China Market Landscape and NewCo Model

March 27th

Howard Chen
Head of Services, MC & PI, IQVIA China

Howard CHEN

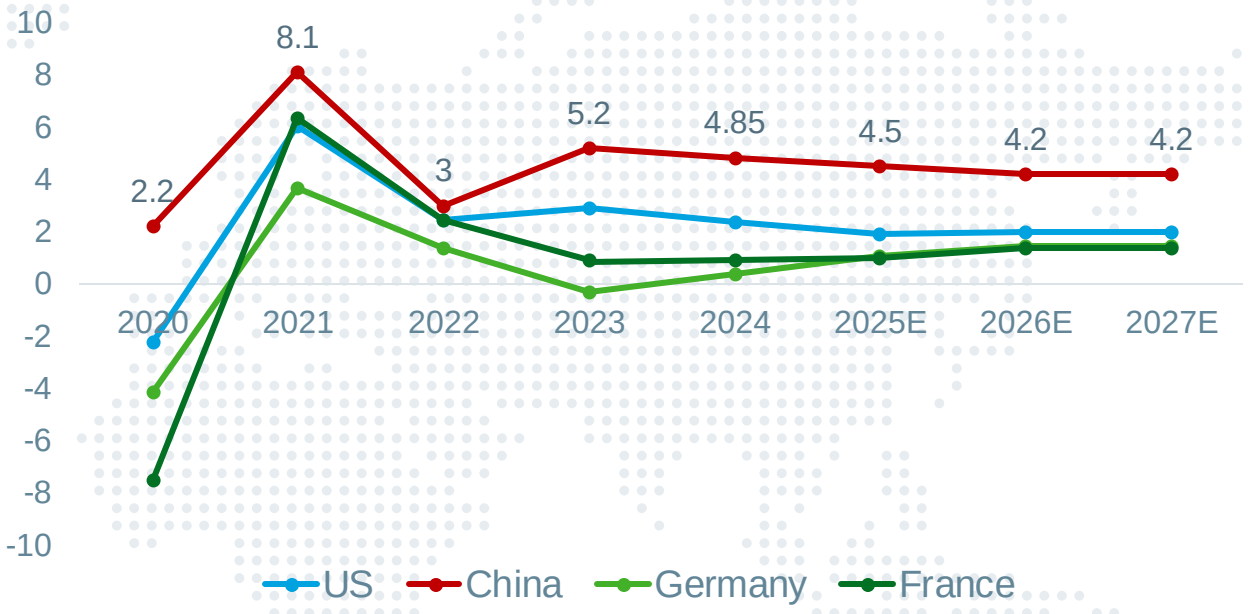
Managing Principal
Head of Services, MC & PI, IQVIA China

- More than 18 years of experience in strategy and management consulting, and investment banking in the healthcare industry across China, US, and the Asia-Pacific region
- A veteran in supporting leading corporations in pharmaceutical and medical device industries with corporate strategy, investment and M&A strategy, portfolio management, and product launch with life cycle planning strategies
- As the Head of IQVIA Consulting in China, Howard has led the team in developing and landing innovative solutions in R&D, commercial, and digital strategies for leading players, to support their business growth in a dynamic environment
- Howard holds an MBA degree from Nanyang Technological University in Singapore

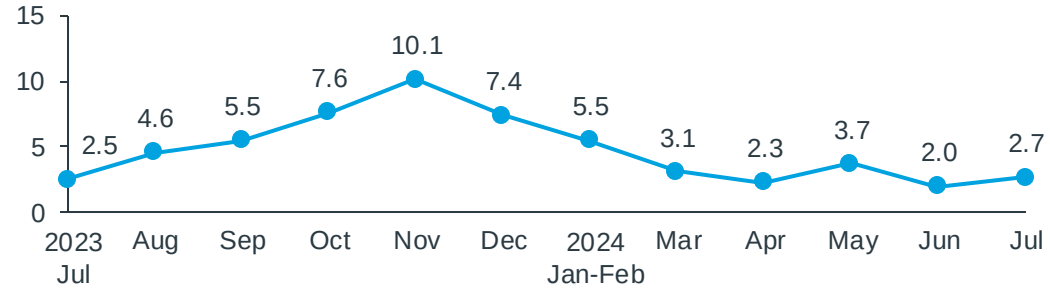
Macro environment overview

China's economic outlook is expected to be tapered in the short term, although various stimulus initiatives shows early signs of improvement

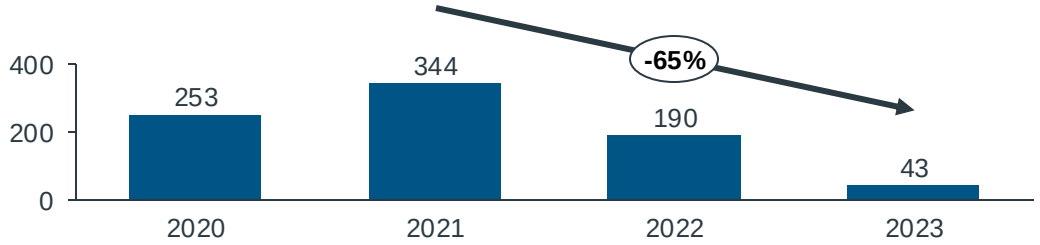
World Economic Outlook by IMF, Jan. 2025 Update
Select Economies GDP Outlook (%)



Growth Rate of Total Retail Sales of Consumer Goods, 2023Jul – 2024Jul (%)



China Foreign Direct Investment(FDI) Flows Trend, 2020 - 2023 (USD Bn)



Highlight of Economies GDP Outlook

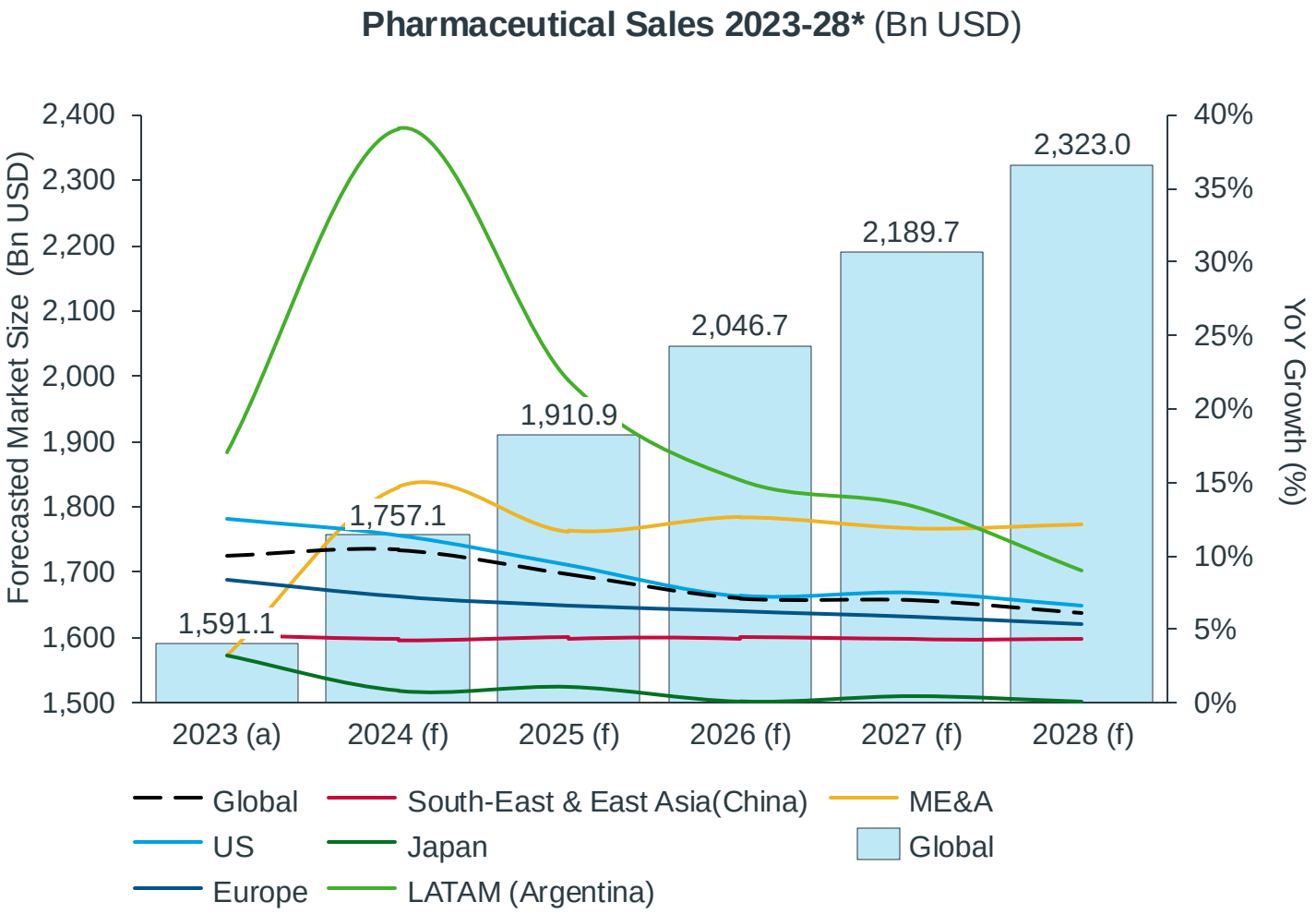
The global economic growth is slowing down including China, but China's outlook is still more optimistic than other key countries with an upward recovery trend 2023 onwards

Indicators of Economic Outlook

- **Consumer spending growth is still sluggish, although on an uptick in July**
- **FDI has declined significantly since 2021**

Note:1 USD = 7.07 CNY
Source: IQVIA analysis, desk research

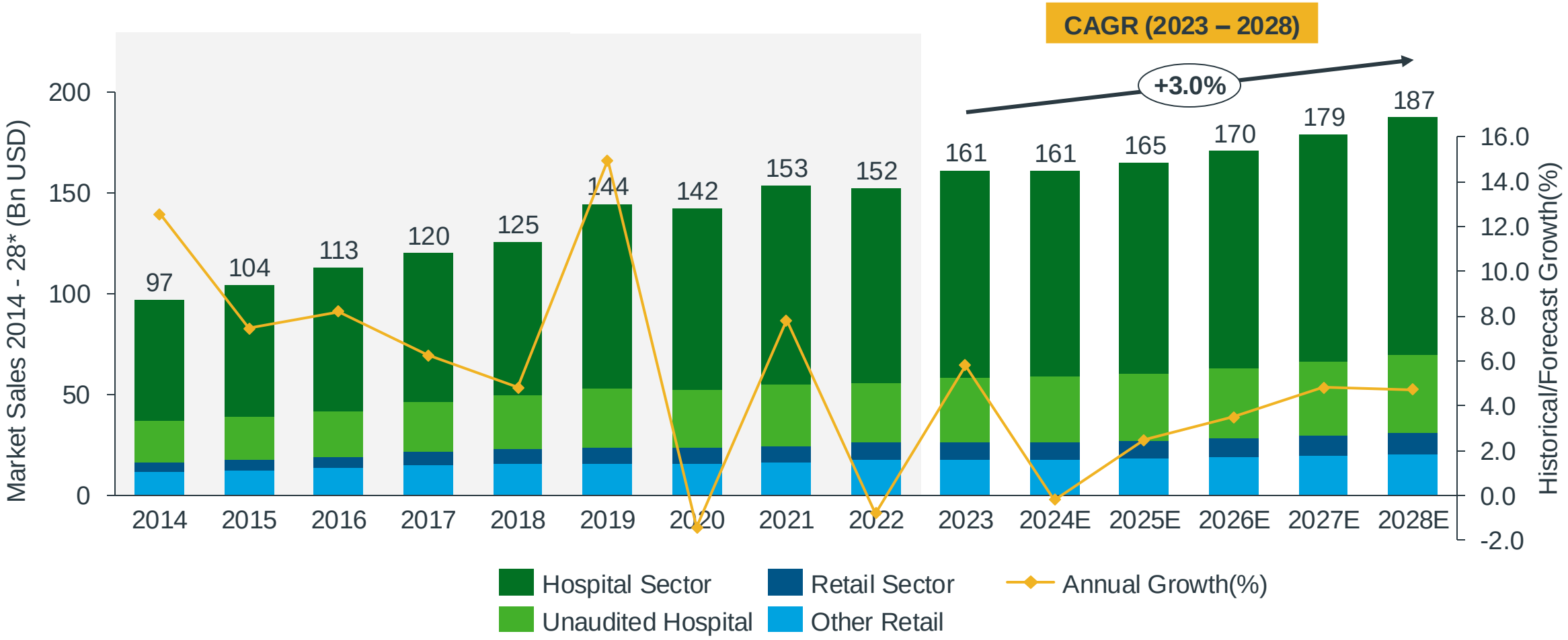
The global pharma market is expected to grow at ~7.9% CAGR through to 2028, with China representing the 2nd largest pharmaceutical market



Rank	2028	Sales (US$ Bn)
1	USA	1,089.2
2	**China**	**187.0**
3	Japan	99.5
4	Germany	88.8
5	France	66.7
6	UK (+1)	64.1
7	Italy (-1)	61.8
8	Brazil	52.1
9	Spain	51.0
10	Canada	49.8
11	India	38.6
12	South Korea	27.8
13	Poland (+6)	22.1
14	Russia (-1)	20.9
15	Mexico (+1)	19.5
16	Australia (-2)	19.5
17	Saudi Arabia	17.7
18	Turkey (+2)	16.2
19	Argentina (-1)	14.6
20	Thailand (+5)	12.4

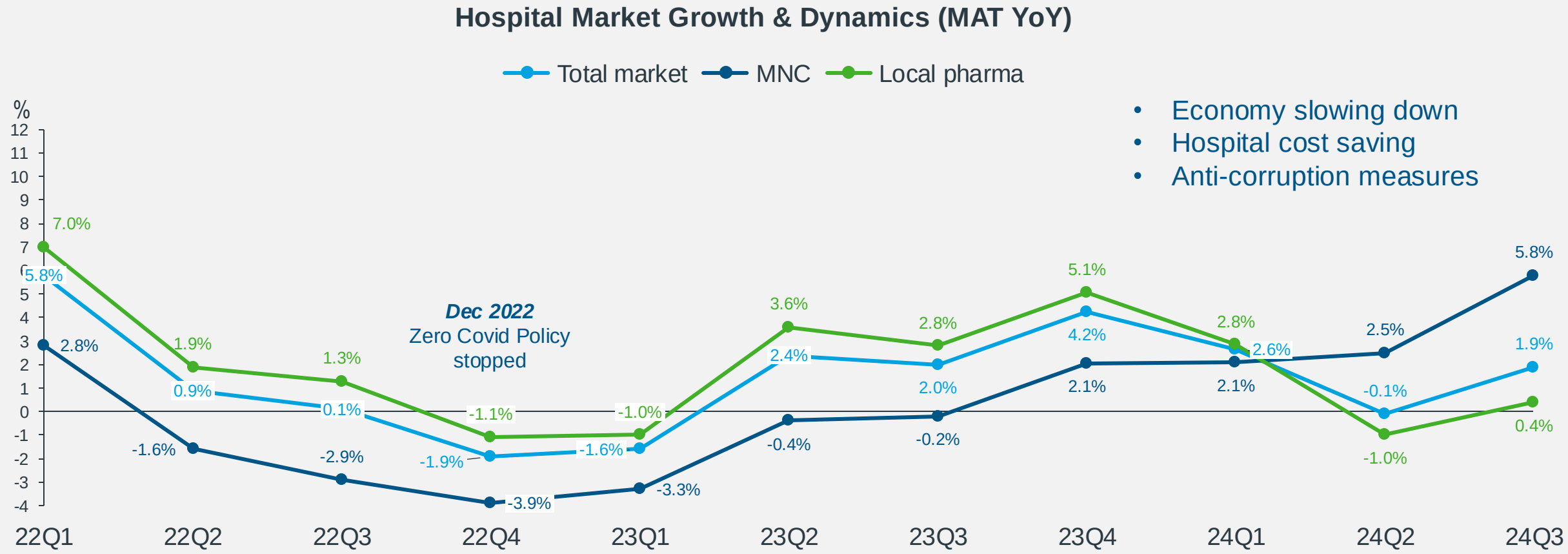
Notes: Growth calculated using constant exchange rates; list prices used in all calculations
*Argentina excluded due to hyperinflation, **5-year growth rates from 2023 to 2028
Rebates and discounts are not considered. Contains Audited + Unaudited data; Growth considered on par if the there is overlap between country and region CAGR ranges; Developed markets refer to EU4+UK, Japan, US and Canada
Source: IQVIA EMEA Thought Leadership; Market Prognosis May 2024

China total pharma market sales growth year over year from 2014 to 2028E



Sources: IQVIA MPG 2019,MPG 2022 and MPG 2024 Q3, USD rate from 2013 – 2022 is 0.13875825.

Having yet to recover from the post COVID environment, various control measures in recent years have further impacted market conditions



Source: IQVIA Hospital Audit(>=100 beds), 3M24; IQVIA analysis

The evolving market landscape and policies

Pharmacos face a ‘juxtaposition,’ as they are challenged by government efforts to encourage innovation while exerting strong price controls

Accelerating Approval & Access (1)

- Streamlined and accelerated regulatory process to encourage innovation

Enhanced Market Access (2)

- New drugs are invited to participate in annual NRDL negotiation
- Hainan and GBA conditional use of global-approved drugs

VBP and NRDL Cost Saving (3)

- Release budget through severe price cut on off-patent drugs
- Regular NRDL price cut and moving out lower-value drugs

Budget Control and Cost Efficiency (4)

- Hospital budget control via DRG/DIP
- BMI funding usage efficiency across channels

An evolving China pharma market under Healthy China 2030: Encourage innovation accelerating R&D and market access

"Healthy China 2030"
issued in Oct. 2016

The 14th Five-Year Plan (2021-2025)
issued in Nov. 2020

"
- ❑ Encourage innovation
- ❑ Improve patient access and affordability
- ❑ Improve healthcare service efficiency

"

Joining ICH in 2017 to develop under international standards

Ranked **2nd** globally in emerging biopharma pipeline in 2024

Regulatory reform since 2017 to optimize regulatory process

IND[1] **27 mos. » 3 mos.**

NDA[1] **26 mos. » 11 mos.**

(2017 average) (after new policy issued)

Influx of investments into China healthcare industry

A CAGR of **11%** in total amount of investment cases[2] from 2017 to 2022

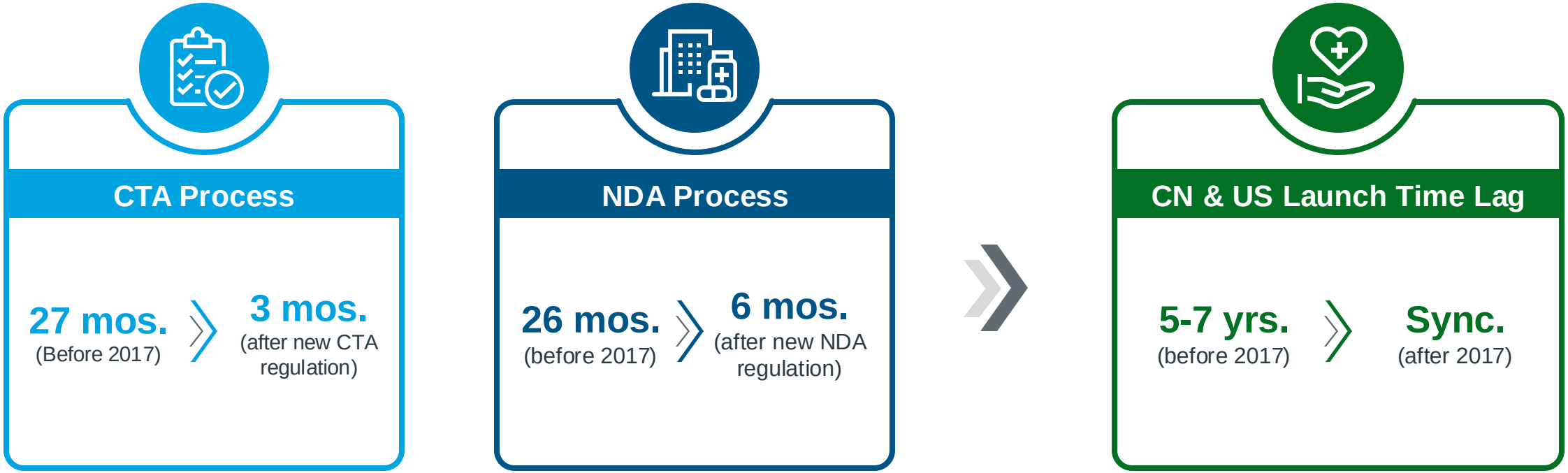
Reflux of R&D talents from global to local innovation

Returnees account for **>80%** of R&D talents[3], becoming a new force in China's innovation

Note: 1. IND: Investigational New Drug (also known as CTA = Clinical Trial Application), IND policy: 60-day Acquiescence, NDA: New Drugs Application, NDA policy: Priority Review, Special Review and Conditional Approval Procedure 2. incl. deals from Angel to Pre-IPO; excl. IPO and M&A; 3. Top innovative talents among the top 17 innovative listed pharmaceutical companies
Source: Government official website, IQVIA analysis, Global Trends in R&D 2023

With regulatory acceleration, FDA and China approvals now can happen very closely to each other, and even synchronized

- National Medical Products Administration **NMPA** oversees both Clinical Trial Application **CTA** and New Drug Approval **NDA**
- Main focuses during NMPA assessment are **Safety, Efficacy and Quality Control**

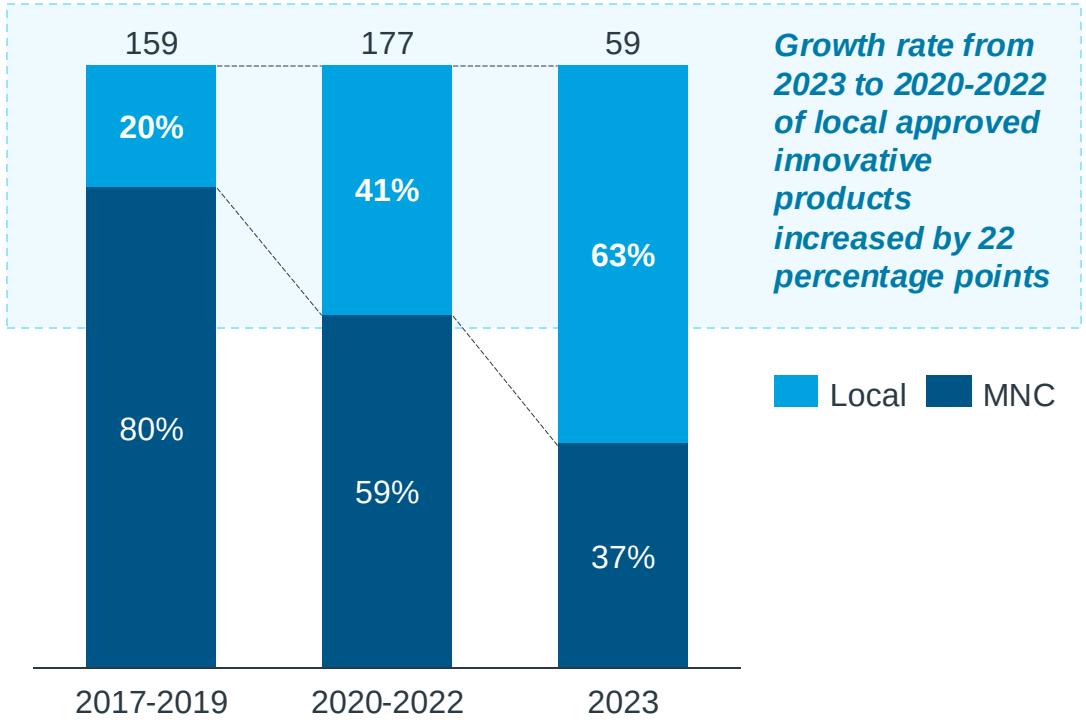


Source: IQVIA analysis

Local players become an increasingly strong pillar of China innovation, they bring both competition and collaboration opportunities

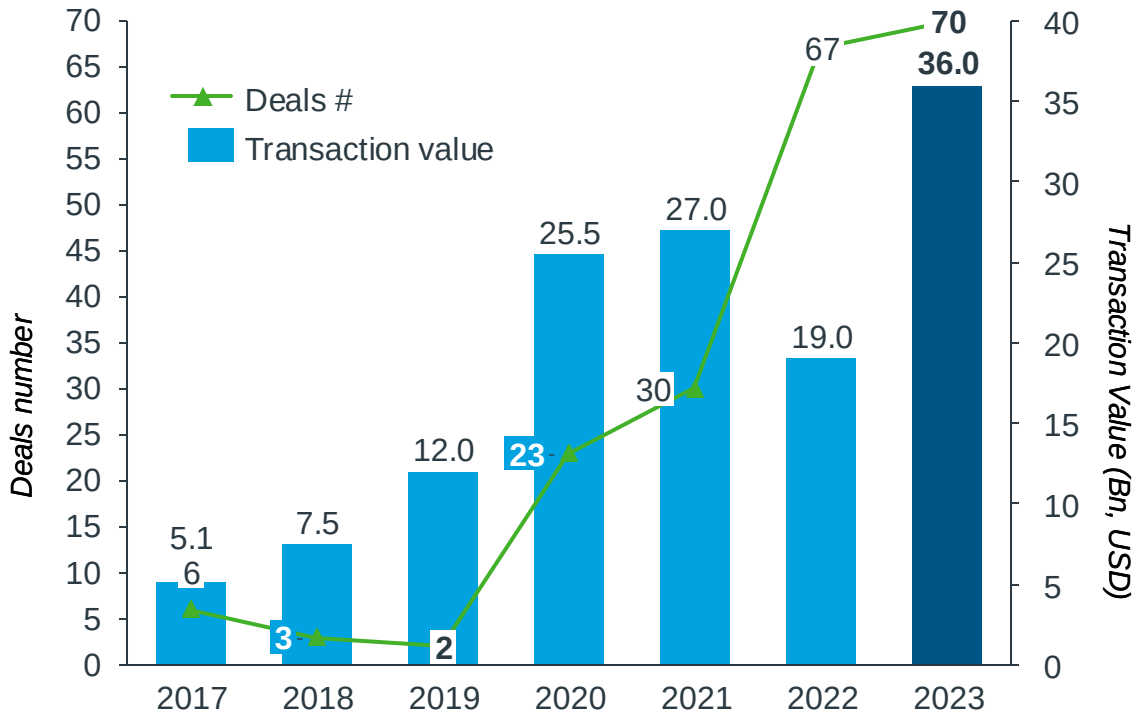
A rise in the proportion of local innovative drug approvals emerged in recent years

Numbers of local and MNC novel drug approvals in China (2017-2023)



More China originated novel products have been licensed out to Global pharma

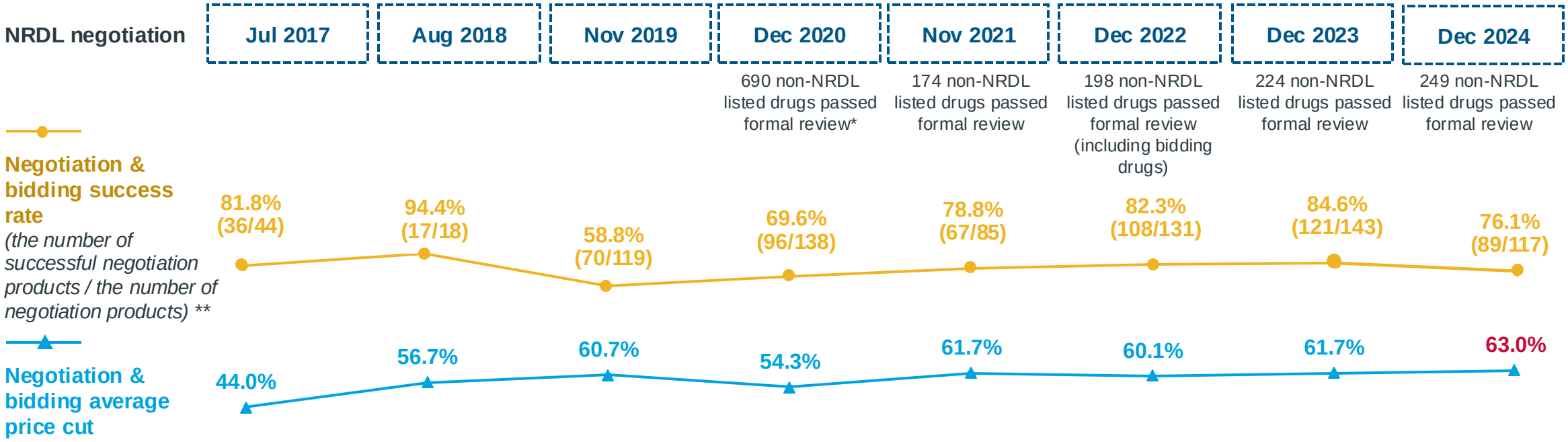
License-out deals of China originated innovative assets (2017-2023)



Note: Innovative drugs exclude biosimilars and generics
Source: PharmaGo Database; Desktop research; IQVIA analysis

NRDL has been normalized with average price cut stabilized at ~60%, and the rules are getting more transparent and scientific to favor innovations

NRDL negotiation success rate evolution since 2017



- **In 2024, the average price of NRDL products dropped by 63%**
- **2024 negotiation is facing high pressure, showing a lower negotiation ticket rate than 2023 NRDL**
- **New listing criteria were strengthened for genuine innovation or significant changes**

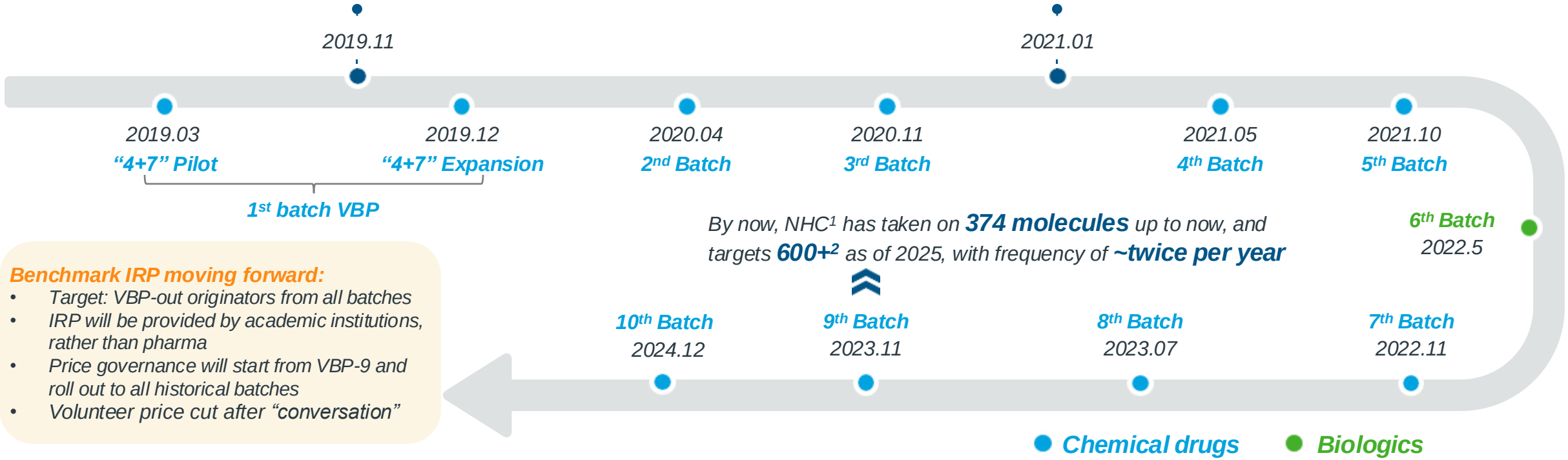
Note: *If the same product meets multiple application requirements, it will not be double-counted; **Before 2022, there are only negotiation success rates, excluding bidding price. In 2022, it includes negotiation and bidding price outside the NRDL list, as well as negotiation renewal in the NRDL list; &, median time (years), only analysis of successfully negotiated Western medicine
Source: Official data released by the Ministry of Human Resources and Social Security and the National Healthcare Security Administration; IQVIA analysis

Up to now, China has conducted 9 batches of national VBP, with emerging policies targeting at VBP-out originators through IRP benchmark

Milestone of China VBP Policies

*"Notice on Policies and Measures to Further Deepen the Reform of the Medical and Health System with **Centralized Procurement & Use of Drugs** as a Breakthrough"*
- The State Council of the People's Republic of China

*"Opinions on Promoting the **Normalized and Institutionalized Development** of Centralized and Volumetric Drug Procurement"*
- The State Council of the People's Republic of China

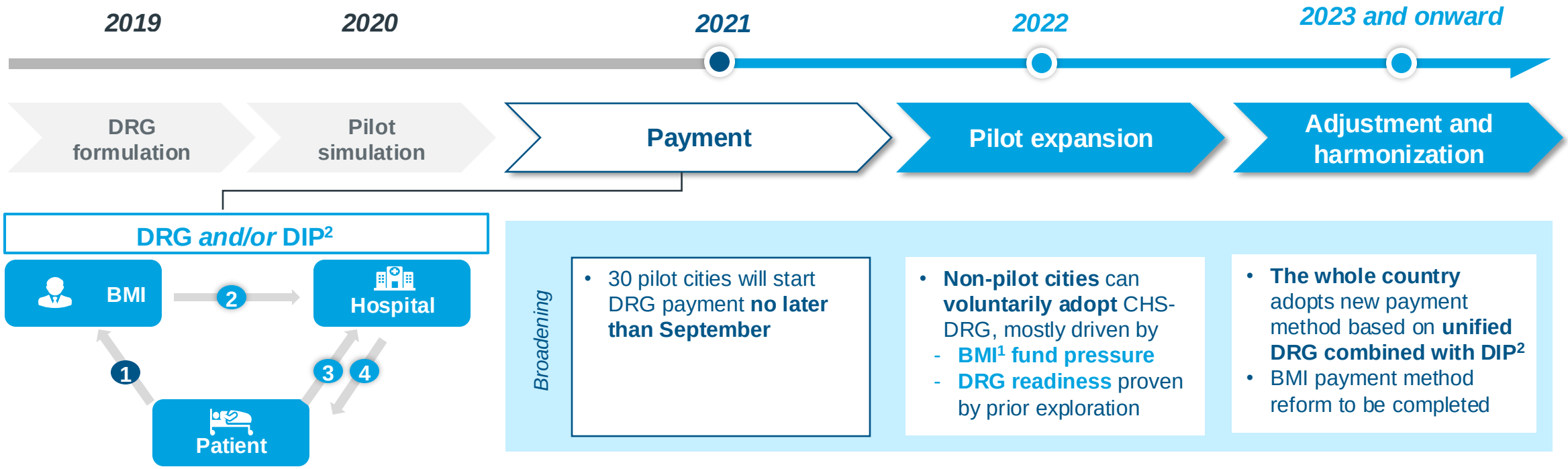


Benchmark IRP moving forward:

- *Target: VBP-out originators from all batches*
- *IRP will be provided by academic institutions, rather than pharma*
- *Price governance will start from VBP-9 and roll out to all historical batches*
- *Volunteer price cut after "conversation"*

Notes: 1. NHC = National Health Commission; 2. Total of national VBP and provincial VBP
Source: Desktop research; IQVIA analysis

Payment methods in DRG and/or DIP have helped public hospitals transform and will be expanded to more cities with regular and dynamic adjustment



1. BMI premium payment by residents
2. Hospitals being paid by NHSA **based on DRG/DIP**
3. Post-reimbursement OOP payment by patient
4. Service provision by hospital to patients, after which **hospital can earn a profit/bear a loss**

Broadening

- 30 pilot cities will start DRG payment **no later than September**

- **Non-pilot cities** can **voluntarily adopt** CHS-DRG, mostly driven by
  - **BMI[1] fund pressure**
  - **DRG readiness** proven by prior exploration

- **The whole country** adopts new payment method based on **unified DRG combined with DIP[2]**
- BMI payment method reform to be completed

Maturing

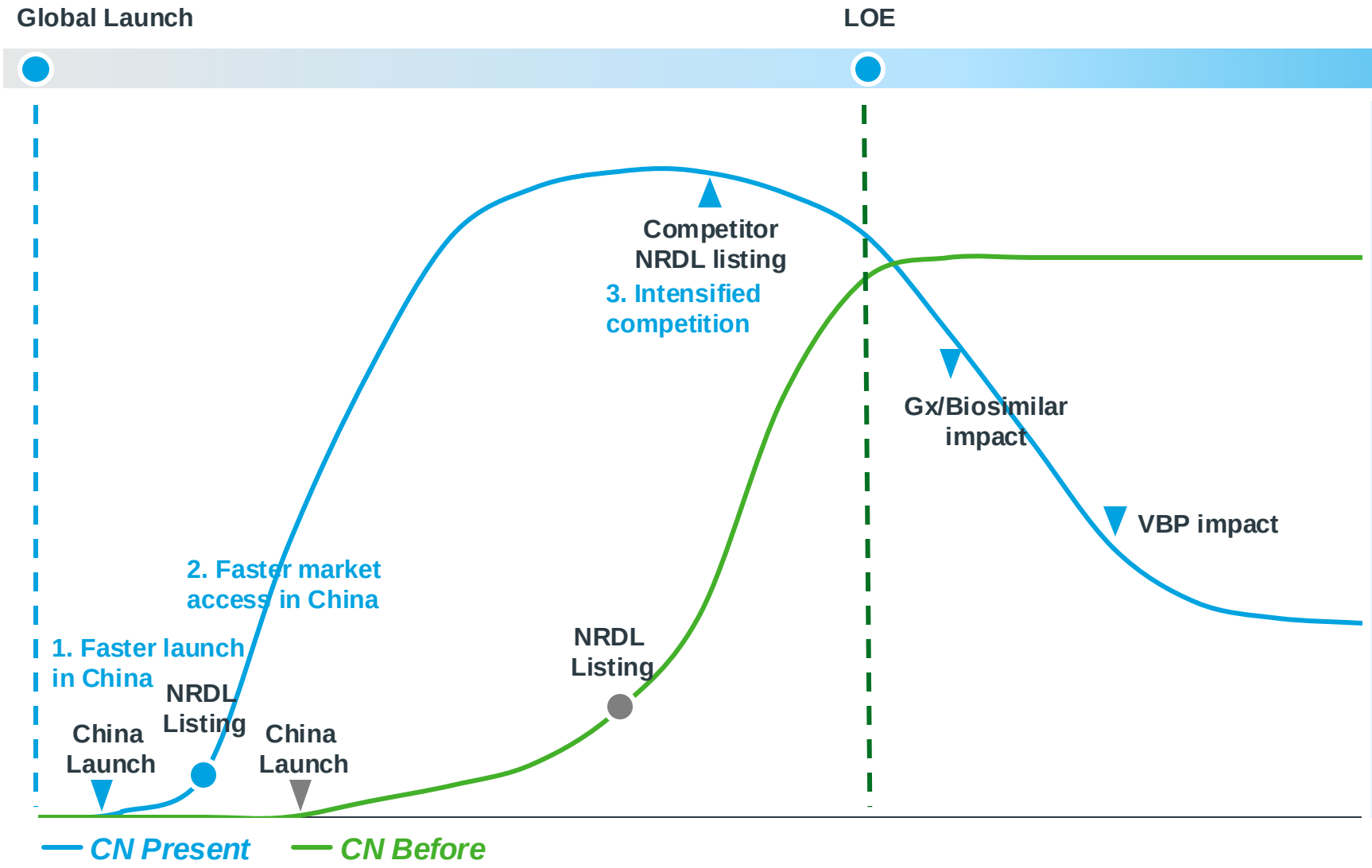
- Pilot cities adopt **CHS-DRG 1.0** in payment
- **CHS DRG 1.1** is on track to be formulated, which offers chances for grouping adjustments

- Local authorities will conduct **regular review & adjustment** of DRG **grouping, weights** and **rates** based on monitored implementation status

- **Grouping will be unified** across the country
- **Routinized review** and **adjustment** at national level on grouping and local level on weights

Note: 1. BMI = Basic Medical Insurances; 2. . Big Data Diagnosis-Intervention Packet
Source: Payer & CI interview, Desk research, Literature review, IQVIA analysis

Product lifecycle in China now has been significantly shortened, making commercialization more challenging for pharmaceutical companies



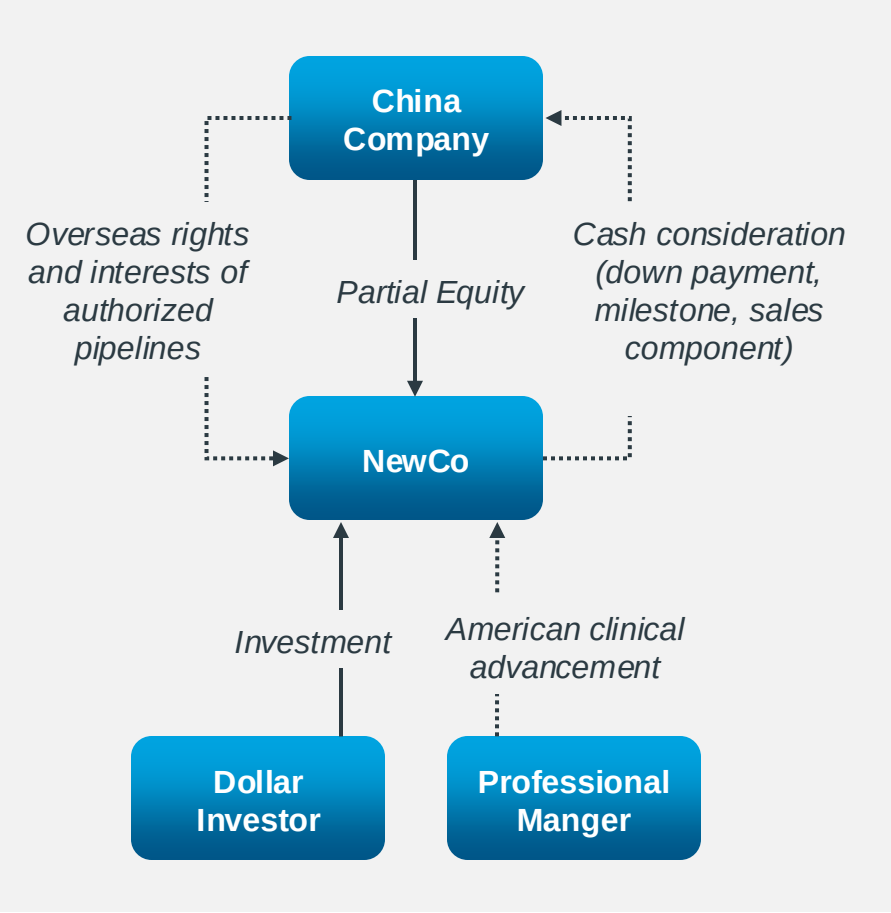
Implications

1. The new environment in China resulted in much **faster sales uptake** but **shortened product lifecycle**
2. A **combo of innovation and speed** will be the engine to drive strong growth momentum
3. At the growing stage, **continuous investment** in market penetration and lifecycle management is vital for product success

Source: IQVIA analysis

China Outbound NewCo Model

NewCo Model “101” introduction and insight



NewCo Model Introduction

- A new company (NewCo) was established in the United States, and domestic innovative pharmaceutical companies authorized the overseas rights and interests of their core pipelines to this company. In addition to the authorization fee, part of the consideration was the equity of NewCo.
- At the same time, as a pure American company, Newco will raise funds in the American market, and finally go public under the independent operation of the United States or be acquired by large pharmaceutical companies to realize the withdrawal of shareholders and investors.

NewCo Model Insight

- Obtaining cash flow income through licensing transactions and holding shares in NewCo have both advantages of pipeline BD and capital operation, and enjoy the potential of sales sharing and listing/M&A value-added.
- The dual value of industrial investment and capital operation can be realized by sharing the dividend of high return and high capital fever in the innovative pharmaceutical industry in the United States and leveraging the mature listing/merger mechanism.
- The main body of China and the United States operates independently, which not only ensures the autonomy of domestic R&D and capital operation by splitting overseas rights and interests, but also realizes the dual efficiency of cross-border collaboration and risk isolation.
- Through overseas financing support and flexible pricing mechanism to supplement cash flow and avoid domestic valuation pressure, relying on pure American capital structure to avoid geographical risks, effectively solve the urgent needs of domestic entities and realize the advantages of cross-border capital operation.

Source: IQVIA analysis

NewCo vs. BD (to MNCs) in the Eyes of Asset Originator

	NewCo Model	Conventional Out-Licensing
Advance Payment	• Generally, it is lower than MNC, but the absolute value is not low	• Relatively high, and there is a trend of higher and higher
Shareholding	• Around 10-30% • Generally considered together with the advance payment	• No share
Operation	• Generally have a board seat • Can participate in the development of assets as a substantial stakeholder	• No (only architectures like JSC or JDC passively participate)
Focus	• Very focused (most NewCo is single asset mode) • Downside comes from the development risk of the asset itself	• Depends on the licensee's own strategic "strength" • Downside comes from the development risk of the asset itself + the "strategic adjustment" of the licensee
Validation	• It has the function of partial validation if the counterparty is a well-known fund	• If the counterparty is Big Pharma, the role of higher validation

Source: IQVIA analysis

NewCo vs. BD (to MNCs) – No Need to Pick & Choose

In practice, NewCo and overseas BD can be pursued in parallel using a "dual track" approach (similar to attempting both an IPO and M&A simultaneously in capital market transactions), and no need to choose one or the other.

Both tracks can be advanced to the term sheet stage before making a substantive evaluation and selection.

The dual track approach can also strengthen the negotiating leverage of the project company with respect to BD and NewCo counterparties.

The additional complexity and pressure on internal resources generated during the transaction process can be managed through the judicious use of external intermediaries (such as financial advisors, sourcing agents, etc.).

NewCo is essentially an intermediate state in the transaction to be sold to Big Pharma, so even if NewCo successfully completes financing and begins operations, maintaining communication with MNCs remains one of NewCo's most important tasks.

Thank you and for further questions please contact:

Howard Chen

Managing Principal

Head of Services, MC & PI

IQVIA China

Howard.chen@iqvia.com