

HARBOUR  
BIOMED



Harbour BioMed  
2022 2Q Issue

INVESTOR RELATIONS

JOURNAL

# CONTENT

---

01

Global Innovation

02

Innovative and Differentiated  
Product Pipeline

03

Technology Platforms Drive  
Global Innovative Product  
Development

04

Global Network and Footprint

05

Keep Clinical Trials and Experimental  
Tasks on Progress During  
Shanghai Lockdown

06

Global Roadshows and  
Conferences in 2Q 2022

07

Analyst Coverage and  
Awards

08

Annual General Meeting

09

HBM Overview  
(02142.HK)

10

HK Biopharma Sector

11

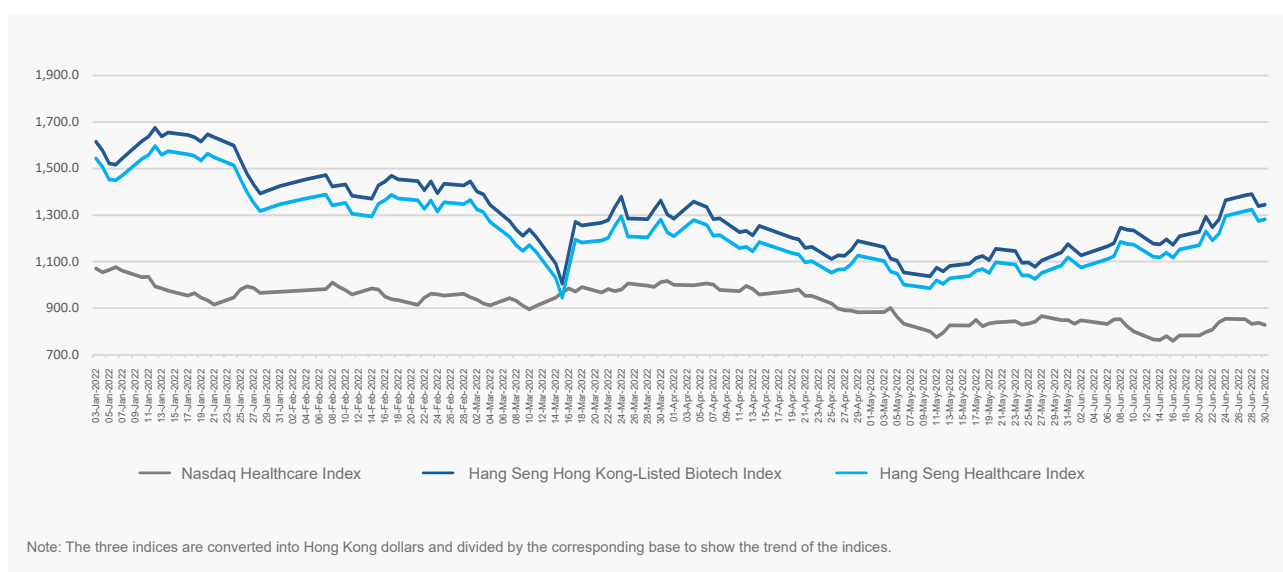
Global Market Overview

# Foreword

## Despite Dampening Sentiment on Healthcare Sector, Investors Remain Selectively Optimistic about the Industry, Especially the Companies with a Focus on Innovation Pipeline

In 2022 2Q, healthcare stocks were edging higher, as the Nasdaq Healthcare Index and Hang Seng Healthcare Index slightly moved to the upside

Healthcare Index Relative Performance of HK and US Markets – 2022 1H



### Meanwhile, there are still some market feedbacks on the biotech sector:

- concerns on cash burning in this bearish market environment
- difficulties to gauge valuation from both PE and PS perspectives considering the less visibility on peak sales/profitability due to the price-cut stance
- concerns about their global expansion story

### Reasons for Optimism

- **Fundamentals are still robust to fund the emerging revenue gap:** though industry valuations are currently experiencing a correction, which is most pronounced for the early-stage companies, the fundamentals remain strong, with biotech innovation projected to remain a major driver of revenues in the coming years
- **Biotech innovation has been a key driver of the sector,** and is expected to continue at a rapid pace

# Chairman Message

The first half of 2022 is time full of uncertainties resulting from geopolitical turmoil, repeated outbreaks of COVID-19 and a sluggish global economy. While faced with such a challenging environment, HBM is more united and determined than ever to persevere through this intricate and tumultuous time and rapidly advance for highly differentiated innovation globally.

“**Global innovation & collaboration**” are in the gene of Harbour BioMed and the keys to drive our sustainable growth since the inception. Our three industry-leading, world-class fully human antibody technology platforms are the engines driving our continuous global innovation and collaboration. In the first half of 2022, we announced numerous milestones in global collaborations which include:

- Global out-license agreement with AstraZeneca for HBM7022(CLDN18.2XCD3).
- Collaborations on ADCs with LegoChem Biosciences, Duality Biologics, etc.
- HBM incubated next-gen biologics company NK Cell Tech successfully completed series A fundraising.

These significant achievements further validate our competitiveness in both technologies and innovation capabilities at the global level.

“**Global operation & innovation**” are our long-term strategy and vision. We are rapidly advancing our global clinical programs for the first-in-class bispecific antibody HBM7008 (B7H4x4-1BB):

- Completion of the first dosing of first patient in Phase I trial of HBM7008 in Australia.
- The clearance and approval of IND applications by USA FDA and China NMPA.

Furthermore, we are excited to observe the promising efficacy and excellent safety profile for HBM4003 program currently at global Phase I/II development stage. The results of the Phase I data were presented at ASCO 2022 which received considerable attention and accolade. In addition, other innovative pipeline assets are rapidly advancing towards clinical phase.

Moving forward, we remain committed to our global innovation strategy, and rapidly develop our portfolio pipeline, to focus on our mission to lead a Healthy Life with Breakthrough Medicines.

---

**Dr. Jingsong Wang**

Founder, Chairman, and CEO

# 01 Global Innovation

## HBM7022 Novel Bispecific Antibody Out-licensed to AstraZeneca

- In April 2022, HBM7022 (CLDN18.2xCD3), a bispecific antibody in the early preclinical stage, was out-licensed to AstraZeneca
- In May 2022, we **received US\$25 million** upfront payment (total transaction value of **US\$350 million**)
- HBM7022 has been completely transferred to AstraZeneca for subsequent developments. AstraZeneca is granted an exclusive global license for the research, development, registration, manufacturing, and commercialization of HBM7022 and shall be solely responsible for all costs and activities associated with its further development and commercialization

**HARBOUR**  
B I O M E D



AstraZeneca

---

**HBM7022's out-license to AstraZeneca further  
validated HBM's global innovation strategy**

**Press Release:**

- Harbour BioMed Announces Global Out-License Agreement with AstraZeneca for CLDN18.2xCD3 Bispecific Antibody HBM7022
- Harbour BioMed (02142.HK): Globally Collaborates with AstraZeneca Leveraging Platform Technologies

# 01 Global Innovation

## ADC Collaborations Continuously Drive Next-Gen Therapeutics

- HBM receives upfront payments, milestone payments and sales-based royalties through ADC collaborations
- Collaborations will contribute further to our fully human antibody platforms' ADC Ecosphere

**HARBOUR**  
BIOMED



### Press Release:

- Harbour BioMed Soars 10%: the Company Announces Collaborations on ADCs with LegoChem Biosciences and Duality Biotherapeutics
- Harbour BioMed (02142.HK): Globally Collaborates with AstraZeneca Leveraging Platform Technologies

# 01 Global Innovation

## NK Collaboration and Value Creation Built on Cutting-edge Technology Platforms

- HBM collaborates with NK Cell Tech as an incubator to develop novel NK cell therapeutics leveraging our world-class fully human antibody platforms
- In June 2022, NK Cell Tech successfully completed series A financing to continuously develop novel NK product pipeline

**HARBOUR**  
BIOMED



### Press Release:

- Strategic Partner of Harbour BioMed - NK Cell Tech Closes a over RMB100 Million Series A Financing
- NK Cell Tech Receives a Series A Round of Funding Worth More Than RMB100 Million

# 02 Innovative and Differentiated Product Pipeline —HBM4003

## Next-Gen Fully Human Heavy-chain only Antibody HBM4003 with Dual MOA of CTLA-4 Inhibition and Unique Treg Depletion Mechanism

Combination Therapy - Encouraging Results of Phase I/a Were Published on ASCO in June 2022

### Efficacy Data is Encouraging for HBM4003 Combination Therapy

In total 10 patients assessed, and 8 patients (72.7%) received previous anti-PD-1/PD-L1 treatments

- 2 PR were confirmed
  - 1 patient had PR as best response (mucosal melanoma, 2 lines of previous treatment including Toripalimab), with tumor shrinkage of 37.2% at week 18
  - 1 patient with PD-1 refractory urothelial carcinoma had tumor shrinkage of 57.4% at week 12

### Best Overall Response, n (%)

	0.03mg/kg 1 evaluable pt	0.1mg/kg 3 evaluable pts	0.3mg/kg 6 evaluable pts
CR	0 (0.0)	0 (0.0)	0 (0.0)
PR	0 (0.0)	0 (0.0)	2 (28.6)
SD	0 (0.0)	1 (33.1)	1 (14.3)
Tumor Reduction	0 (0.0)	2 (66.7)	2 (28.6)
PD	1 (100.0)	2 (66.7)	3 (42.9)

### HBM4003 is Well Tolerated for Combination Therapy

- No fatal TRAE
- No TRAE > Grade 3

0.3 mg/kg Q3W was recommended as the Phase II dose (RP2D) for dose expansion

### 0.3mg/kg + Toripalimab 240mg, n (%)

Total pts No.	7 (100.0)
≥ G3 TRAE	1 (14.3)
Lymphopenia	0 (0.0)
Diarrhoea	1 (14.3)
≥ G3 irAE	1 (14.3)
Diarrhoea	1 (14.3)



# 02 Innovative and Differentiated Product Pipeline —HBM4003

HBM4003 has demonstrated significantly improved depletion specific to high CTLA-4 expressing Treg cells in tumor tissues

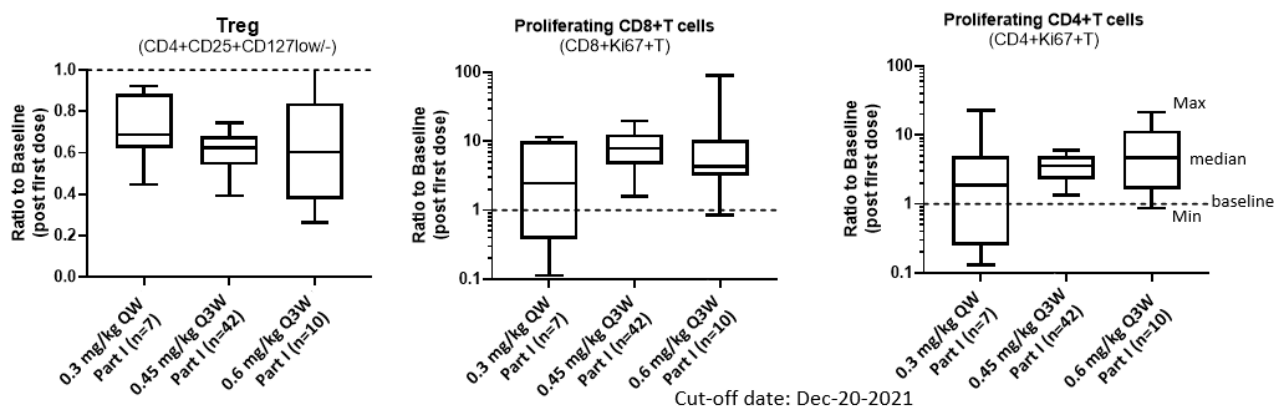
## Positive Efficacy Results for HBM4003 Mono Therapy

- 62% of patients received previous anti-PD-1/PD-L1 treatments
- For HCC, all patients received previous anti-PD-1/PD-L1 treatments. Both PR patients were heavily pre-treated and failed prior anti-PD-1 and anti-VEGFR TKI treatments
- 2 PR were confirmed, CRPC patient PSA Response
  - HCC patient had confirmed PR, tumor reduction reached 64.4% at week 24
  - HCC patient tumor reduction reached 38.3% for target lesions at week 12
  - CRPC patient had PSA response of more than 50% reduction

## HBM4003 is Well Tolerated for Mono Therapy

- No fatal TRAE
- Majority of TRAE were G1/2;  $\geq$ G3 TRAE was 9.3% at 0.45mg/kg

## HBM4003 Depleted Tregs and Increased CD4+ T and CD8+ T Cell Proliferation in Peripheral Blood



- HBM4003 depleted blood Tregs and increased CD4+ T, CD8+ T cell proliferation subsequently
- Treg depletion and T cell proliferation at 0.45mg/kg, 0.6mg/kg were comparable, supporting 0.45mg/kg selected as RP2D

## Press Release:

- Harbour BioMed to Present the Latest Progress of Next-Generation Anti-CTLA-4 Antibody HBM4003 at 2022 ASCO Annual Meeting
- Harbour BioMed: HBM4003 Is Published on ASCO with Validated Treg Depletion Mechanism

## 02 Innovative and Differentiated Product Pipeline —HBM7008

### Global Multi-Center Clinical Trials



- **The world's first bispecific antibody against B7H4x4-1BB**
- **Innovative bispecific antibody generated from the HBICE<sup>®</sup> platform**
- **Great potential to treat PD-1/PD-L1 negative or resistant patients**

#### Press Release:

- Harbour BioMed Announces IND Clearance for B7H4x4-1BB Bispecific Antibody by the U.S. Food and Drug Administration
- Harbour BioMed Announces Dosing of First Patient in Phase I Trial of B7H4x4-1BB Bispecific Antibody
- Harbour BioMed (02124HK) Obtains IND Approval in China

## 02 Innovative and Differentiated Product Pipeline

**Multiple assets are advancing rapidly and achieved significant progress**

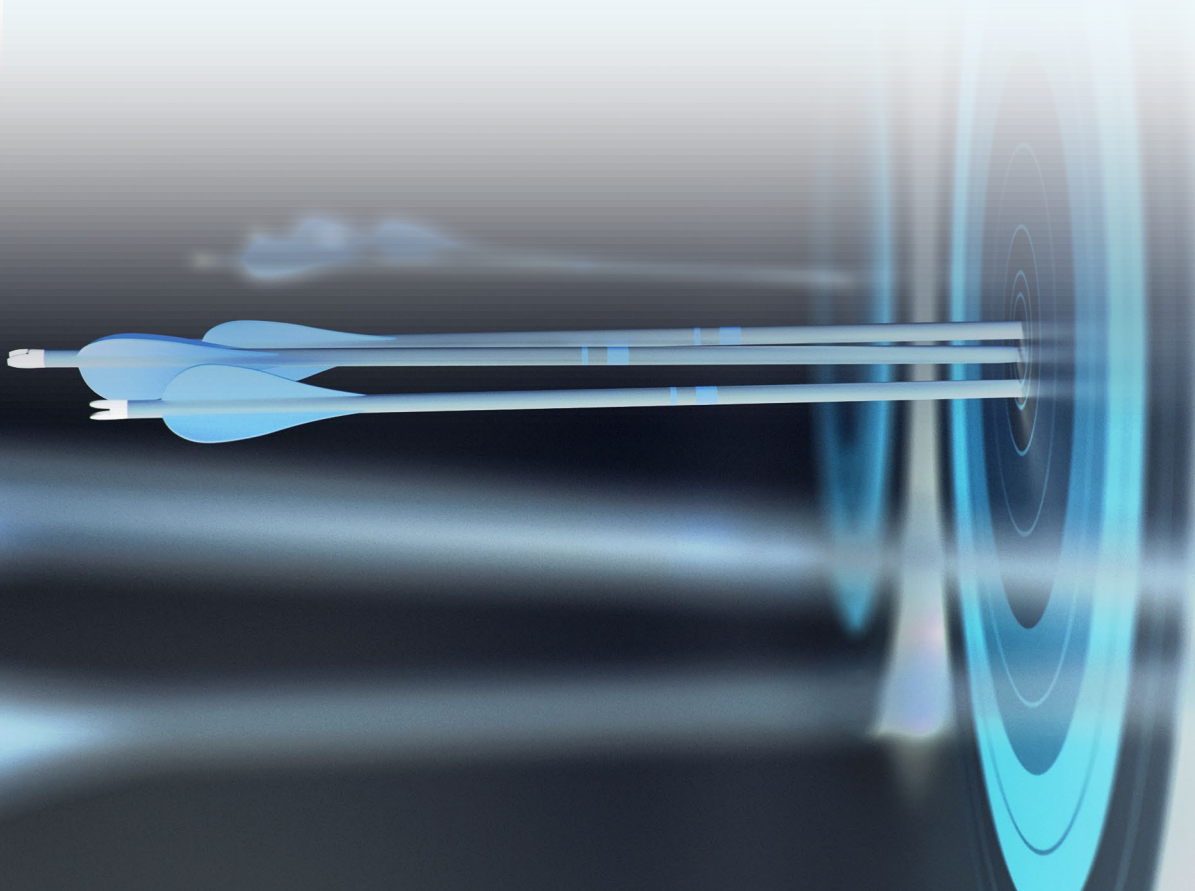
---

**Continuously** develop clinical products, advancing for BLA

- Batoclimab (HBM9161) and Tanfanercept (HBM9036)

**Rapidly** advance 4+ pre-clinical assets into the clinical stage

- HBM1022 (CCR8)
- HBM1020 (B7H7)
- HBM7020 (BCMAxCD3)
- HBM1007 (CD73)



# 03 Technology Platforms Drive Global Innovative Product Development

## HBM9027 at AACR 2022

- HBM9027, generated from HBICE® platform, a novel PD-L1xCD40 bispecific antibody
- It demonstrated a unique mechanism of action, potent anti-tumor efficacy, and superior safety profile, which is an innovative DC/myeloid cell bispecific engager for the next generation of immunotherapies



## 87G7 in Science Immunology

- 87G7, generated from H2L2 platform, a pan-neutralizing mAb against multiple variants including Omicron
- In a recent study published in the Science Immunology in April, researchers identified a human monoclonal antibody (mAb), 87G7, with in vitro neutralizing activity against several severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) variants of concern, including Alpha, Beta, Gamma, Delta, and Omicron

## Science Immunology

RESEARCH ARTICLES CORONAVIRUS



### An ACE2-blocking antibody confers broad neutralization and protection against Omicron and other SARS-CoV-2 variants of concern

WENJUAN DU DANIEL L. HURDIS OUBRAVKA DRABEK ANNA Z. MYKTYN FRANZISKA K. KAISER MARIANA GONZÁLEZ-HERNÁNDEZ  
DIEGO MUÑOZ-SANTOS MART M. LAMERS RIEN VAN HALPEREN BEREND-JAN BOSCH +18 authors Authors Info & Affiliations

SCIENCE IMMUNOLOGY • 26 Apr 2022 • First Release • DOI:10.1126/sciimmunol.abe2312

5,108



## 04 Global Network and Footprint

### New Member Joined the HBM Scientific Advisory Board



#### Dr. Alexander Zukiwski

Dr. Alexander Zukiwski joined the company's Scientific Advisory Board to provide scientific advice and guidance on the development of the oncology innovation pipeline, further improving the company's global development strategy.

Dr. Zukiwski currently serves as Chief Medical Officer of CASI Pharmaceuticals. Prior to that, he served as Chief Executive Officer and Chief Medical Officer of Arno Therapeutics, where he also served as a Board member. He also served as Chief Medical Officer and Vice President of Administration at MedImmune, responsible for clinical research and development.

### HBM Scientific Advisory Board Member was Elected as Academia Europaea 2022



#### Dr. Zhigang Tian

Dr. Zhigang Tian has been elected as Academia Europaea 2022 (clinical & veterinary science), recognizing his outstanding scientific accomplishments and substantial academic influences in the world. So far, 90 Nobel Prize laureates were members of the Academia Europaea.

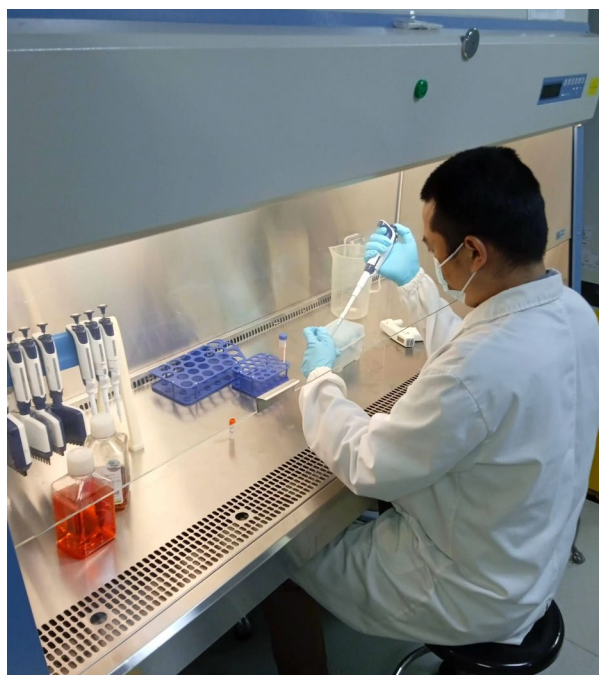
Dr. Tian is the Member of Chinese Academy of Engineering, Member of Academia Europaea, Professor at University of Science and Technology of China (USTC), Director of Institute of Immunology of USTC, Director of The Key Lab of Innate Immunity and Chronic Diseases of Chinese Academy of Science, and President of the School of Basic Medicine.

# 05 Keep Clinical Trials and Experimental Tasks on Progress During Shanghai Lockdown

## In June, all HBM Shanghai staff returned to work

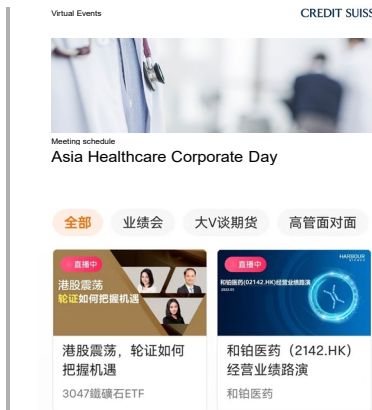
- As life came to a halt in Shanghai for two months due to the latest COVID-19 outbreak, HBM scientists and researchers kept on their duties and maintained experiments and clinical trials on progress
- During the two-month full-scale lockdown, researchers not only minimized epidemic impact on experiments but also initiated new R&D projects

### A Glance at Lab During Shanghai Lockdown



# 06 Global Roadshows and Conferences in 2Q 2022

HBM conducted **60+** global roadshows in 2Q 2022, to expand investor base and increase the company's visibility in the capital market



## 07 Analyst Coverage and Awards

Initial Coverage				
Firm	Recommendation	Target Price (HKD)	Date	Topic
Guoyuan International	Buy	8.10	12 July 2022	全人源抗体平台独具优势，创新药即将上市
Everbright Securities	Buy	7.41	19 May 2022	“和”璧隋珠，“铂”采众长，推动变革性全新疗法
China Securities	Buy	7.80	16 May 2022	科学驱动，自研+合作构建差异化研发管线
China Tonghai Securities	Non-Rated	NA	20 April 2022	Harbour BioMed Innovative Biotech with a Differentiation Strategy
Essence International	Non-Rated	NA	19 April 2022	创新双抗对外授权阿斯利康，核心技术平台价值逐步验证

Coverage Update				
Firm	Recommendation	Target Price Adjustment	Date	Topic
Morgan Stanley	Overweight	Raised	22 April 2022	Risk Reward Update
BofA Securities	Buy	Raised	8 April 2022	Update on out-license agreement with AstraZeneca; Retain Buy
Credit Suisse	Outperform	Raised	7 April 2022	Out-license deal with AstraZeneca significantly validates HBM's antibody discovery platform



**2021' Top 10 Innovation Scientists**

**Dr. Jingsong Wang**



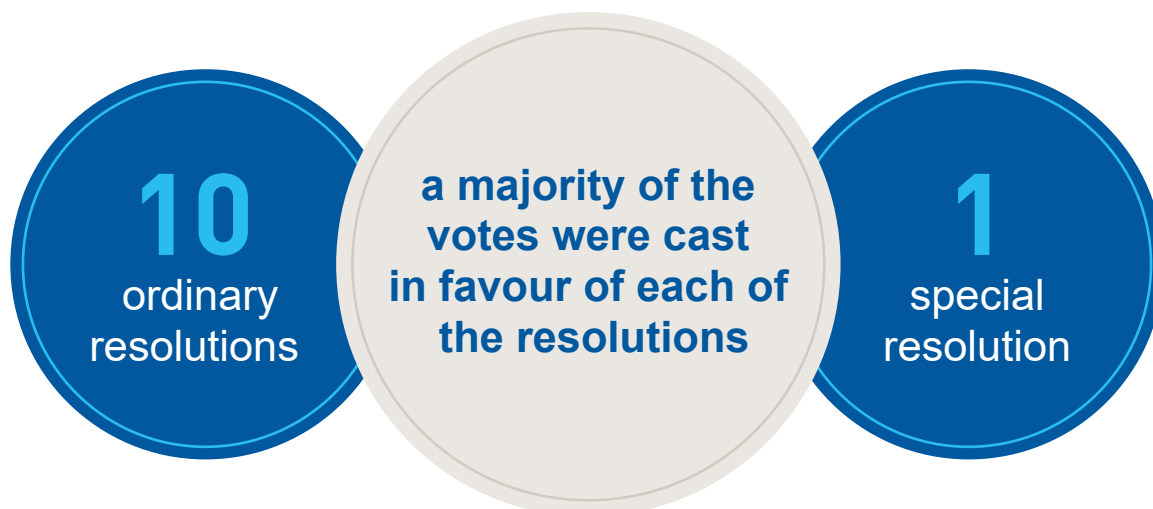
## 08 Annual General Meeting

# The AGM of HBM Holdings Limited was Held in June 2022

The Company conducted the Virtual AGM on 8 Jun 2022, registered shareholders was able to attend the Virtual AGM via the E-Meeting System, vote and submit questions online

### Poll Results

All the proposed resolutions were passed by the way of poll



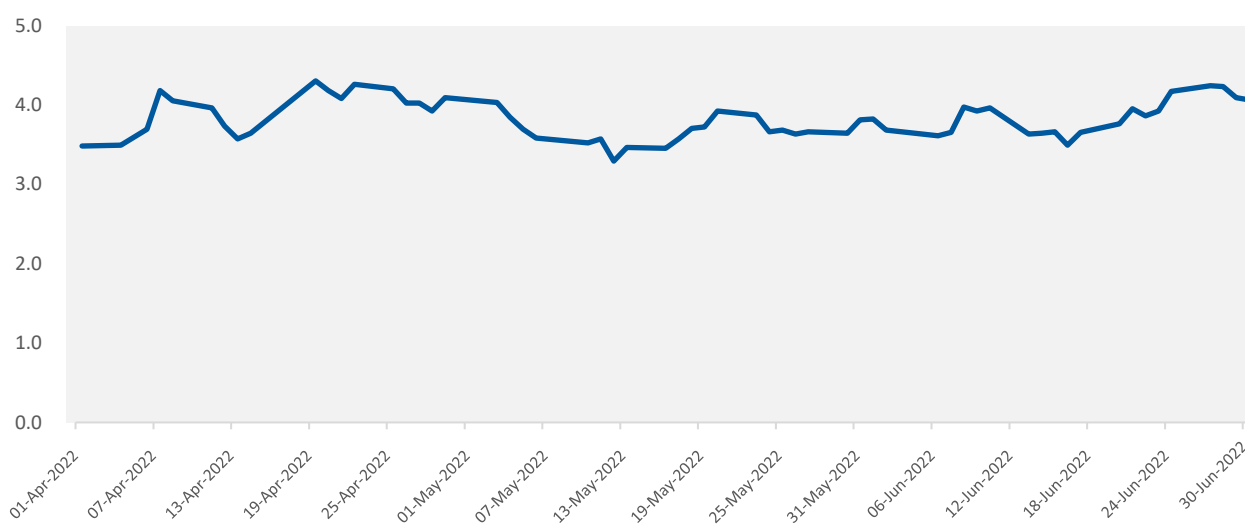
- To re-elect Dr. Yiping Rong as an executive director of the Company. Dr. Rong is the senior vice president and head of discovery
- To receive and adopt the audited consolidated financial statements of the Company and its subsidiaries and the reports of the directors and auditor of the Company for the year ended 31 December 2021
- To re-appoint Ernst & Young as auditor of the Company and authorize the board of directors of the Company to fix its remuneration

# 09 HBM Overview (02142.HK)

Key Information	
Website – Investor Access	<a href="https://www.harbourbiomed.com/investor">https://www.harbourbiomed.com/investor</a>
Market Cap (6/30, Mil HK\$)	3,125
Total Share Capital (Mil)	768
Circulation Stock (Mil)	768

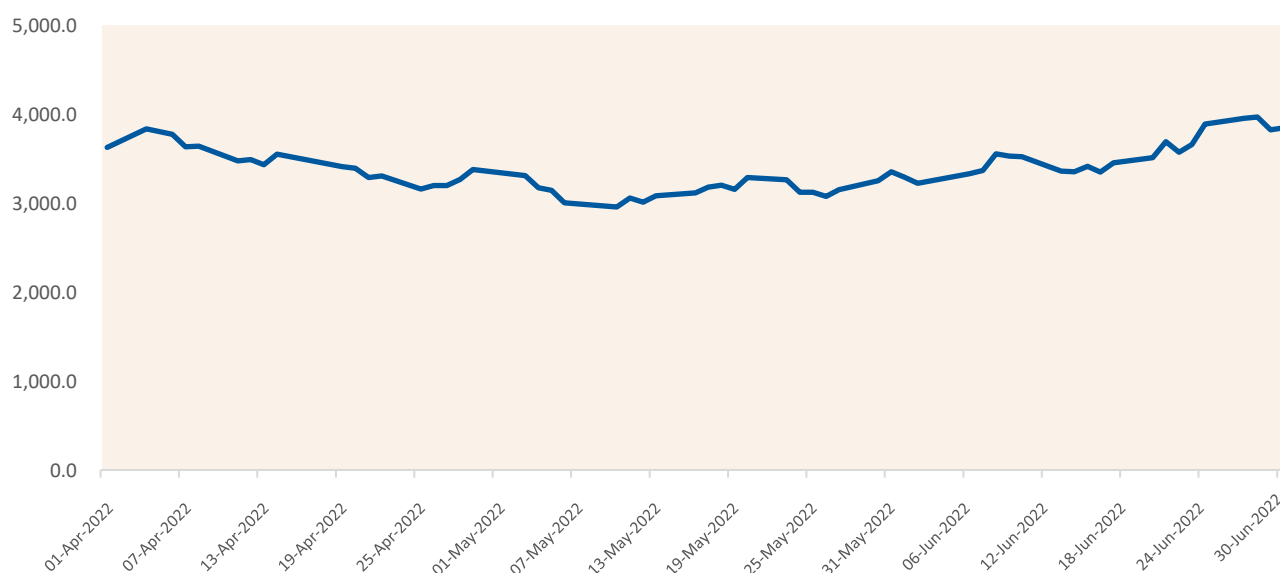
Hong Kong stocks were headed for the best monthly gain since October 2021 on China's recovery outlook in June 2022 after Covid-19 lockdowns eased. Mild recovery seen in healthcare sector as HSHCI was up 6.0% to 3844.9. Compared to the first trading day of 2Q 2022, HBM stock jumped 16.6% to HKD4.1 on the last trading day of June, share price gains ranked top 5 among the HK 18A biotech companies.

**HBM Stock Performance – 2Q 2022**



Unit: HKD

**Hang Seng Healthcare Composite Index (HSHCI) – 2Q 2022**



# 09 HBM Overview (02142.HK)

## Announcements

- 01** **June 27:** the Company has been granted the clearance of Investigational New Drug (the "IND") from the Food and Drug Administration of the United States ("FDA") for B7H4X4-1BB bispecific antibody HBM7008
- 02** **June 8:** Seventh amended and restated memorandum and articles of association
- 03** **June 8:** Poll results of the annual general meeting held on 8 June 2022
- 04** **June 8:** the Company has been granted the approval of Investigational New Drug from the National Medical Products Administration, to commence Phase I clinical trial of its B7H4x4-1BB bispecific antibody (HBM7008) in China
- 05** **June 1:** the Company released the progress of the HBM4003 studies of monotherapy and combination therapy with anti PD-1 antibody at the American Society of Clinical Oncology ("ASCO") 2022 annual meeting
- 06** **May 30:** the Company has commenced collaborations on antibody-drug conjugate ("ADC") projects with LegoChem Biosciences Inc. and Duality Biotherapeutics, Inc. as part of the Company's ADC development and collaboration strategy
- 07** **May 11:** Notice of annual general meeting
- 08** **May 11:** Proposals for general mandates to issue shares and repurchase shares; re-election of retiring directors; proposed amendments to articles of association and notice of annual general meeting
- 09** **May 11:** Proposed adoption of the new memorandum and articles of association of the Company
- 10** **May 10:** the Company is pleased to announce that the Company will release the progress of our HBM4003 studies of monotherapy and combination therapy with anti-PD-1 antibody during the American Society of Clinical Oncology ("ASCO") 2022 annual meeting
- 11** **May 5:** List of directors and their roles and functions
- 12** **May 5:** Change of executive director
- 13** **April 28:** Environmental, Social and Governance Report
- 14** **April 28:** Annual Report
- 15** **April 14:** HBM Holdings Limited is pleased to announce the appointment of Dr. Humphrey Gardner as the Chief Medical Officer of the Company
- 16** **April 7:** the Company and AstraZeneca have entered into a global out-license agreement to develop and commercialize HBM7022, a novel bispecific antibody generated from the HCAb Based Immune Cell Engagers ("HBICE<sup>®</sup>") Platform of the Company

# 09 HBM Overview (02142.HK)

## Company News

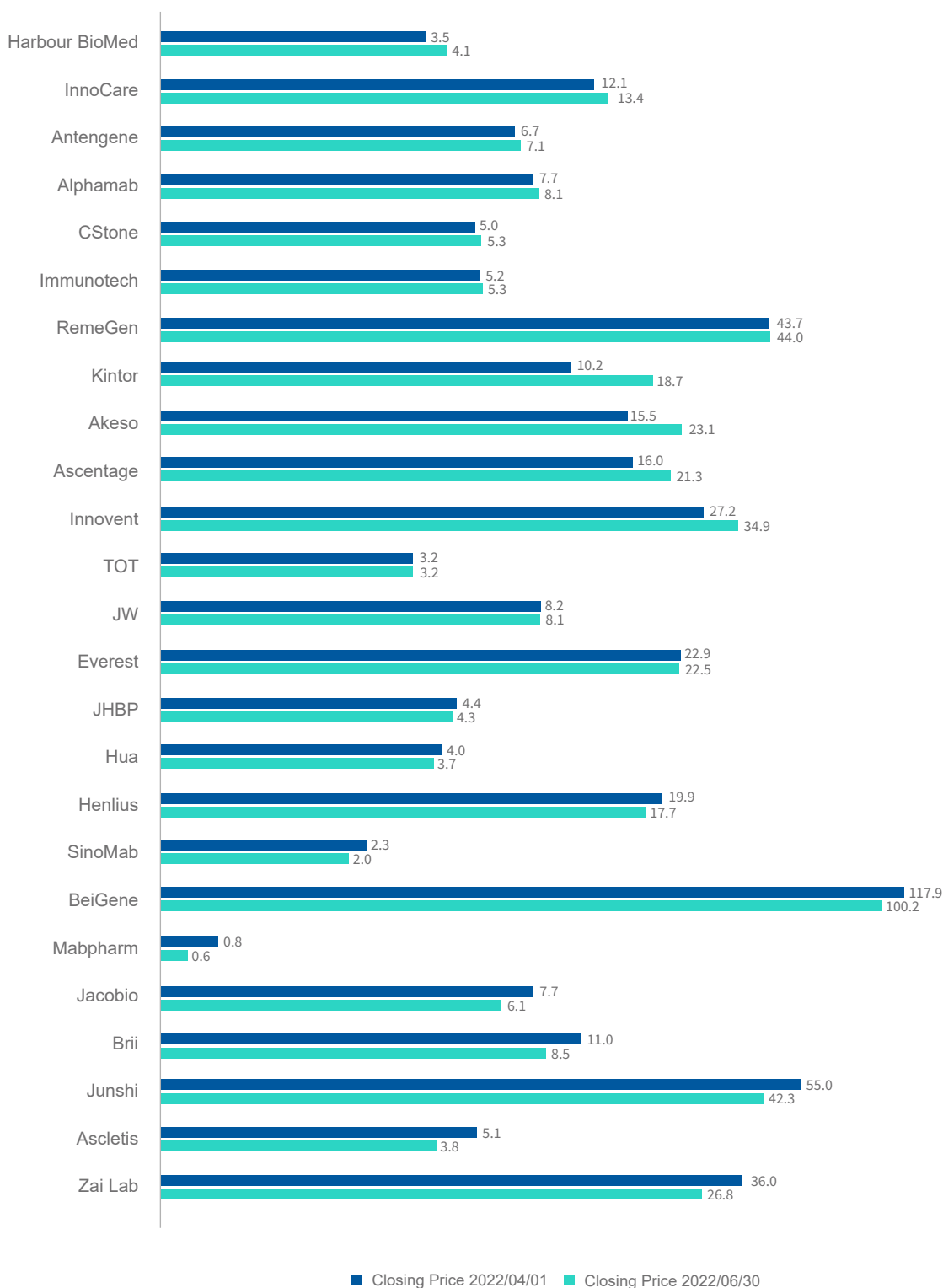
- 01 Harbour BioMed Announces Global Out-License Agreement with AstraZeneca for CLDN18.2xCD3 Bispecific Antibody HBM7022
- 02 Harbour BioMed Announces IND Clearance for B7H4x4-1BB Bispecific Antibody by the U.S. Food and Drug Administration
- 03 Harbour BioMed Announces IND Approval for B7H4x4-1BB Bispecific Antibody in China
- 04 Harbour BioMed Announces Dosing of First Patient in Phase I Trial of B7H4x4-1BB Bispecific Antibody
- 05 Harbour BioMed Reports the Latest Progress of Next-Generation Fully Human Heavy-chain Antibody HBM4003 with Unique Treg Depletion Mechanism
- 06 Harbour BioMed (02142.HK): HBM4003 Is Presented at ASCO, Validating the Unique Treg Depletion Mechanism
- 07 Harbour BioMed Soars 10%. The Company announced collaborations on ADCs with LegoChem Biosciences and Duality Biotherapeutics
- 08 Strategic Partner of Harbour BioMed - NK Cell Tech closed a over 100mm RMB Series A financing
- 09 Harbour BioMed Presented on CD73 Antibody HBM 1007 at Adenosine-Pathway Targeted Cancer Immunotherapy Summit
- 10 Harbour BioMed Announces Poster Presentation on the Novel Bispecific Antibody PD-L1xCD40 at American Association for Cancer Research (AACR) Annual Meeting
- 11 A human monoclonal antibody (mAb), 87G7, generated from H2L2 antibody platform, with in vitro neutralizing activity against several severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) variants of concern is published in the Science Immunology
- 12 Harbour BioMed Appoints Dr. Humphrey Gardner as Chief Medical Officer
- 13 Harbour BioMed Appoints Dr. Alexander A. Zukiwski to its Scientific Advisory Board
- 14 Harbour BioMed SAB Member Dr. Tian Zhigang has been Elected as Member of Academia Europaea
- 15 Everbright Securities: Analyst Coverage Initiation on Harbour BioMed with "Buy" at target price HKD 7.41
- 16 China Securities: Initiates Harbour BioMed with "Buy" at target price HKD 7.8
- 17 Interview with Dr. Jingsong Wang, CEO of Harbour BioMed: Innovation is the Key Source of Company Development
- 18 Dr. Jingsong Wang, CEO of Harbour BioMed: Bispecific Antibody Companies Shall Develop Product Pipeline with Clear Strategy and Strong Capabilities

# 10 HK Biopharma Sector

## Market Overview

As of 30<sup>th</sup> June, 2022, the Hang Seng Composite Index (HSCI) closed at 3305.8, down 0.6% from the first trading day of 2Q 2022. The Hang Seng Healthcare Composite Index (HSHCI) closed at 3844.9, up 6.0% from the first trading day of 2Q 2022. The China Hong Kong Biotech Index (CESHKB) closed at 7153.1, up 2.6% from the first trading day of 2Q 2022.

### HK Listed Biopharma Companies (18A)



# 11 Global Market Overview

## Global Market Index – 2Q 2022

	Closing Price	
	2022.04.01	2022.06.30
Dow Jones Industrial	34818.3	30775.4
Nasdaq Composite	14261.5	11028.7
UK FTSE 100	7537.9	7169.3
German DAX	14446.5	12783.8
France CAC40	6684.3	5922.9

## HK Market Index – 2Q 2022

	Closing Price	
	2022.04.01	2022.06.30
Hang Seng Index	22039.6	21892.9
Hang Seng Composite Index	3325.1	3305.8
Hang Seng Tech Index	4524.3	4780.3
HS China Enterprise Index	7674.2	7681.9
Hang Seng Healthcare Index	3627.6	3844.9

## Major Global Economic Indicators – 2Q 2022

Country	Related Indicator	Estimated	Actual
US	Number of Unemployment Benefits Initial Claiming for the week of 6/25 (unit: 10k ppl)	22.8	23.1
US	The Index of Consumer Sentiment of the University of Michigan – June	50.2	50.0
Eurozone	Sentix Investor Confidence – March	-20.0	-15.8
Germany	ZEW Economic Sentiment – March	-27.5	-28.0
Germany	Gfk Consumer Confidence – March	-40.0	-41.0

- The Federal Reserve on June 15, 2022, lifted interest rates by 0.75 percentage point, the third hike this year and the largest since 1994. The move is aimed at countering the fastest pace of inflation in over 40 years.
- Cleveland Federal Reserve Bank President Loretta Mester said it will take two years for inflation to fall to the central bank's 2% target. Mester added that inflation will be "moving down" gradually from the current level and she was not predicting a recession despite slowing growth.
- The U.S. and the other members of the G-7 including Canada, Germany and Japan formally launched the Partnership for Global Infrastructure and Investment. It aims to raise about \$600 billion for global infrastructure projects in developing countries in the next five years.



Harbour BioMed is a global biopharmaceutical company committed to the discovery, development and commercialization of novel antibody therapeutics focusing on oncology and immunology. The Company is building its robust portfolio and differentiated pipeline through internal R&D capability, collaborations with co-discovery and co-development partners and select acquisitions.

The Company's proprietary antibody technology platforms Harbour Mice® generate fully human monoclonal antibodies in two heavy and two light chain (H2L2) format, as well as heavy chain only (HCAb) format. Building upon the HCAb antibodies, the HCAb-based immune cell engagers (HBICE®) are capable of delivering tumor killing effects unachievable by traditional combination therapies. Integrating H2L2, HCAb, HBICE with single B cell cloning platform, our antibody discovery engine is highly unique and efficient for development of next generation therapeutic antibodies.



Harbour BioMed

[ir@harbourbiomed.com](mailto:ir@harbourbiomed.com)

[www.harbourbiomed.com](http://www.harbourbiomed.com)

linkedin:

<https://www.linkedin.com/company/13244036/admin/>