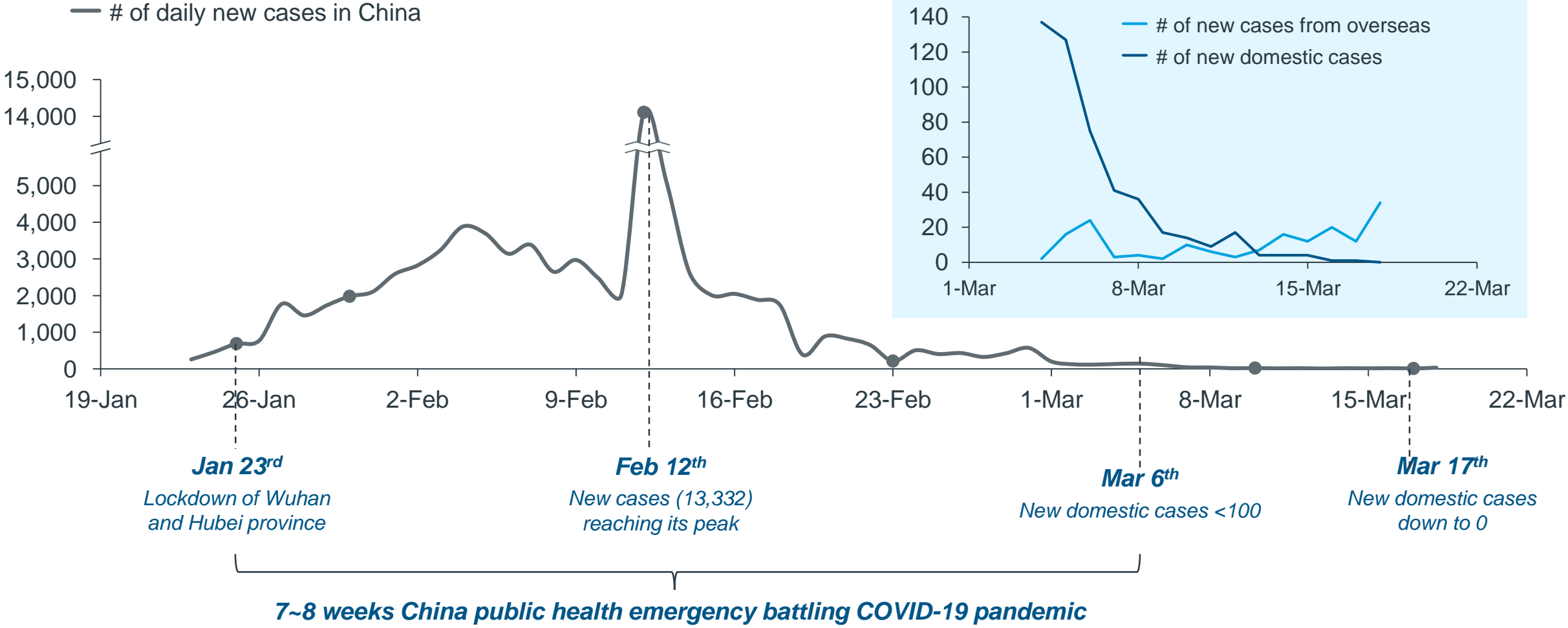
The background of the slide is a deep blue color. It features a microscopic view of several hands, with the fingers spread, appearing to be covered in a fine, textured layer. Scattered throughout the scene are numerous small, spherical particles, some of which have a distinct outer shell and a darker center, resembling virus particles or bacteria. On the left side, there is a vertical column of six dark blue, rounded rectangular shapes, each with a white semi-circle on its left edge, resembling a stylized bar chart or a list of items.

# Update on COVID-19 Pandemic in China and its Impact on Pharmaceutical Market

**IQVIA Management Consulting**  
March 20, 2020

# In China, the battle ground for COVID-19 pandemic is shifted to screening and isolating imported cases from overseas

## Trend of new COVID-19 cases in China

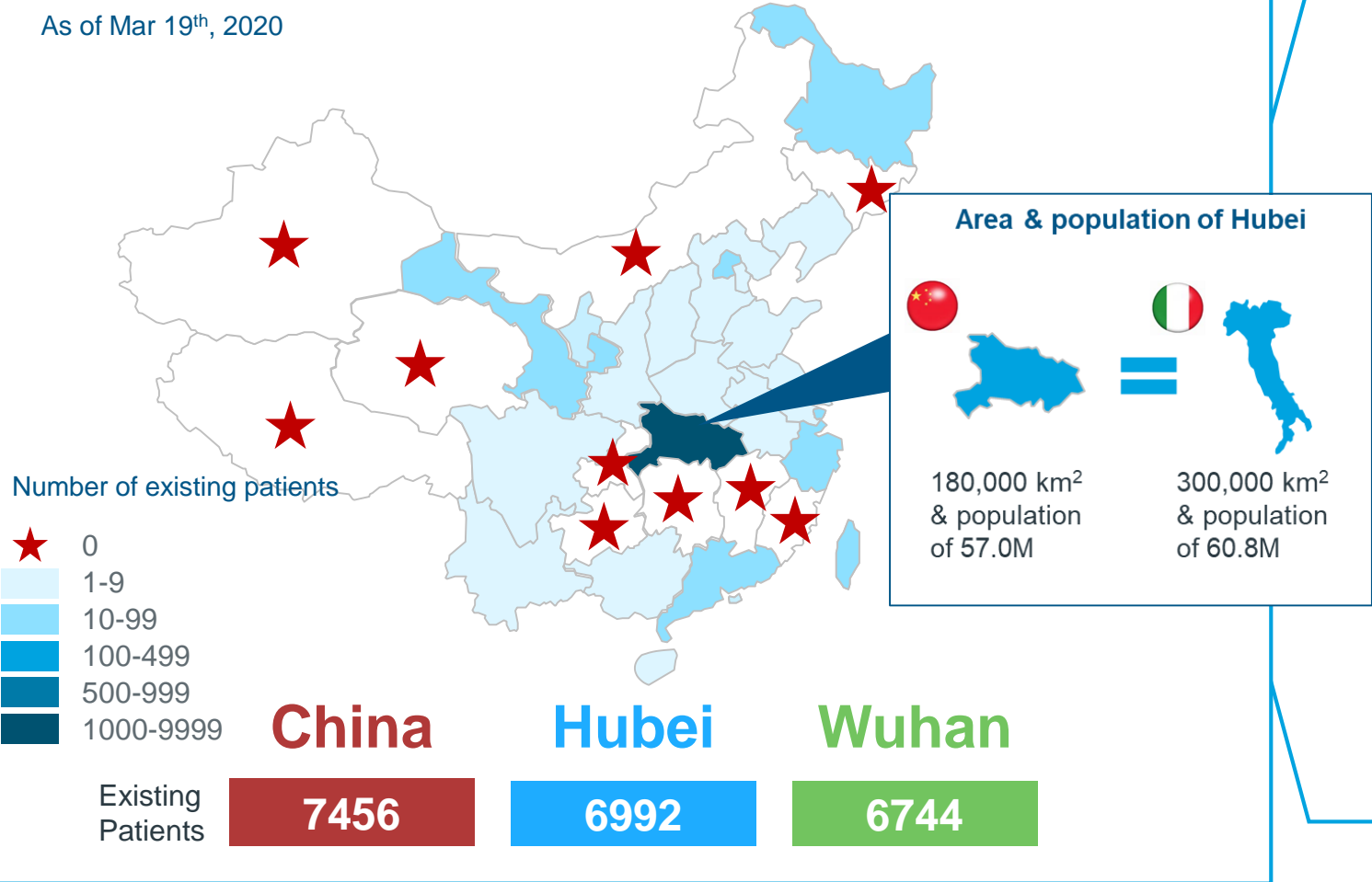


Source: National Health Commission; IQVIA analysis

# In the last 24 hours, the whole China, including Hubei has zero new domestic cases, but 34 imported cases

Hubei province (Wuhan being the state capital) has been under lockdown for 57 days since Jan 23<sup>rd</sup>, 2020

As of Mar 19<sup>th</sup>, 2020



Hubei province, excluding Wuhan, is being unlocked

- **3,675 medical professionals** from **41** nationally recruited medical teams has left Wuhan
- **46 COVID-19 designated hospitals** in Wuhan planned to resume regular services in April
- Wuhan aside, Hubei is gradually removing traffic blockade
- **49.3% manufacturers**, mostly large SOEs has reopened, with the rest reopen after March 20

Source: National Health Commission; IQVIA analysis; Public News

# Life outside Hubei is expected to return to normal in April, while recovery in Hubei is expected in June



## Manufacturing

- **>90%** manufacturing reopened outside Hubei, **49.3%** in Hubei
- Pharmaceutical, chemical and electronics industries have recovered to **~70%** of original capacity
- Government has taken actions to stimulate the economy, including low interest loan, tax subsidy and deferral



## Commerce

- Service sector has recovered to **67%** of level seen in 2019 Q4 nationwide, **~30%** in Wuhan
- **90%** of supermarkets, retail stores, restaurants and hotels have re-opened nationwide



## Transportation

- Nearly **100%** of cross-state highways reopened and **80%** local traffic resumed nationwide
- Other than Wuhan, **Hubei unblocked all communities** on Mar18<sup>th</sup>

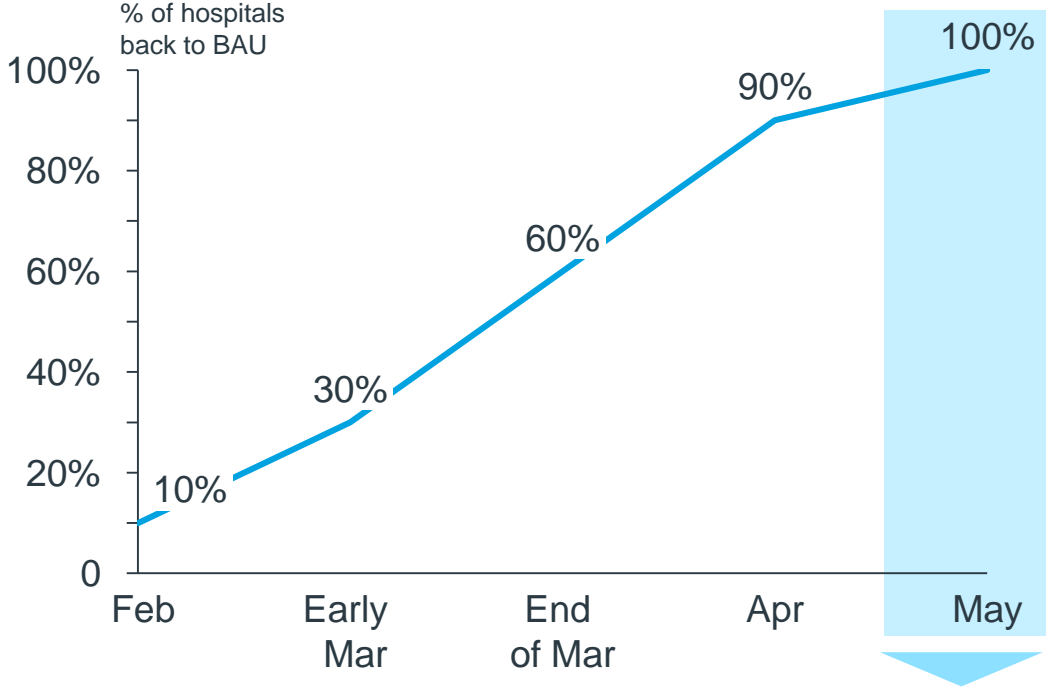


## Education

- **Schools** are already open in 3 provinces (Qinghai, Guizhou, Xinjiang)
- All schools outside Hubei will gradually open throughout April
- Hubei schools are expected to reopen in June

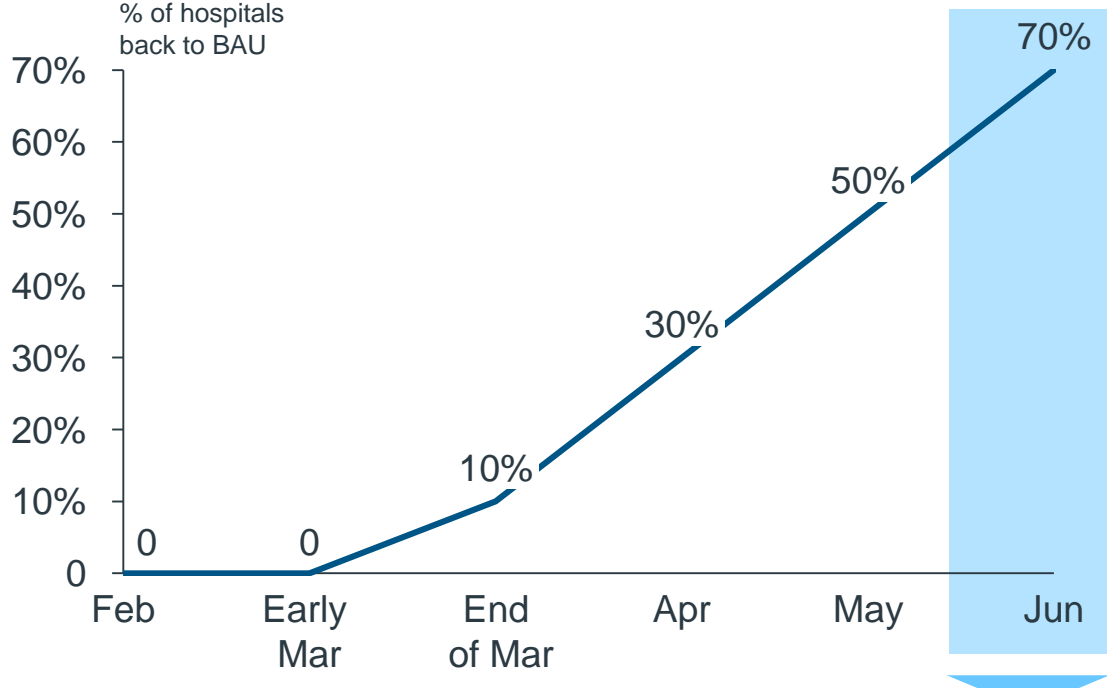
# Hospitals/Sites increasingly re-opened from Feb, and 100% of the sites outside Hubei will resume patient access by the end of May

Outside Hubei, access to patients will return to normal by the end of May



- By end of May, ~**100%** of the hospitals (outside Hubei) will resume services with patient access

In Hubei, access to patients started to recover in March and will recover to 70% in June



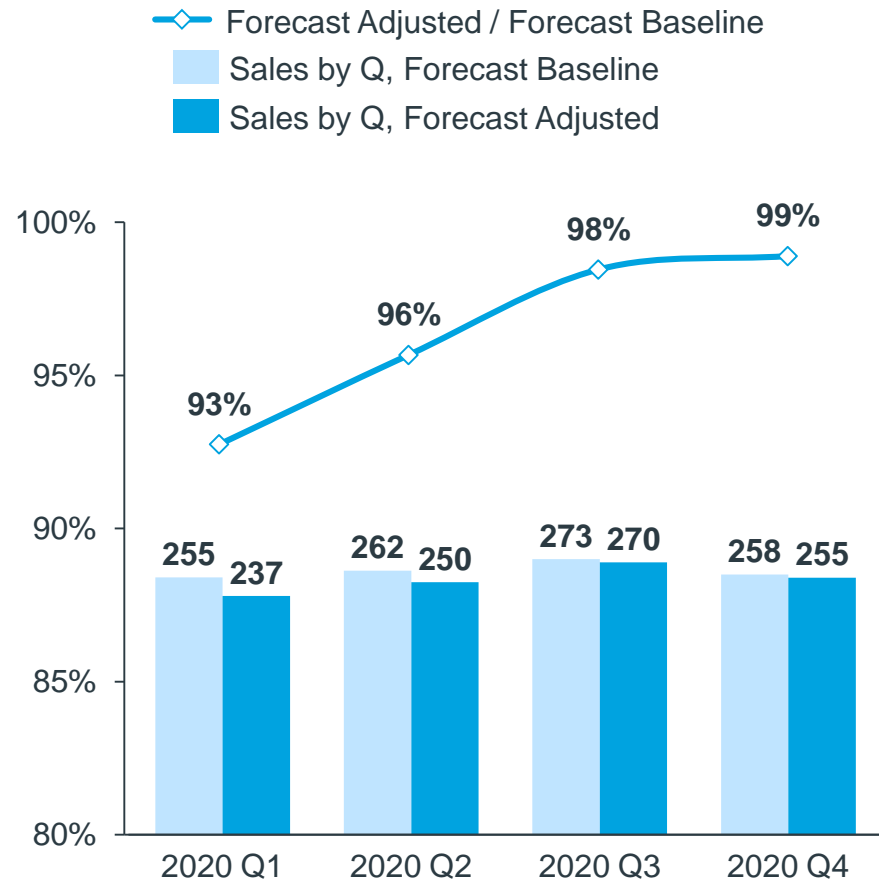
- By June, ~**70%** of hospitals in Hubei (excluding Wuhan), will resume services with patient access. Recovery in Wuhan may need additional 1-2 months

Note: Hospitals/Sites in Wuhan (90% of those in Hubei province), recovery progress is generally one month later compared to the rest of hospitals in Hubei province  
 Source: IQVIA analysis

# Pharma market is affected in Q1 and Q2, but will gradually recover in Q3

## COVID-19 Impact in 2020

China Pharmaceutical Market Prognosis, Bn RMB  
(Sales value, by quarter, 2020)



- ### Regions: Hubei vs. Non-Hubei

**Hubei is seriously impacted by COVID-19 and it may take more time to recover**

  - The outbreak ends in April and June outside and inside Hubei, respectively
  - Hospitals repurposed for COVID-19 will resume normal function. The process takes longer time for Hubei than rest of China
- ### Channel: Hospital vs. Retail

**Hospitals, especially large hospitals have greater impact due to COVID-19, while retail channel has limited impact**

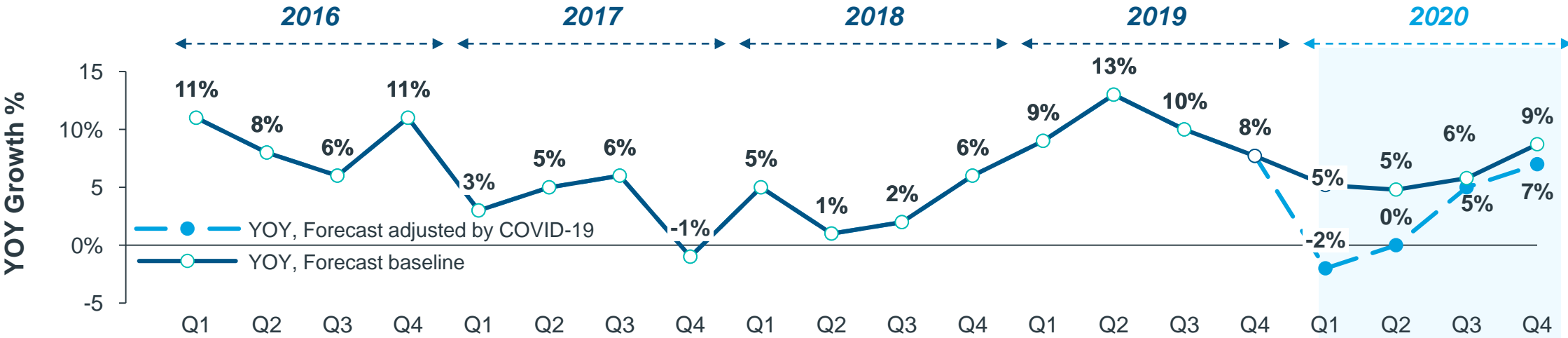
  - Nationwide quarantine reduces hospital visits
  - More drug purchase and dispense shifted to retail pharmacy, including online pharmacy
  - Reimbursement for online drug purchase likely to be piloted in Wuhan and Shanghai
- ### Therapeutic areas: by ATC

**The impact varies by therapeutic areas**

  - Drugs for anti-viral, respiratory, and life-threatening diseases are least impacted
  - Drugs for chronic diseases and general surgery are moderately impacted
  - Drugs for adjuvant therapy and supportive care are most impacted

Based on our best understanding, we project that growth rate will drop to -2% and 0% in Q1 and Q2, respectively, then recover to 5-7% in Q3 and Q4

China Pharmaceutical Market YoY Growth Trend (Sales value, 2016Q1-2020Q4)

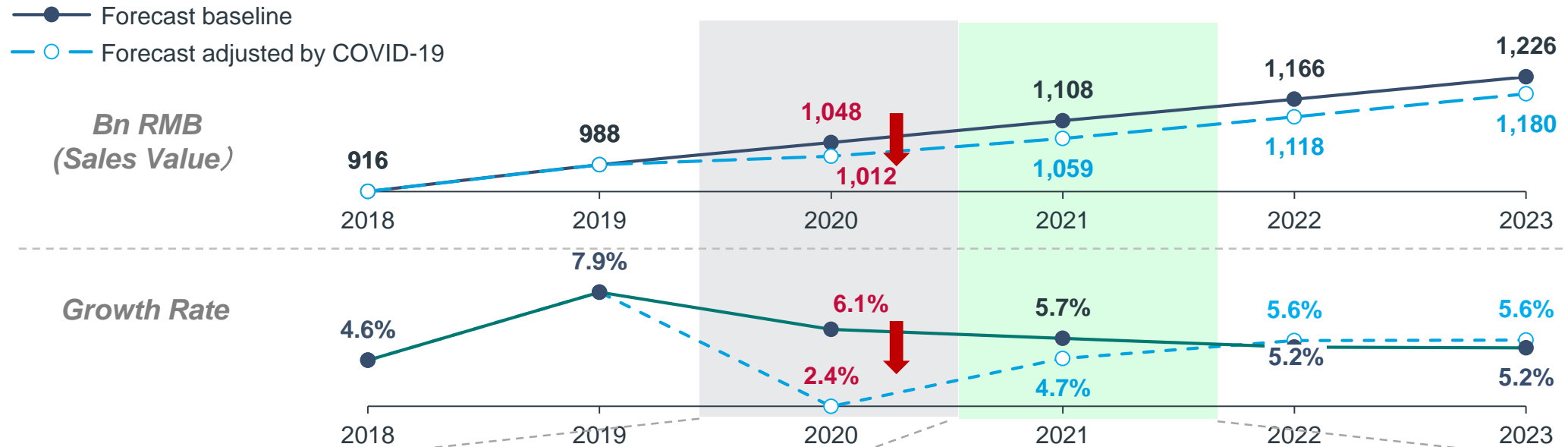


Key Impact	2016	2017	2018	2019	2020
	<ul style="list-style-type: none"> <li>✓ Ensure drug quality and effectiveness.</li> <li>✓ Tendering &amp; central purchase, and reform pilot of reimbursement price. Integration of distributors.</li> <li>✓ Clinical medicine use standardization and drug fee control</li> </ul>	<ul style="list-style-type: none"> <li>✓ Comprehensive reform on public hospitals, including medical expenses control, the percentage of drug expenditure control</li> <li>✓ Separation between medical and pharmaceutical services.</li> <li>✓ Promotion of hierarchical medical system.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Continue to implement a strict drug control policy.</li> <li>✓ Implementation of Generic Quality Consistency Evaluation.</li> <li>✓ 17 oncology products were included in NRDL list .</li> <li>✓ Announced the result of volume-based procurement in 4+7 cities .</li> </ul>	<ul style="list-style-type: none"> <li>✓ VBP in 4+7 cities has been execution in March 2019.</li> <li>✓ Announced piloting DRGs payment system in 30 cities.</li> <li>✓ 2019 NRDL update.</li> <li>✓ Announced the result of volume-based procurement in alliance regions.</li> </ul>	<ul style="list-style-type: none"> <li>✓ Local lockdown and stay-home quarantine</li> <li>✓ Stringent cost containment of medical insurance</li> <li>✓ Decrease in out-of-pocket expenditure</li> <li>✓ Disruption in commercial activities</li> </ul>

Note: All projections are based on the constant inflation rate  
Source: IQVIA analysis

# We anticipate market rebound will continue throughout 2021 and recover growth momentum by 2022

## China Pharmaceutical Market Prognosis, 2018-2023



### Key Impact

#### Short-term (2020-2021)

- ✓ **The outbreak of novel coronavirus affects the entire pharmaceutical industry chain in 2020, including:**
  - Pipeline clinical research
  - Drug manufacturing and import
  - Drug distribution
  - New product launch
  - Sales and marketing activity
  - Procurement and reimbursement

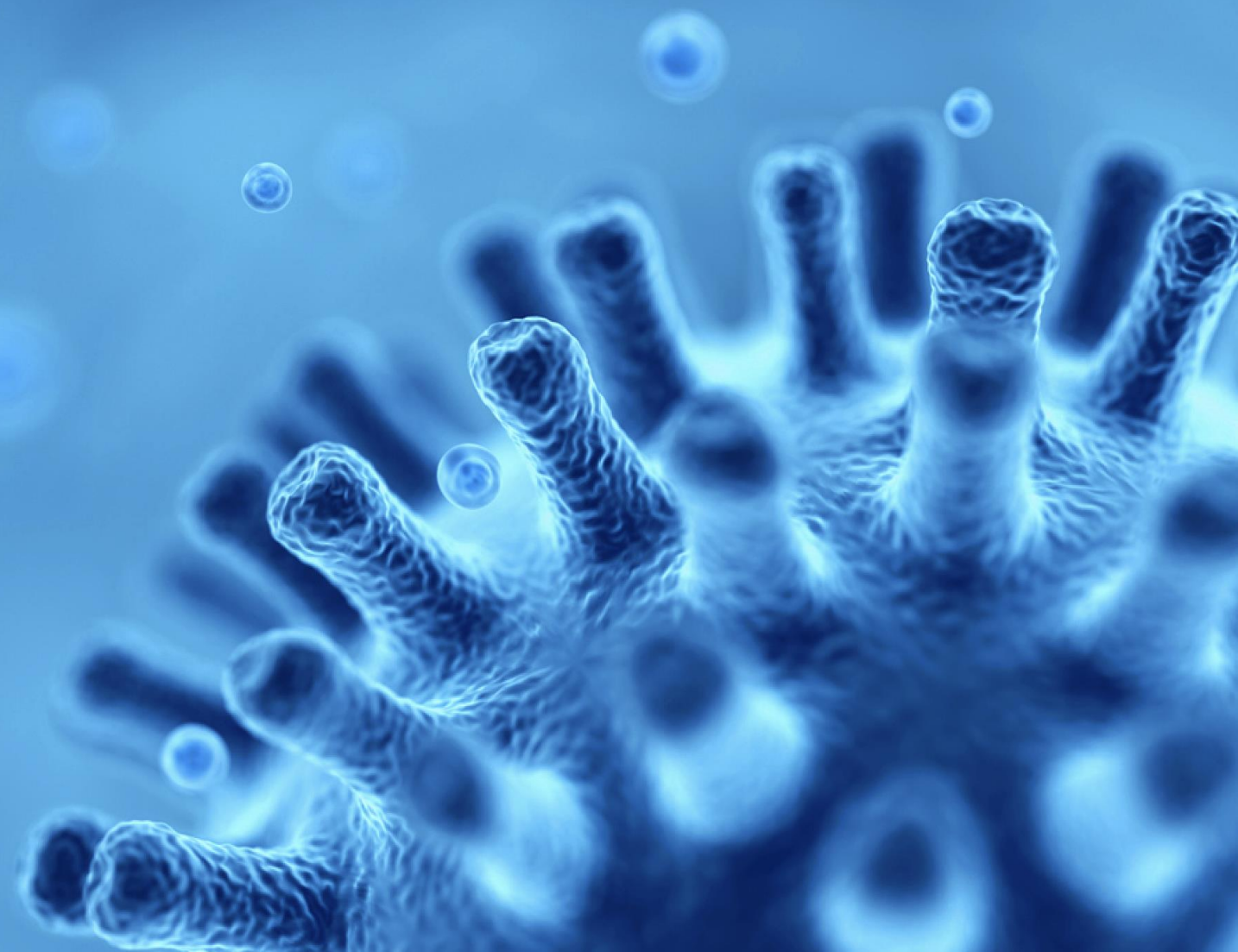
#### Mid-term (2021-2022)

- ✓ **Pharmaceutical market will regain the growth momentum and return to the baseline growth rate from 2022, because**
  - **Hospital service:** impact from delayed and cancelled services will be fully minimized in 2021; more regular and strict control in the next flu seasons
  - **Tightened budget:** limited healthcare funding on drugs with cost containment; consumer confidence and willingness-to-pay will recover
  - **Delayed access timeline:** negotiation and regular NRDL update will be delayed in 2020 and consequently impact on the local implementation

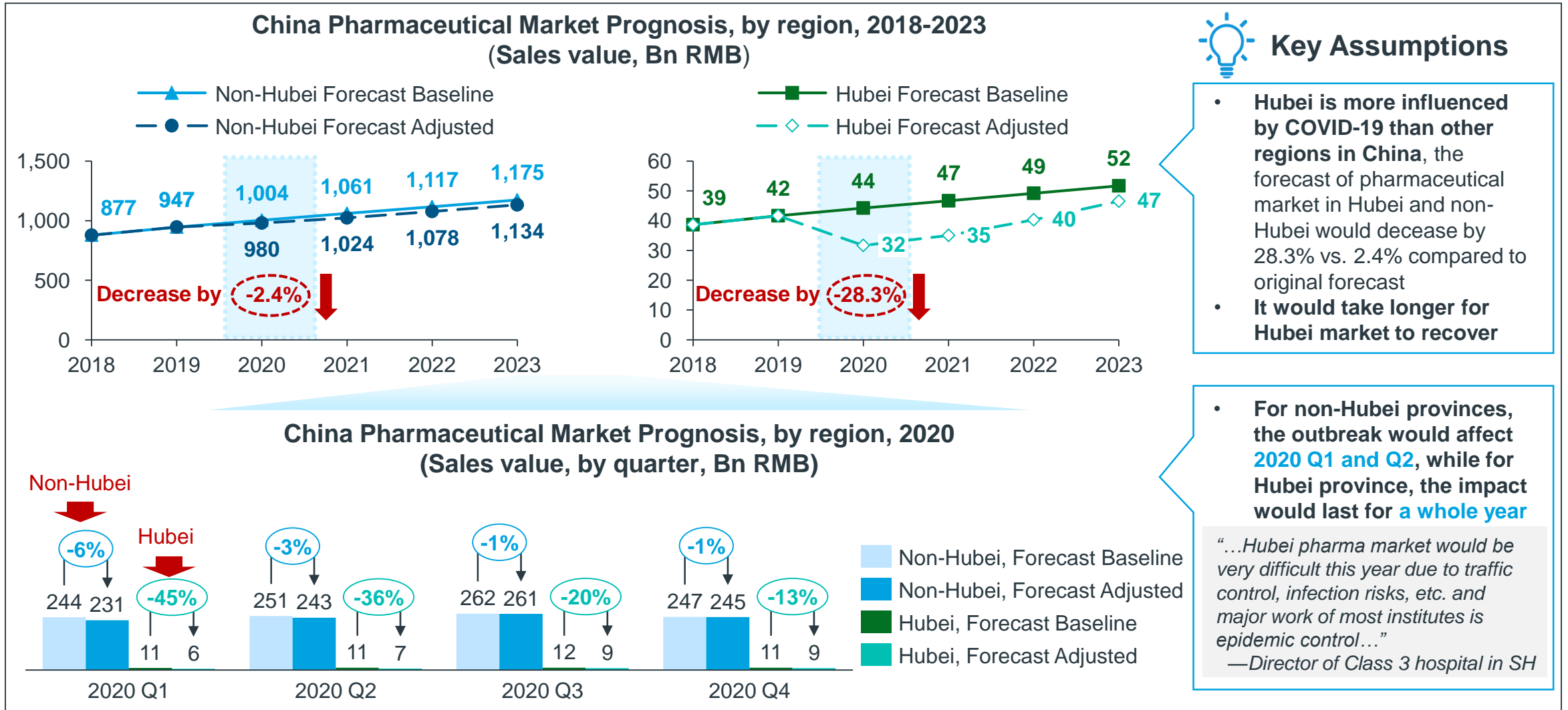
Note: All projections are based on the constant inflation rate  
 Source: IQVIA analysis



**Thank You**



# Appendix: Pharma market in Hubei took the biggest hit, hence takes longer time to recover



Note: All projections are based on the constant inflation rate  
Source: IQVIA analysis