential weight loss benefits.

➢ **Marketed Oral GLP-1 Drug Targeting Obesity and Type 2 Diabetes**

Drug Name	Company	Indications	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Rybelsus® (Oral semaglutide)	Novo Nordisk	Type 2 Diabetes	2019-09	2024-01	3,381

➢ **Clinical Pipeline of GLP-1 Drug (Oral) Targeting Obesity and Type 2 Diabetes**

Drug Name	Company	Indications	Highest Phase	First Posted Date	Country*
LY3502970	Eli Lilly	Obesity	Phase III	2023-05	China, US, Japan, Spain, etc.
HRS-7535	**Hengrui Medicine**	**Type 2 Diabetes**	**Phase III**	**2024-09**	**China**
VCT220	Vincentage	Type 2 Diabetes	Phase III	2024-11	China
HDM1002	Zhongmei Huadong Pharmaceutical	Obesity	Phase III	2025-04	China
SAL0112	Salubris Pharmaceuticals	Type 2 Diabetes	Phase II	2024-08	China
MDR-001	MindRank Technology	Obesity	Phase II	2024-08	China
DA-302168S	Chendu DIAO Pharmaceutical Group CO., LTD.	Obesity	Phase II	2025-04	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate, and only the trial sites including China are listed in the above table.*

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of URAT1 Inhibitor Drug Targeting Hyperuricemia

- URAT1 inhibitors work by blocking urate transporter 1 (URAT1), an anion-exchanging uptake transporter from the organic anion transporter family, located on the apical membrane of renal proximal tubular cells.
- By inhibiting URAT1, these drugs reduce renal uric acid reabsorption, thereby promoting its excretion and lowering serum urate levels.
- URAT1 inhibitors offer a targeted therapeutic approach to managing hyperuricemia and gout by directly addressing impaired uric acid clearance.

➢ **Marketed URAT1 Inhibitor Drug Targeting Hyperuricemia**

Drug Name	Company	Indications	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Urece® (Dotinurad)	Mochida Pharmaceutical	Hyperuricemia	NA	2024-12	NA

➢ **Clinical Pipeline URAT1 Inhibitor Drug Targeting Hyperuricemia**

Drug Name	Company	Indications	Highest Phase	CDE Acceptance Date / First Posted Date	Country*
SHR4640	**Hengrui Medicine**	**Hyperuricemia**	**NDA**	**2025-01**	**China**
YL-90148	Yingli Pharmaceutical	Hyperuricemia	Phase III	2022-12	China
XNW3009	Xinnuowei Pharmaceutical	Hyperuricemia	Phase II/III	2022-10	China
ABP-671	New Element Pharmaceutical	Hyperuricemia	Phase II/III	2023-04	China
HP501	Asymchem Life Science	Hyperuricemia	Phase II/III	2024-03	China
AR882	Ruianbo Pharmaceutical	Hyperuricemia	Phase II/III	2024-04	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate, and only the trial sites including China are listed in the above table.*

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of ANGPTL3 Monoclonal Antibody Drugs Targeting Homozygous FH And Hyperlipidemia

- Anti-ANGPTL3 antibodies target angiopoietin-like 3 (ANGPTL3), a key regulator of lipid metabolism encoded by the ANGPTL3 gene.
- By inhibiting ANGPTL3, these antibodies reduce levels of triglycerides, low-density lipoprotein cholesterol, and other atherogenic lipoproteins, offering a promising therapeutic approach to managing dyslipidemia and cardiovascular diseases.

➢ **Marketed ANGPTL3 Monoclonal Antibody Drugs**

Drug Name	Company	Indications	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Evkeeza® (Evinacumab)	Regeneron/Ultragenyx	HoFH	2021-02	N/A	126

➢ **Clinical Pipeline ANGPTL3 Monoclonal Antibody Drugs Targeting Homozygous FH And Hyperlipidemia**

Drug Name	Company	Indications	Highest Phase	First Posted Date	Country*
SHR-1918	**Hengrui Medicine**	**HoFH**	**Phase III**	**2024-12**	**China**
LY3475766	Eli Lilly	Hyperlipidemia	Phase I	2019-08	US
NN 6491	Novo Nordisk	Hyperlipidemia	Phase I	2023-08	US
VERVE-201	Verve Therapeutics	Hyperlipidemia	Phase I	2024-06	Canada, UK

Note: 1. This table was last updated on 2025-05-05 2. HoFH: Homozygous familial hypercholesterolemia

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate*

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of Myosin Inhibitor Drug Targeting Obstructive hypertrophic cardiomyopathy

- Myosin inhibitors are designed to target cardiac myosin, thereby reducing excessive contractility and improving cardiac function in patients with hypertrophic cardiomyopathy (HCM) and related heart failure.
- By modulating myosin activity, these inhibitors help alleviate obstructive symptoms while potentially offering superior efficacy and safety profiles, which reduces the risk of adverse events associated with decreased contractility.

➢ **Marketed Myosin Inhibitor Targeting Obstructive hypertrophic cardiomyopathy**

Drug Name	Company	Indications	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
CAMZYOS® (Mavacamten)	BMS	Obstructive hypertrophic cardiomyopathy	2022-04	2024-04	602

➢ **Clinical Pipeline Myosin Inhibitor Targeting Obstructive hypertrophic cardiomyopathy**

Drug Name	Company	Indications	Highest Phase	FDA/CDE Acceptance Date / First Posted Date	Country*
Aficamten	Cytokinetics	Obstructive Hypertrophic Cardiomyopathy	NDA	2024-08 (FDA)	US
		Obstructive Hypertrophic Cardiomyopathy	NDA	2024-10 (NMPA)	China
HRS-1893	**Hengrui Medicine**	**Obstructive Hypertrophic Cardiomyopathy**	**Phase II**	**2024-07**	**China**
HS-10511	Hansoh Pharmaceutical	Obstructive hypertrophic cardiomyopathy	Phase I	2024-01	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate*

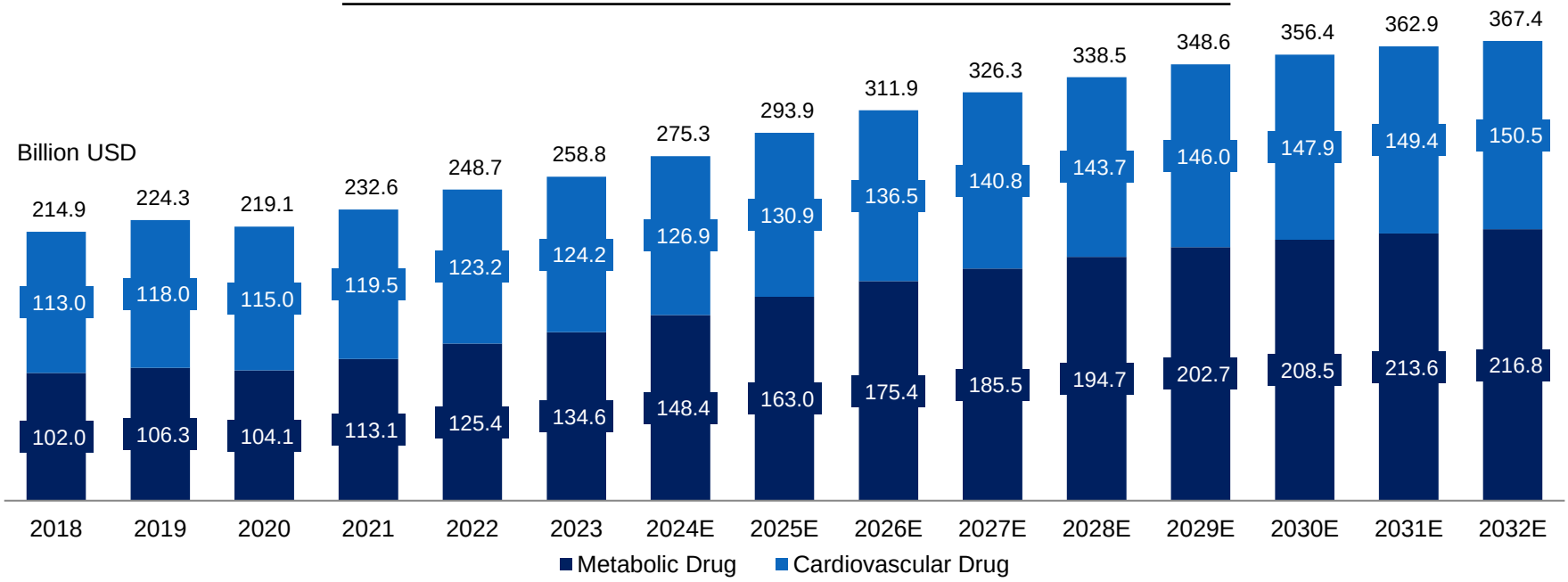
Source: FDA, NMPA, Frost & Sullivan

Global Metabolic and Cardiovascular Drug Market, 2018-2032E

- The global metabolic and cardiovascular drug market has grown rapidly in the past few years, from USD 214.9 billion in 2018 to USD258.8 billion in 2023, with a CAGR of 3.8%. It is expected to reach US$338.5 billion in 2028 and US$367.4 billion in 2032 at a CAGR of 5.5% from 2023 to 2028 and 2.1% from 2028 to 2032.

Global Metabolic and Cardiovascular Drug Market, 2018-2032E

Period	CAGR		
	Metabolic	Cardiovascular	Total
2018-2023	5.7%	1.9%	3.8%
2023-2028E	7.7%	3.0%	5.5%
2028E-2032E	2.7%	1.2%	2.1%



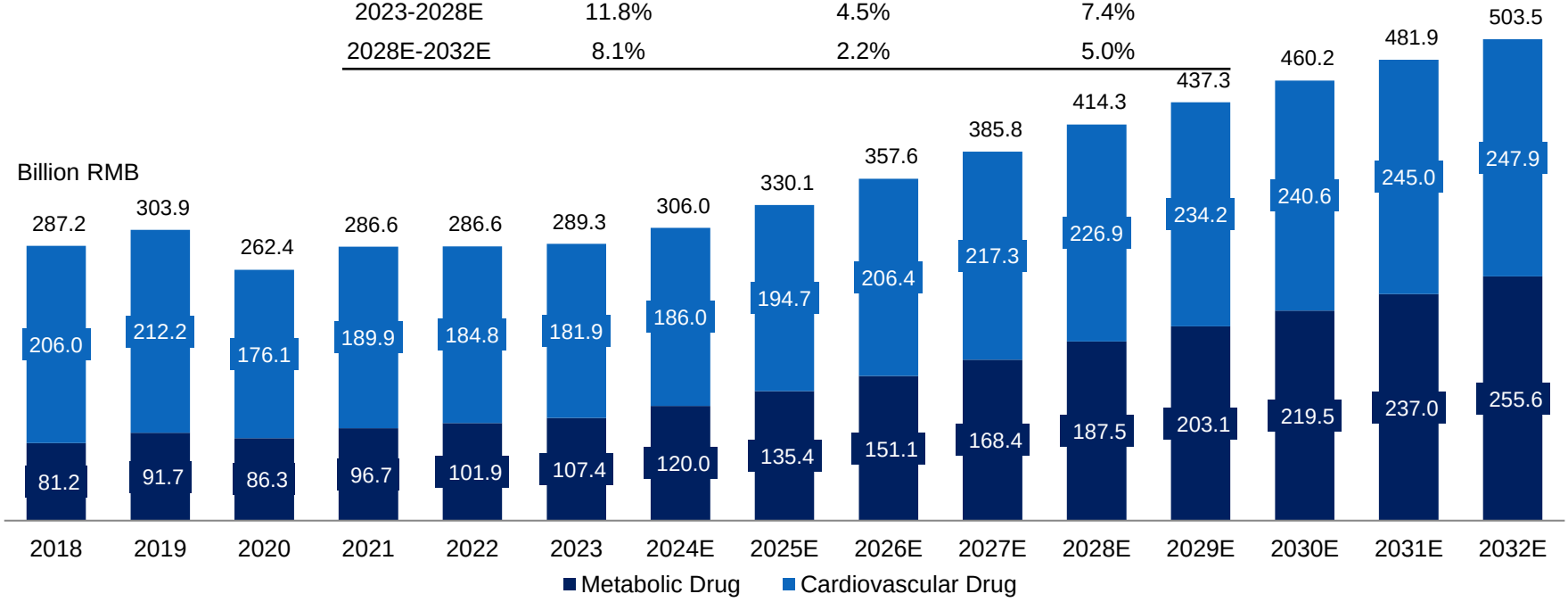
Source: Frost & Sullivan Analysis

China Metabolic and Cardiovascular Drug Market, 2018-2032E

- The China metabolic and cardiovascular drug market has grown rapidly in the past few years, from RMB287.2 billion in 2018 to RMB289.3 billion in 2023, with a CAGR of 0.1%. It is expected to reach RMB414.3 billion in 2028 and RMB503.5 billion in 2032 at a CAGR of 5.5% from 2023 to 2028 and 2.1% from 2028 to 2032.
- The declines of the global and Chinese metabolic and cardiovascular pharmaceutical markets in 2020 compared to the prior year were precipitated by a combination of factors, including the widespread impact of the COVID-19 pandemic, which disrupted healthcare services and patient access to medications; the implementation of a centralized procurement policies, particularly China's VBP scheme; and the ongoing dynamics of market competition and substitution, where newer, more cost-effective drugs replaced older, more expensive ones.

China Metabolic and Cardiovascular Drug Market, 2018-2032E

Period	CAGR		
	Metabolic	Cardiovascular	Total
2018-2023	5.7%	-2.5%	0.1%
2023-2028E	11.8%	4.5%	7.4%
2028E-2032E	8.1%	2.2%	5.0%



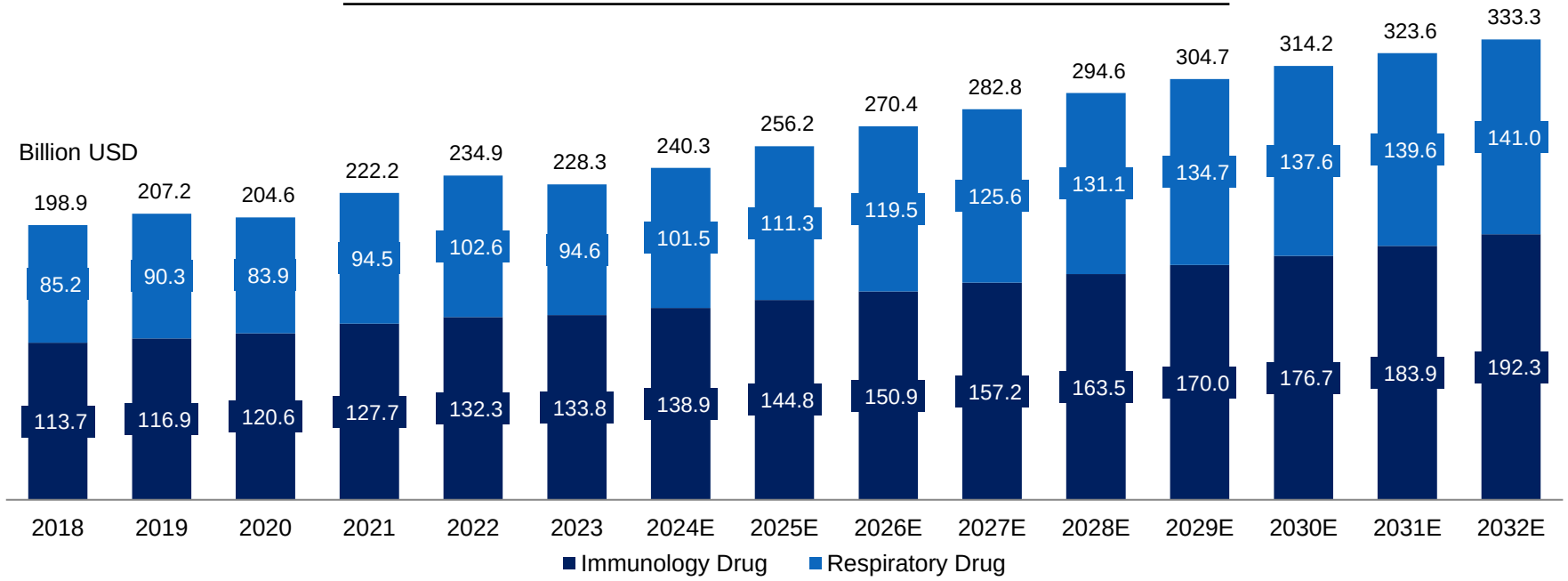
Source: Frost & Sullivan Analysis

Global Immunology and Respiratory Drug Market, 2018-2032E

- The global immunology and respiratory drug market has grown rapidly in the past few years, from USD 198.9 billion in 2018 to USD 228.3 billion in 2023, with a CAGR of 2.8%. It is expected to reach US$294.6 billion in 2028 and US$333.3 billion in 2032 at a CAGR of 5.2% from 2023 to 2028 and 3.1% from 2028 to 2032.

Global Immunology and Respiratory Drug Market, 2018-2032E

Period	CAGR		
	Immunology	Respiratory	Total
2018-2023	3.3%	2.1%	2.8%
2023-2028E	4.1%	6.8%	5.2%
2028E-2032E	4.1%	1.8%	3.1%



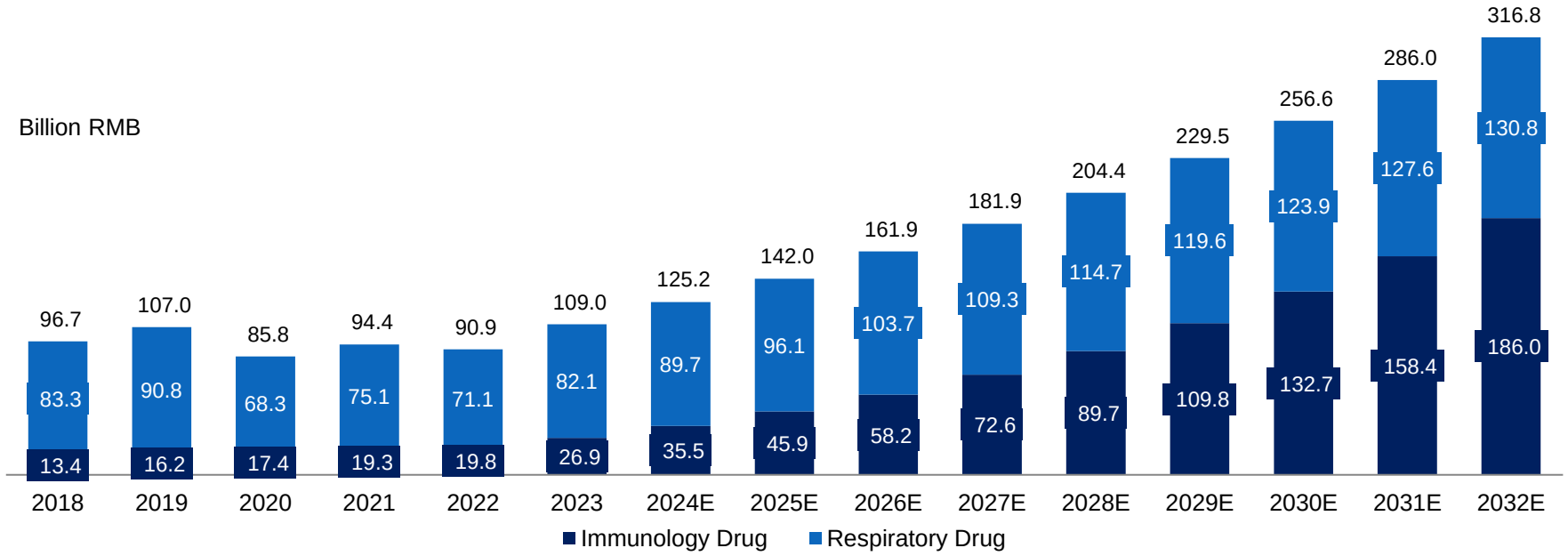
Source: Frost & Sullivan Analysis

China Immunology and Respiratory Drug Market, 2018-2032E

- The China immunology and respiratory drug market has grown rapidly in the past few years, from RMB96.7 billion in 2018 to RMB109.0 billion in 2023, with a CAGR of 2.4%. It is expected to reach RMB204.4 billion in 2028 and RMB316.8 billion in 2032 at a CAGR of 13.4% from 2023 to 2028 and 11.6% from 2028 to 2032.

China Immunology and Respiratory Drug Market, 2018-2032E

Period	CAGR		
	Immunology	Respiratory	Total
2018-2023	14.9%	-0.3%	2.4%
2023-2028E	27.3%	6.5%	13.4%
2028E-2032E	20.0%	3.3%	11.6%



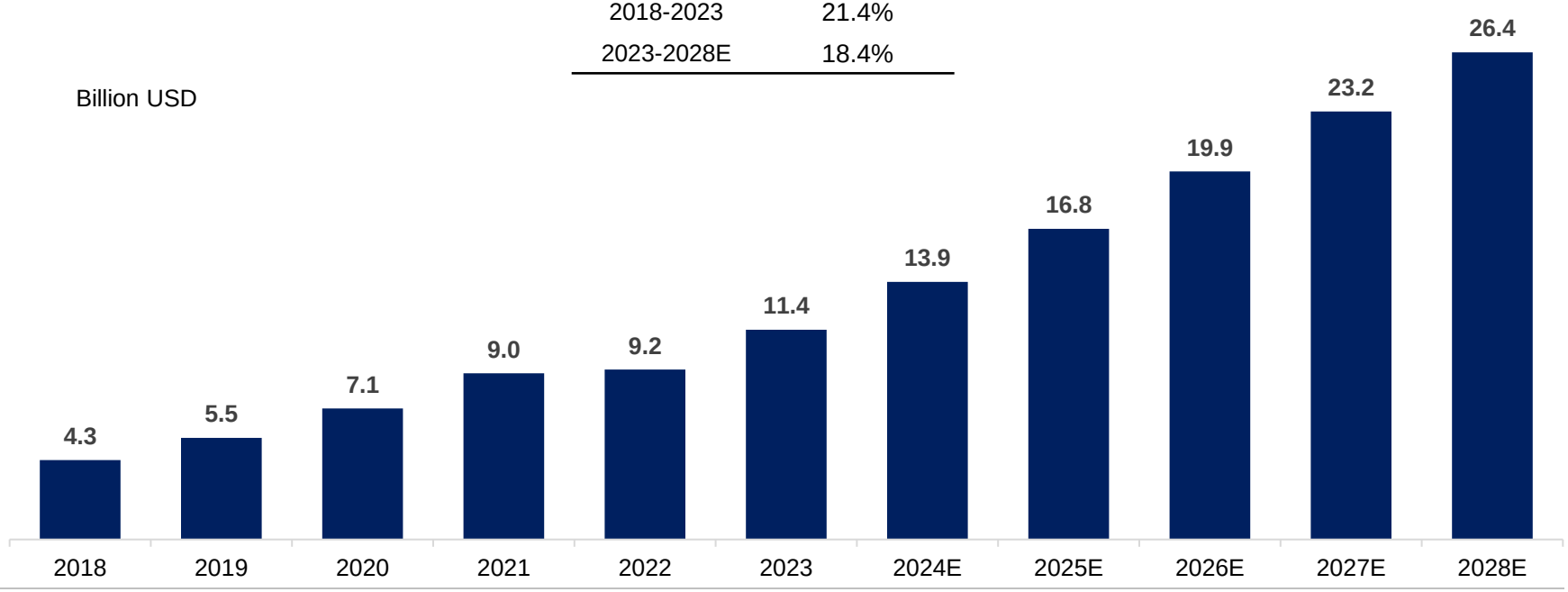
Source: Frost & Sullivan Analysis

Global JAK Inhibitors Market, 2018-2028E

- The size of Global JAK inhibitors market in 2018 was USD 4.3 billion, and quickly developed to USD 11.4 billion in 2023.
- It is expected that with more innovative JAK inhibitors coming in to Global market, the market will grow from USD 11.4 billion in 2023 to USD 26.4 billion in 2028, the CAGR of 2023 to 2028 is 18.4%.

Global JAK Inhibitors Market, 2018-2028E

Period	CAGR
2018-2023	21.4%
2023-2028E	18.4%



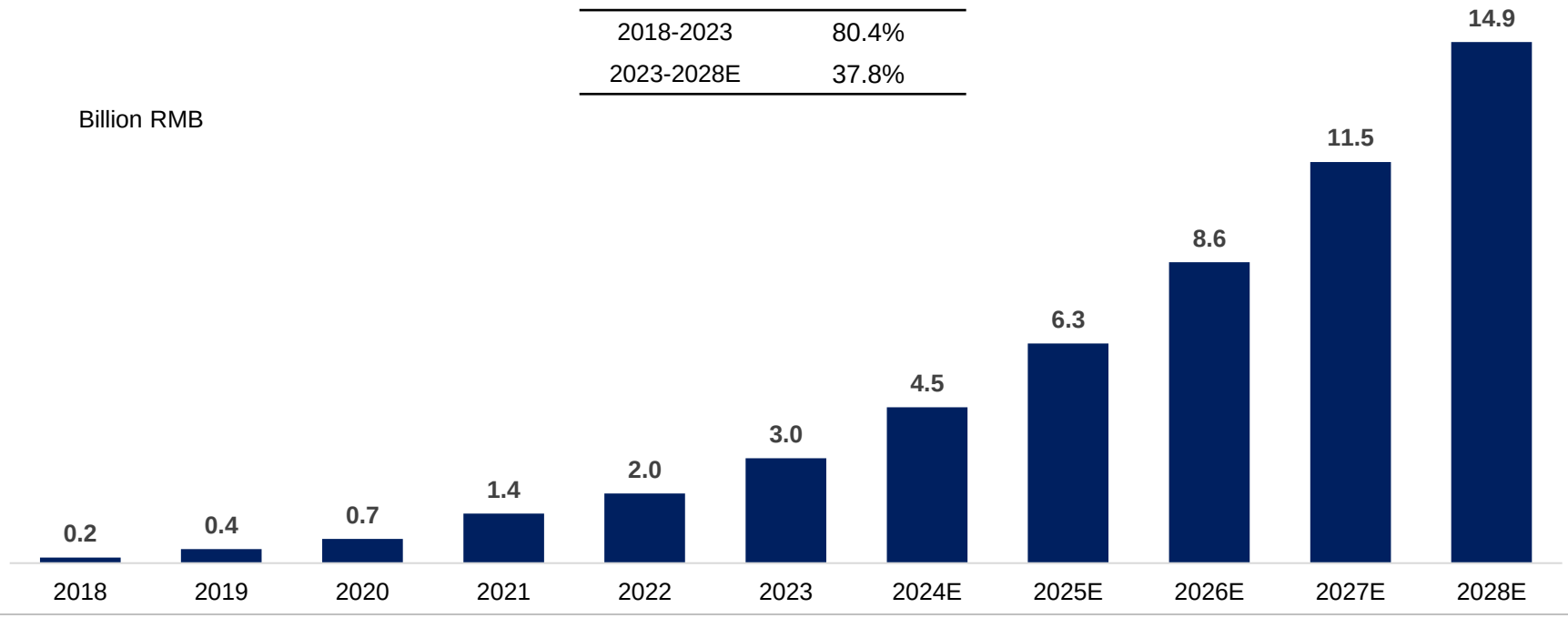
Source: Frost & Sullivan analysis

China JAK Inhibitors Market, 2018-2028E

- The size of China JAK inhibitors market merged in 2018 with a start point of RMB 0.2 billion, and quickly developed to RMB 3.0 billion in 2023.
- It is expected that with more innovative JAK inhibitors coming in to China market, the market will grow from RMB 3.0 billion in 2023 to RMB 14.9 billion in 2028, the CAGR of 2023 to 2028 is 37.8%.

China JAK Inhibitors Market, 2018-2028E

Period	CAGR
2018-2023	80.4%
2023-2028E	37.8%



Source: Frost & Sullivan analysis

Global Competitive Landscape of JAK Inhibitor Targeting Autoimmune Disease (1/2)

- JAK inhibitors work by suppressing the activity of one or more members of the Janus kinase family (e.g., JAK1, JAK2, JAK3, and TYK2), thereby interfering with the JAK-STAT signaling pathway. JAK inhibitors have shown therapeutic potential in the treatment of cancer and inflammatory diseases. Myeloproliferative disorders such as polycythemia vera, essential thrombocythemia, and myelofibrosis are associated with JAK2 mutations.

➢ **Marketed JAK Inhibitor Targeting Autoimmune Disease**

Drug Name	Company	Target	Indication	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Aisuda® (Ivarmacitinib)	Hengrui Medicine	JAK1	Ankylosing spondylitis, rheumatoid arthritis, atopic dermatitis	NA	2025-03	NA
Cibinqo® (Abrocitinib)	Pfizer	JAK1	Atopic dermatitis	2022-01	2022-04	64
Rinvoq® (Upadacitinib)	AbbVie	JAK1	Rheumatoid arthritis, Psoriatic arthritis, Ankylosing spondylitis, Atopic dermatitis, Ulcerative colitis, Non-radiographic axial spondyloarthritis, Crohn's disease, Polyarticular juvenile idiopathic arthritis, Juvenile psoriatic arthritis	2019-08	2022-02	5,971
LEQSELVI® (Deuterated ruxolitinib)	Sun Pharmaceutical Concert Pharmaceuticals	JAK1 JAK2	Alopecia areata	2024-07	NA	NA
Anzupgo® (Delgocitinib)	Torii Pharmaceutical Akros Pharma	JAK	Atopic dermatitis, Eczema	2020-01 (Japan approval)	NA	NA
Olumiant® (Baricitinib)	Incyte Corporation	JAK1 JAK2	Rheumatoid arthritis, Atopic dermatitis, Alopecia areata, Juvenile idiopathic arthritis, Enthesitis-related arthritis, Juvenile psoriatic arthritis, Polyarticular juvenile idiopathic arthritis	2018-05	2019-06	136.1
Xeljanz® (Tofacitinib)	Pfizer	JAK1 JAK2 JAK3	Rheumatoid arthritis, Juvenile idiopathic arthritis, Psoriatic arthritis, Ulcerative colitis, Polyarticular juvenile idiopathic arthritis, Juvenile psoriatic arthritis, Ankylosing spondylitis	2012-11	2017-03	1,168

Note: This table was last updated on 2025-05-05

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of JAK Inhibitor Targeting Autoimmune Disease (2/2)

➢ **Marketed JAK Inhibitor Targeting Autoimmune Disease**

Drug Name	Company	Target	Indication	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Jyseleca® Filgotinib	Galapagos	JAK1	Rheumatoid arthritis, ulcerative colitis	2020-09 (Japan approval)	NA	NA
Sotyktu® Deucravacitinib	BMS	TYK2	Plaque psoriasis, pustular psoriasis, erythrodermic psoriasis	2022-09	2023-10	246
Litfulo® Ritlecitinib	Pfizer	JAK3 TEC	Alopecia areata	2023-06	2023-10	NA

Drug Name	Company	Target	Indications	FDA Approval	NMPA Approval	Sales in 2023 (million USD)	Sales in 2024Q1-Q3 (million USD)
Jakavi/Jakafi® (Ruxolitinib)	Incyte Corporation Novartis	JAK1 JAK2	Graft-versus-host disease	2011-11	2017-03	4,529	3,468

➢ **NDA Pipeline JAK Inhibitor Targeting Autoimmune Disease**

Drug Name	Company	Target	Indications	Highest Phase	CDE Acceptance Date	Country*
OB756	Hangzhou Bangshun Pharmaceutical	JAK2	Myelofibrosis	NDA	2024-08	China
JXHS2400119	AbbVie	JAK1	Giant cell arteritis	NDA	2024-12	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate*

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of IL-4Rα Monoclonal Antibody Drugs Targeting Autoimmune Disease (1/2)

- Anti-IL-4Rα antibodies are biologic therapies designed to target and block the interleukin-4 receptor alpha (IL-4Rα), a key component of the IL-4 and IL-13 signaling pathways.
- By inhibiting IL-4Rα, these antibodies disrupt the downstream inflammatory signaling involved in conditions such as asthma, atopic dermatitis, and other allergic or immune-mediated diseases.

➢ **Marketed IL-4Rα Monoclonal Antibody Drugs Targeting Autoimmune Disease**

Drug Name	Company	Indication	FDA Approval	NMPA Approval	Sales in 2024 (million USD)
Dupixent® (Dupilumab)	Regeneron Sanofi	Asthma, Atopic dermatiits, CRSwNP, Prurigo nodularis, Eosinophilic esophagitis, Chronic obstructive pulmonary disease	2017-03	2020-06	14,148
Kangyueda® (Stapokibart)	Keymed Biosciences	Atopic dermatitis, Chronic rhinosinusitis with nasal polyps	NA	2024-09	NA

Note: 1. This table was last updated on 2025-05-05

Source: FDA, NMPA, Frost & Sullivan

Global Competitive Landscape of IL-4Rα Monoclonal Antibody Drugs Targeting Autoimmune Disease (2/2)

➢ **Pipeline IL-4Rα Monoclonal Antibody Drugs Targeting Autoimmune Disease**

Drug Name	Company	Indications	Highest Phase	First Posted Date	Country*
Comekibart/MG-K10	Mabgeek	Atopic Dermatitis	Phase III	2023-09	China
GR1802	Genrix (Shanghai) Biopharmaceutical Co., Ltd.	Atopic Dermatitis	Phase III	2023-12	China
SSGJ-611	Sunshine Guojian Pharmaceutical (Shanghai) Co., Ltd.	Atopic Dermatitis	Phase III	2023-12	China
AK120	Akeso	Moderate to Severe Atopic Dermatitis	Phase III	2024-04	China
QX005N	Qyuns Therapeutics	Moderate to Severe Atopic Dermatitis	Phase III	2024-04	China
SHR-1819	**Hengrui Medicine**	**Atopic Dermatitis**	**Phase III**	**2024-05**	**China**
		Prurigo Nodularis	**Phase II/III**	**2024-08**	**China**
CBP-201	Connect Biopharm	Atopic Dermatitis	Phase III	2024-06	China
TQH2722	Chia Tai Tianqing Pharmaceutical Group Co., Ltd.	Atopic Dermatitis	Phase III	2024-08	China
LQ036	Novamab Biopharma	Asthma	Phase II	2024-02	China
BA2101	BoAn Biotech	Atopic Dermatitis	Phase II	2024-07	China
SHR-4597	Hengrui Medicine	Asthma	Phase II	2025-04	China

Note: This table was last updated on 2025-05-05

**: "Country" in the table above indicates the clinical site of the highest phase trial of the drug candidate, and only the trial sites including China are listed in the above table.*

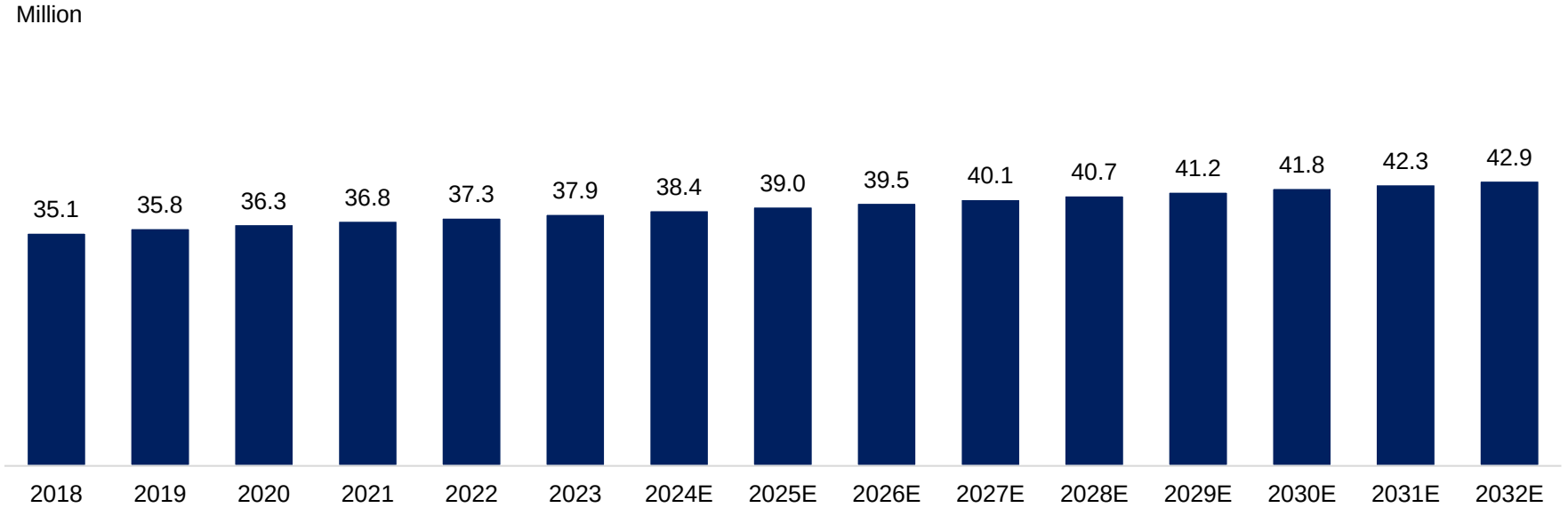
Source: FDA, NMPA, Frost & Sullivan analysis

Global Prevalence of Alzheimer's Disease, 2018-2032E

- The global prevalence of AD had reached 37.9 million in 2023, with a CAGR of 1.6% from 2018 to 2023. It is predicted that the number of patients will continue to increase, reaching 40.7 million in 2028, with a CAGR of 1.4% from 2023 to 2028, 42.9 million in 2032 with a CAGR of 1.3% from 2028 to 2032.
- There were estimated to be 58.3 million people affected by dementia worldwide in 2023, with Alzheimer's Disease contributing to 60-70% of dementia cases.

Global Prevalence of Alzheimer's Disease, 2018-2032E

Period	CAGR
2018-2023	1.6%
2023-2028E	1.4%
2028E-2034E	1.3%



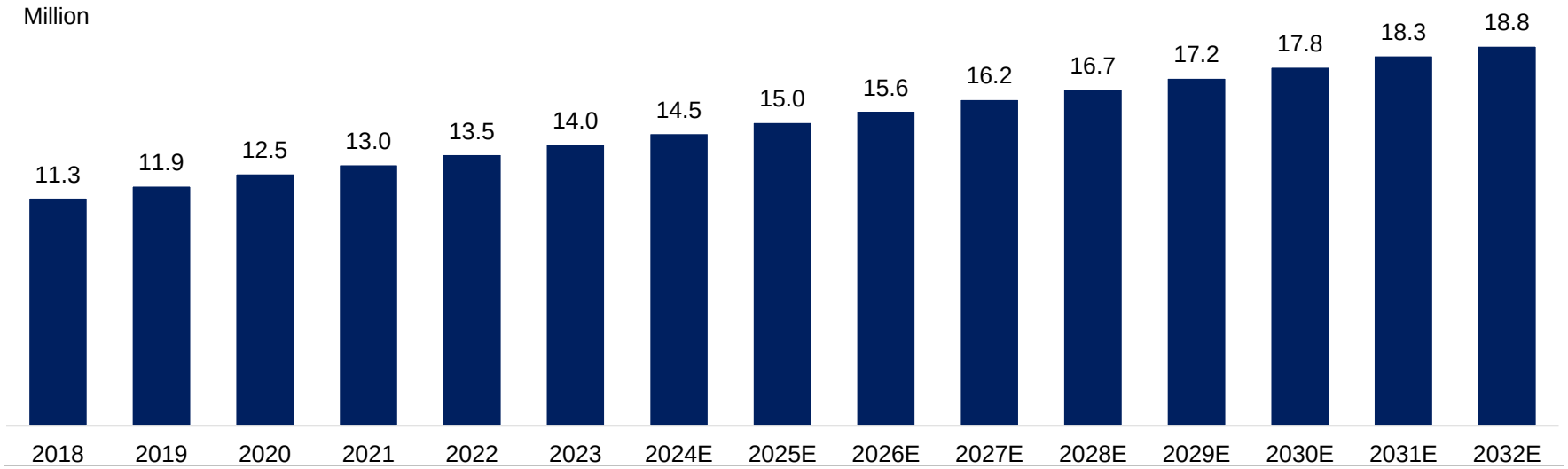
Source: Frost & Sullivan Analysis

Prevalence of Alzheimer's Disease in China, 2018-2032E

- In recent years, the number of patients with Alzheimer's disease in China has increased rapidly, from 11.3 million to 14.0 million in 2018 and 2023, with a CAGR of 4.3%, due to the aging population. In 2023, China had approximately 43.4 million people at the MCI stage. It is predicted that the number of patients with Alzheimer's disease in China will continue to increase, reaching 16.7 million in 2028, with a CAGR of 3.6% from 2023 to 2028, 18.8 million in 2032 with a CAGR of 3.0% from 2028 to 2032.

Prevalence of Alzheimer's disease in China, 2018-2032E

Period	CAGR
2018-2023	4.3%
2023-2028E	3.6%
2028E-2032E	3.0%



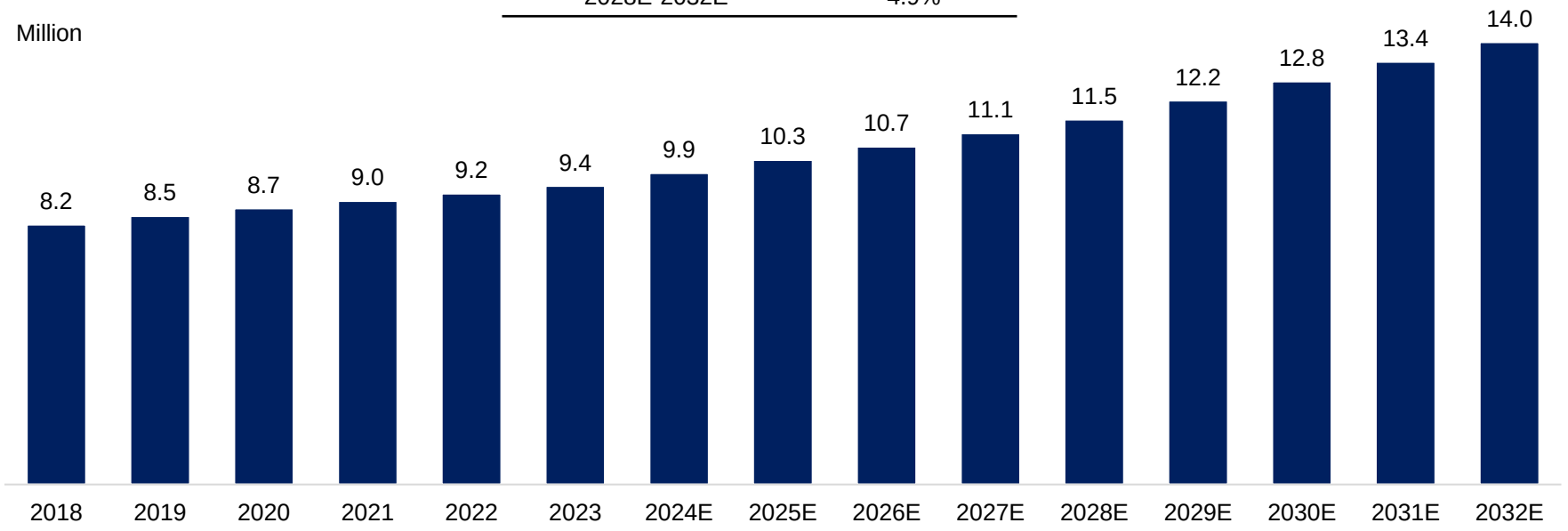
Source: Frost & Sullivan analysis

Global Prevalence of PD, 2018-2032E

- The global prevalence of PD had reached 9.4 million in 2023, with a CAGR of 2.8% from 2018 to 2023. . It is predicted that the number of patients in China will continue to increase, reaching 11.5 million in 2028, with a CAGR of 4.1% from 2023 to 2028, 14.0 million in 2032 with a CAGR of 4.9% from 2028 to 2032.

Global Prevalence of PD, 2018-2032E

Period	CAGR
2018-2023	2.8%
2023-2028E	4.1%
2028E-2032E	4.9%



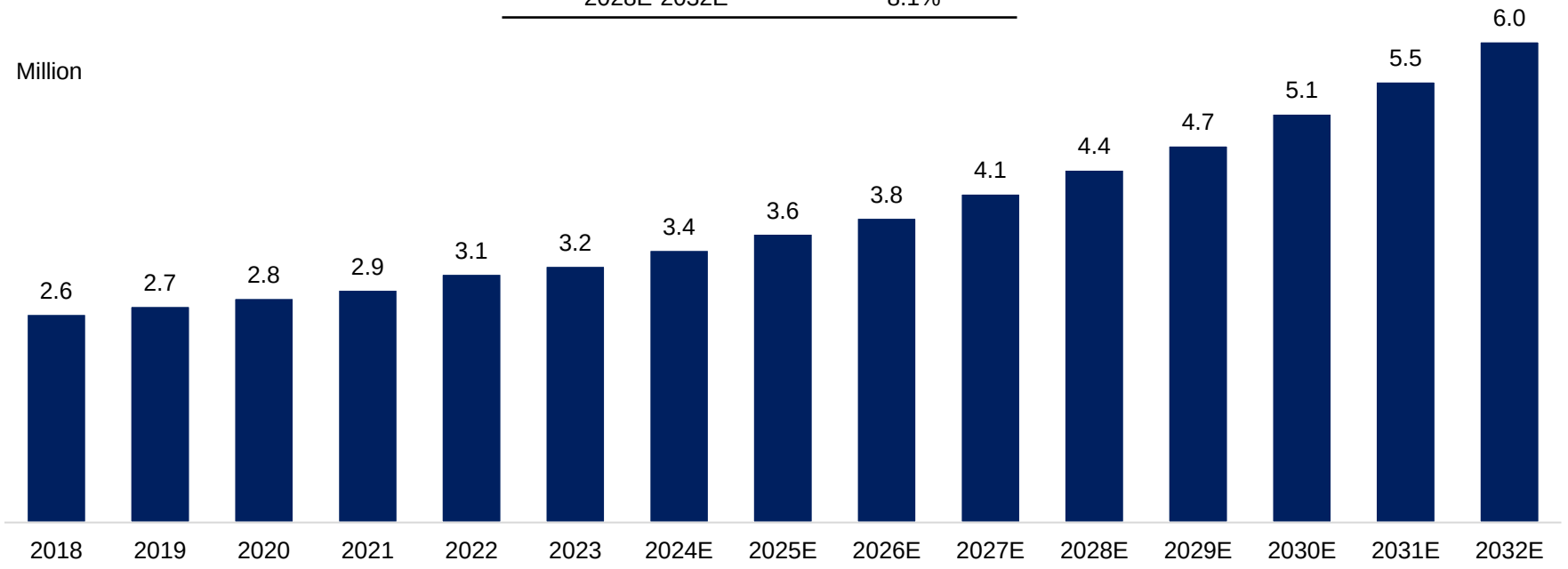
Source: Frost & Sullivan Analysis

Prevalence of PD in China, 2018-2032E

- The prevalence of PD in China had reached 3.2 million in 2023, with a CAGR of 4.2% from 2018 to 2023. It is estimated to reach 6.0 million patients in 2032.

Prevalence of PD in China, 2018-2032E

Period	CAGR
2018-2023	4.2%
2023-2028E	6.6%
2028E-2032E	8.1%



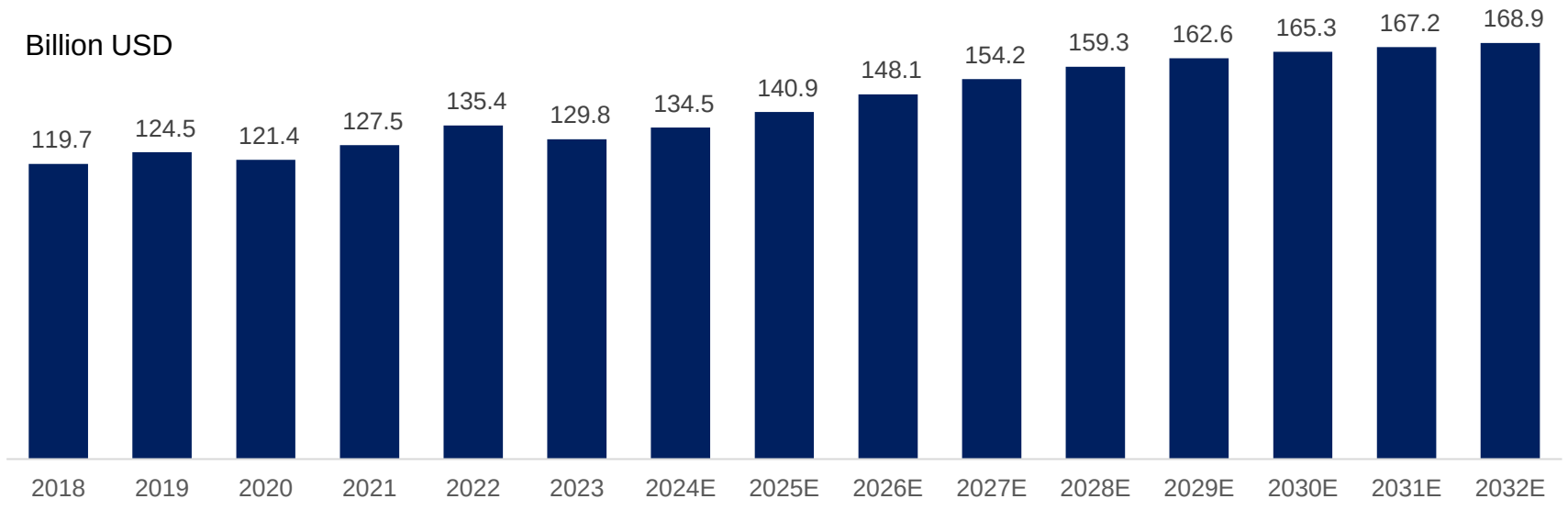
Source: Frost & Sullivan Analysis

Global Neuroscience Drug Market, 2018-2032E

- The neuroscience pharmaceutical market broadly covers neurology, analgesia (or pain management), and anaesthesia.
- The market of global neuroscience drug has raised from USD119.7 billion in 2018 to USD129.8 billion in 2023, with a CAGR of 1.6%.The market of global neuroscience drug is estimated to reach US$159.3 billion in 2028 and US$168.9 billion in 2032 at a CAGR of 4.2% from 2023 to 2028 and 1.5% from 2028 to 2032.

Global Neuroscience Drug Market, 2018-2032E

Period	CAGR
2018-2023	1.6%
2023-2028E	4.2%
2028E-2032E	1.5%



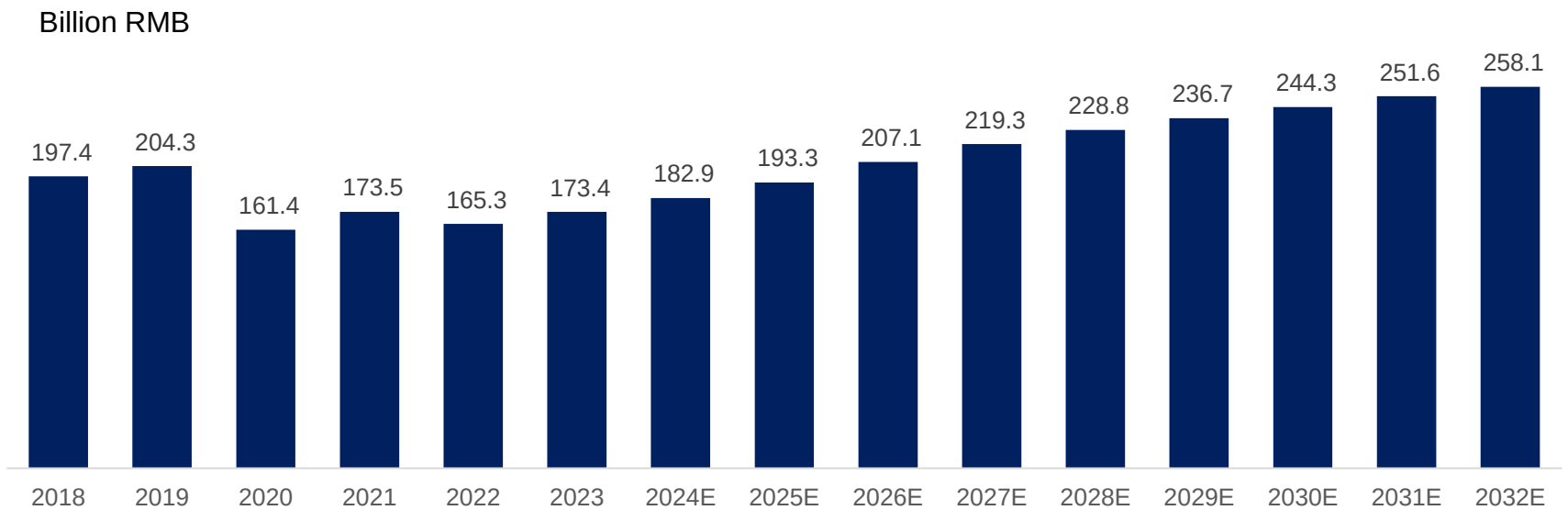
Source: Frost & Sullivan Analysis

China Neuroscience Drug Market, 2018-2032E

- The market of China neuroscience drug has decreased from RMB 197.4 billion in 2018 to RMB 173.4 billion in 2020, with a CAGR of -2.6%. China neuroscience drug market is estimated to reach RMB228.8 billion in 2028 and RMB258.1 billion in 2032 at a CAGR of 5.7% from 2023 to 2028 and 3.1% from 2028 to 2032.
- The decrease was primarily because by the end of 2022, more than 30 neuroscience drugs were included in the VBP scheme, which affected the overall neuroscience market.

China Neuroscience Drug Market, 2018-2032E

Period	CAGR
2018-2023	-2.6%
2023-2028E	5.7%
2028E-2032E	3.1%



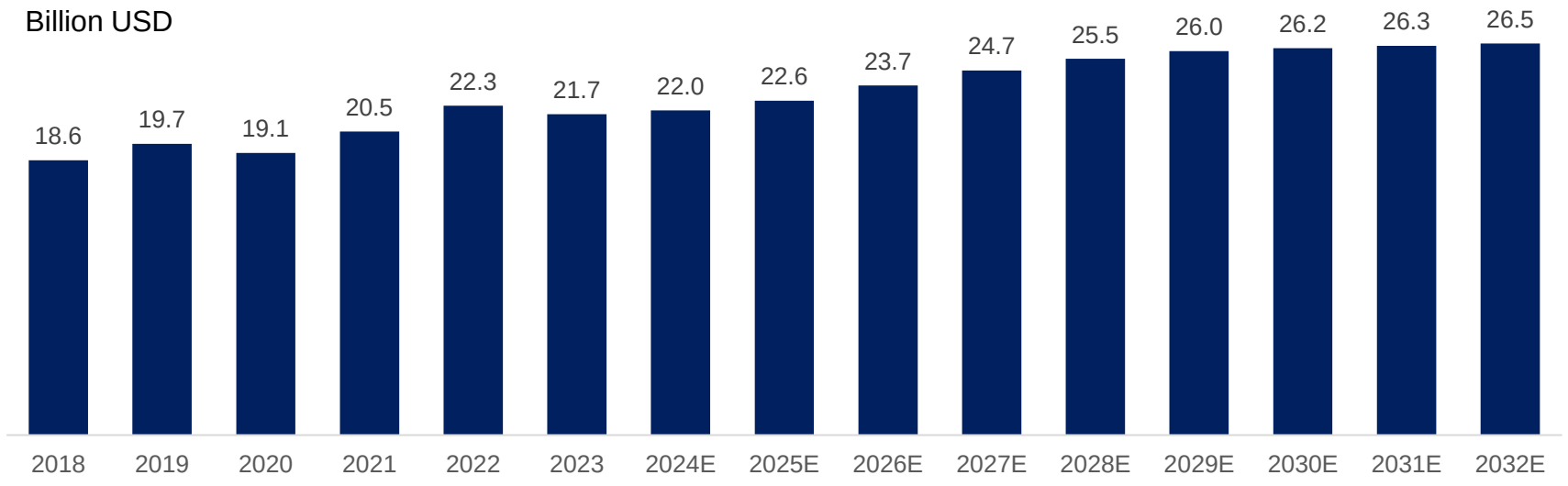
Source: Frost & Sullivan Analysis

Global Contrast Agent Market, 2018-2032E

- The market of global contrast agent drug has raised from US$18.6 billion in 2018 to US$21.7 billion in 2023, with a CAGR of 3.1%, mainly due to increased adoption of medical imaging procedures.The market of global contrast agent drug is estimated to reach US$25.5 billion in 2028 and US$26.5 billion in 2032 at a CAGR of 3.2% from 2023 to 2028 and 1.0% from 2028 to 2032 driven by growing demand for early disease detection.

Global Contrast Agent Market, 2018-2032E

Period	CAGR
2018-2023	3.1%
2023-2028E	3.2%
2028E-2032E	1.0%



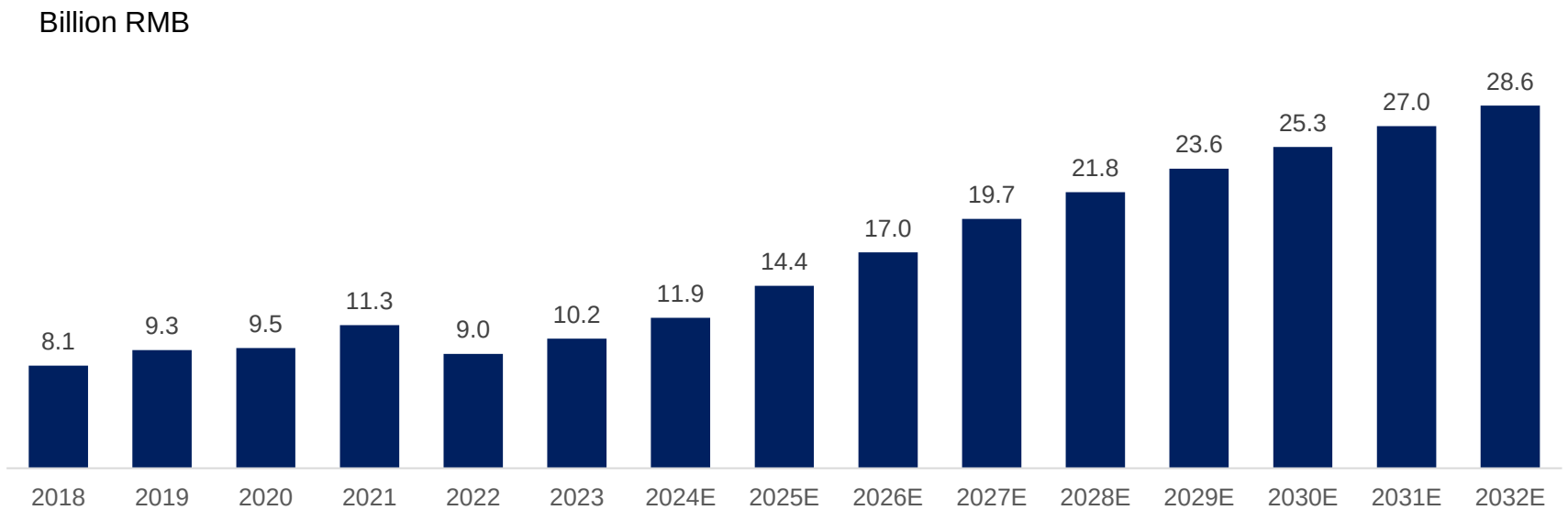
Source: Frost & Sullivan Analysis

China Contrast Agent Market, 2018-2032E

- The China contrast agent market has grown from RMB8.1 billion in 2018 to RMB10.2 billion in 2023 mainly due to the downward pricing pressure from the inclusion of major contrast agents in VBP scheme, with a CAGR of 4.8%. It is expected to reach RMB21.8 billion in 2028 and RMB28.6 billion in 2032 at a CAGR of 16.3% from 2023 to 2028 and 7.1% from 2028 to 2032 driven by growing awareness of early disease detection. The growing demand for medical imaging is driven by an increase in medical procedures and the greater utilization of medical imaging in clinical protocols.

China Contrast Agent Market, 2018-2032E

Period	CAGR
2018-2023	4.8%
2023-2028E	16.3%
2028E-2032E	7.1%



Source: Frost & Sullivan Analysis

Appendix 1

- Globally, 11.2 million patients are with obstructive heart muscle contraction and 4.8 million patients are non- obstructive heart muscle contraction.
- Stroke is a potentially debilitating or even deadly cerebrovascular event. It is one of the leading causes of death. There is no approved medical therapy for treatment beyond the 3 to 4.5-hour time window. Novel therapies with improved better clinical outcomes are expected to address the significant unmet medical needs.
- As a result, the rates for diagnosis and treatments for many diseases have been limited, representing a significant public health challenge with substantial unmet medical needs.
- There are significant unmet medical needs for disease-modifying therapies which target clearly-defined pathogenic mechanisms and have the potential to delay the disease progression.
- Insufficient symptom control, poor tolerance of medications, and opioid overuse are still challenges in clinical practice, especially in the treatment of chronic pain.
- there are approximately 80 types of drugs and approximately 200 manufacturers (including, for instance, 41 and 63 manufacturers for capecitabine and gemcitabine hydrochloride, respectively) in the breast cancer pharmaceutical market
- the Group does not occupy a notable share in the breast cancer pharmaceutical market
- the Associate's Controlled Group does not occupy a notable share in the breast cancer pharmaceutical market
- over 300 manufacturers in the type 2 diabetes pharmaceutical market, including certain established first-to-market players.
- the Group does not occupy a notable share in the type 2 diabetes pharmaceutical market
- the Associate's Controlled Group does not occupy a notable share in the type 2 diabetes pharmaceutical market
- there are over 100 pharmaceutical companies developing GLP-1 and GIP/GLP-1 receptor agonist product candidates, occupy a market share significant enough
- there is also a very large market for the manufacturing of anti-infective products in the PRC, with over 400 pharmaceutical companies engaging in the manufacturing of the same type of products as the two overlapping anti-infective products set out above
- the Group does not occupy a notable share in the anti-infective pharmaceutical market
- the Associate's Controlled Group does not occupy a notable share in the anti-infective pharmaceutical market
- the pharmaceutical industry in the PRC is highly fragmented and sizeable, with more than 10,000 pharmaceutical companies in the market.

Appendix 2

- The declines of the global and Chinese metabolic and cardiovascular pharmaceutical markets in 2020 compared to the prior year were precipitated by a combination of factors, including the widespread impact of the COVID-19 pandemic, which disrupted healthcare services and patient access to medications; the implementation of a centralized procurement policies, particularly China's VBP scheme; and the ongoing dynamics of market competition and substitution, where newer, more cost-effective drugs replaced older, more expensive ones.
- The declines of the global and Chinese immunological and respiratory pharmaceutical markets in 2020 compared to the prior year were primarily driven by impact of the COVID-19 pandemic and market competition and, for China, the implementation of the VBP scheme.
- The declines of the global and Chinese neuroscience pharmaceutical markets in 2020 compared to the prior year were primarily driven by impact of the COVID-19 pandemic and market competition and, for China, the implementation of the VBP scheme.
- GLP-1 and GIP receptor dual agonists activate both glucagon-like peptide-1 (GLP-1) and glucose-dependent insulinotropic polypeptide (GIP) receptors, thus enhancing insulin secretion, suppressing appetite, and improving metabolic regulation.
- These dual agonists have demonstrated significant benefits in reducing body weight, blood glucose, blood pressure, and triglycerides in clinical studies, while maintaining a favorable safety profile, making them a promising therapy for type 2 diabetes and obesity management.
- As of the Latest Practicable Date, tirzepatide was the only marketed injection GLP-1/GIP receptor dual agonist drug worldwide.
- GLP-1 receptor agonists are a class of drugs designed to mimic the action of glucagon-like peptide-1 (GLP-1), a hormone that regulates blood sugar levels by enhancing insulin secretion, suppressing glucagon release, and slowing gastric emptying.
- They are particularly beneficial for treating patients with type 2 diabetes who have impaired GLP-1 secretion, offering improved glycemic control and potential weight loss benefits.
- Rybelsus® (Semaglutide oral form) was approved by the NMPA and the U.S. FDA in January 2024 and September 2019, respectively, for the treatment of type 2 diabetes, which HRS-7535 is also intended for.
- URAT1 inhibitors work by blocking urate transporter 1 (URAT1), an anion-exchanging uptake transporter from the organic anion transporter family, located on the apical membrane of renal proximal tubular cells.
- By inhibiting URAT1, these drugs reduce renal uric acid reabsorption, thereby promoting its excretion and lowering serum urate levels.
- URAT1 inhibitors offer a targeted therapeutic approach to managing hyperuricemia and gout by directly addressing impaired uric acid clearance.

Appendix 3

- Anti-ANGPTL3 antibodies target angiopoietin-like 3 (ANGPTL3), a key regulator of lipid metabolism encoded by the ANGPTL3 gene.
- By inhibiting ANGPTL3, these antibodies reduce levels of triglycerides, low-density lipoprotein cholesterol, and other atherogenic lipoproteins, offering a promising therapeutic approach to managing dyslipidemia and cardiovascular diseases.
- In China, there was no approved anti-ANGPTL3 antibody drug as of the Latest Practicable Date.
- As of the Latest Practicable Date, there was no other anti-ANGPTL3 antibody drug candidate intended for the treatment of HoFH under clinical development in China.
- Myosin inhibitors are designed to target cardiac myosin, thereby reducing excessive contractility and improving cardiac function in patients with hypertrophic cardiomyopathy (HCM) and related heart failure.
- By modulating myosin activity, these inhibitors help alleviate obstructive symptoms while potentially offering superior efficacy and safety profiles, which reduces the risk of adverse events associated with decreased contractility.
- HER2 ADC works by specifically targeting HER2-overexpressing cancer cells with a monoclonal antibody, which then delivers a cytotoxic payload directly to the tumor cell, causing cell death through mechanisms like DNA damage or disruption of the microtubule function, effectively killing the cancer cells while minimizing harm to healthy tissues.
- Nectin-4 ADC is a targeted therapy designed to deliver a cytotoxic payload specifically to cancer cells overexpressing Nectin-4, a type I transmembrane cell adhesion molecule associated with tumor progression and poor prognosis.
- By binding to Nectin-4, the ADC enables selective internalization and release of the cytotoxic agent, effectively killing cancer cells while minimizing damage to normal tissues.
- Nectin-4 ADC has shown potential in treating various malignancies.
- AR-PROTAC is a bifunctional molecule designed to selectively degrade the androgen receptor (AR) by leveraging the ubiquitin-proteasome system. It consists of a ligand that binds to AR and a ligand that recruits an E3 ubiquitin ligase, facilitating targeted protein degradation.
- By eliminating AR rather than merely inhibiting its activity, AR PROTACs offer a novel therapeutic approach to androgen-driven cancers, such as prostate cancer, with potential advantages in overcoming resistance to traditional AR inhibitors.
- JAK inhibitors have shown therapeutic potential in the treatment of cancer and inflammatory diseases.
- Myeloproliferative disorders such as polycythemia vera, essential thrombocythemia, and myelofibrosis are associated with JAK2 mutations.
- Our NDA for ivarmacitinib, a JAK1 inhibitor drug candidate, for the treatment of atopic dermatitis was accepted by the NMPA in June 2023, which was the first NDA for a JAK1 inhibitor drug candidate to have been accepted by the NMPA.
- Anti-IL-4Rα antibodies are biologic therapies designed to target and block the interleukin-4 receptor alpha (IL-4Rα), a key component of the IL-4 and IL-13 signaling pathways.
- By inhibiting IL-4Rα, these antibodies disrupt the downstream inflammatory signaling involved in conditions such as asthma, atopic dermatitis, and other allergic or immune-mediated diseases.

Appendix 4

- Comprehensive therapeutic areas with significant unmet medical needs and growth potential mainly include: (i) oncology, (ii) metabolic and cardiovascular diseases, (iii) immunological and respiratory diseases, and (iv) neuroscience. The aggregate global pharmaceutical market of these major therapeutic areas in 2023 was US$845.8 billion
- As of September 30, Hengrui Medicine had a dedicated in-house sales and marketing team of approximately 9,000 employees, which was an industry-leading scale among Chinese pharmaceutical companies. As of the same date, sales network of Hengrui Medicine covered over 22,000 hospitals and over 200,000 offline retail pharmacies across over 30 provincial-level regions in China, which was an industry-leading coverage among Chinese pharmaceutical companies.
- As of the Latest Practicable Date, trastuzumab rezetecan (SHR-A1811) had received breakthrough therapy designations from the NMPA for seven indications, which were the most among all clinical-stage drug candidates in China.
- In December 2023, the NMPA approved abiraterone acetate tablets (II) (Iregi®) as a new dosage form with prednisone or prednisolone for the treatment of mCRPC and mHSPC. This drug was the first abiraterone acetate nanocrystal preparation approved by the NMPA.
- As of the Latest Practicable Date, worldwide, four KRAS G12C inhibitors had been approved to treat patients with advanced NSCLC harboring KRAS G12C mutations.
- Compared to KRAS G12C, KRAS G12D is most commonly seen in PDAC, a dismal disease with an average 5-year survival rate of 12% due to difficulties in early diagnosis and the lack of effective treatments.
- HRS-4642 was the first inhibitor targeting KRAS G12D to have reported clinical data globally.
- Henagliflozin was the first domestically developed novel SGLT-2 inhibitor approved by the NMPA.
- A novel, long-acting, anti-IL-23p19/IL-36R bispecific antibody, with first-in-class potential has been developed by Hengrui medicine. It exhibited high IL-23 and IL-36R affinity and prolonged half-life, making it the first long-acting anti-IL-23p19/IL-36R bispecific antibody globally.
- Suzetrigine is the only approved Nav1.8 inhibitor for acute pain
- Sales and distribution arrangement of Hengrui Medicine is in line with industry norms in the pharmaceutical industry.

Appendix 5

- Due to molecular/genetic subtyping, patients with the same disease type and characteristics can be subdivided into different treatment groups, requiring drugs with different MOAs. Diseases can be highly heterogeneous, meaning the same type of disease can be triggered by different underlying causes. This is most commonly observed in cancers such as non-small cell lung cancer (NSCLC). NSCLC can be driven by multiple genetic alterations, such as EGFR mutation, KRAS mutation, HER2 mutation, etc. Each specific mutation requires a drug with a corresponding MOA for the effective treatment. The situation is the same for NSCLC patients with different severity levels. For the first-line treatment of NSCLC caused by EGFR mutations, EGFR inhibitors are used to control the proliferation of cancer cells. However, patients inevitably develop resistance to EGFR inhibitors over time. To address this issue, drugs with different MOAs, such as immune checkpoint inhibitors that regulate the immune system to inhibit cancer, can be used in subsequent second-line therapy.
- Based on information publicly available and from Frost & Sullivan in respect of the current product portfolios of our Group and the Associate's Controlled Group as of the Latest Practicable Date, RuiQin®, HRS-7535, HRS9531 and LeLang® and BeiLai® of the Group (the "Overlapping Products") overlap or substantially overlap with products or product candidates of the Associate's Controlled Group, in terms of type of disease, severity of disease and patient characteristics addressed, as well as MOA.
- The existing distribution model of Hengrui Medicine is in line with the general practice in the industry.
- In order to maximize the effectiveness of its medical insurance programs, the PRC government has expanded the coverage of public medical insurance to include more innovative drugs, improving the drugs' affordability and boosting demand for relevant drugs. Recently, the NHSA introduced the proposed Category C Drug List, which aims to enhance the commercial health insurance coverage of innovative drugs and clinically valuable drugs that are not covered by basic medical insurance. This initiative has expanded the coverage of medical insurance programs and helps to broaden revenue streams for companies focused on developing innovative drugs.
- As of the Latest Practicable Date, tirzepatide was the only marketed injection GLP-1/GIP receptor dual agonist drug worldwide. It was approved by the U.S. FDA for the treatment of type 2 diabetes and obesity in May 2022 and November 2023, respectively. In addition, it was approved by the NMPA for the treatment of type 2 diabetes and obesity in May 2024 and July 2024, respectively. HRS9531 from Hengrui Medicine is also being developed for these indications.
- As of the Latest Practicable Date, ivarmacitinib, a JAK1 inhibitor drug candidate, for the treatment of atopic dermatitis was accepted by the NMPA in June 2023, which was the first NDA for a JAK1 inhibitor drug candidate to have been accepted by the NMPA. As of the Latest Practicable Date, three additional NDAs for our ivarmacitinib had been accepted by the NMPA. As of the same date, two NDAs for other JAK inhibitors had been accepted by the NMPA.
- In addition to the foregoing, considering that there are over 100 pharmaceutical companies developing GLP-1 and GIP/GLP-1 receptor agonist product candidates according to Frost & Sullivan.
- Based on information publicly available and from Frost & Sullivan inrespect of the current product portfolios of our Group and the Associate's Controlled Group as of the Latest Practicable Date, the Group's capecitabine (a S-phase cycle chemotherapy drug for breast cancer), dalpiciclib (a CDK4/6 inhibitor for breast cancer) and HRS5580 (a novel NK-1 receptor antagonist for suppression of nausea and vomiting) (collectively, the "Relevant Products") are under the same therapeutic area and share the same MOA as certain products of the Associate's Controlled Group.
- As of the Latest Practicable Date, ivarmacitinib was the most clinically advanced domestically developed JAK1 inhibitor for the treatment of immunological diseases in China.

Appendix 6

- The out-licensing of a molecule by a company to its subsidiary(ies) is a common practice in the pharmaceutical industry it will take several years for SHR0302's new approved indications to ramp up sales, which requires substantial commercialization efforts to promote the drug and bid its access to hospitals and government-sponsored insurance programs in the CDE's practice, an innovative drug molecule can have only one MAH for one formulation, including the ability to act as the applicant to submit drug registration applications for the different indications under the same formulation. It is not uncommon in pharmaceutical industry that a parent company licenses certain indications of a drug molecule within its products portfolio to a subsidiary, in order to facilitate the development, manufacturing and commercialisation of such indications
- China has periodically launched healthcare reform plans to improve its healthcare system. China's most recent healthcare reform plan aims to strengthen coordination among insurance providers, medical services providers, and pharmaceutical manufacturers. The plan also aims to reform medical pricing and payment systems, upgrade grassroots healthcare facilities, and establish advanced medical centers. These reforms will improve the service quality of public hospitals through better hospital management and expanded nursing services, and strengthen insurance coverage through increased government subsidies and better commercial insurance options. In addition, the plan streamlines approval processes for innovative drugs, promotes digital healthcare services, and extends support for elderly care and childcare programs. Furthermore, the plan implements stricter oversight measures to prevent corruption and misuse of medical funds. Overall, these comprehensive reforms aim to create a more efficient, affordable and higher-quality healthcare system in China.
- The "Several Measures to Further Improve the Diverse Payment Mechanisms in Shanghai to Support the Development of Innovative Drugs and Medical Devices" (《上海市進一步完善多元支付機制支持創新藥械發展的若干措施》), issued by the Shanghai Healthcare Security Administration and other departments, aims to drive the growth of the PRC's pharmaceutical market by strengthening commercial insurance and improving the affordability of innovative drugs. These measures incentivize pharmaceutical companies to increase their R&D investments. Additionally, the "Announcement on Matters Related to Optimizing the Registration Application for the Transfer of Overseas Manufactured Drugs Already Marketed Domestically to Domestic Production" (《關於優化已在境內上市的境外生產藥品轉移至境內生產的藥品上市註冊申請相關事宜的公告》), issued by the NMPA, seeks to promote the development of the PRC's pharmaceutical industry by accelerating the domestic production and market availability of high-quality drugs, through an enhanced review process for drugs transferred from overseas research to production in the PRC.
- In particular, as of the same date, trastuzumab rezetecan (SHR-A1811) had received breakthrough therapy designations from the NMPA for eight indications, which were the most among all clinical-stage drug candidates in China, according to Frost & Sullivan.
- As a strong validation of the company's innovation results, the company had a leading position among Chinese pharmaceutical companies, in terms of revenue from NME drugs in 2023 and the number of NME drug candidates in clinical or later stages of development as of the Latest Practicable Date, according to Frost & Sullivan.
- The company have developed an industry-leading, highly differentiated matrix of innovative products, including several potential blockbusters.
- According to Frost & Sullivan, there is also a very large market for the manufacturing of anti-infective products in the PRC, with over 400 pharmaceutical companies engaging in the manufacturing of the same type of products as the two overlapping anti-infective products set out above.
- As of the Latest Practicable Date, based on recent market observations, a drug will generally be eligible for inclusion in the national VBP scheme if seven or more generic drugs under the same generic name have passed the Generic Quality Consistency Evaluation in China.

Appendix 7 Global Competitive Landscape of approved Nav1.8 drugs targeting acute pain

Drug Name	Company	type	Indications	FDA Approval	NMPA Approval
Suzetrigine	Vertex Pharmaceuticals	Small molecule inhibitor	Acute pain	2025-01	NA

Note: This table was last updated on 2025-05-05

Source: FDA, NMPA, Frost & Sullivan analysis