

Healthcare Listing Locations in Asia Pacific

Five-Year Recap



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Key Learnings

- Stock exchanges in Asia Pacific (Hong Kong, China, Korea, and Japan) have special boards or listing requirements supporting growth-stage healthcare companies, e.g., pre-revenue Biopharma, in going public.
- Shanghai Stock Exchange STAR Market (“STAR”) and Shenzhen Stock Exchange ChiNext (“ChiNext”) listing activities are more resilient amidst the global IPO slowdown, compared to Hong Kong Stock Exchange (“HKEX”), Korea Exchange (“KRX”), and Tokyo Stock Exchange (“TSE”).
- Biopharma companies dominate the sector mix in almost all listing locations except for ChiNext, where Industry Service companies, like CROs/CDMOs are the majority.
- Median market cap at offering of Chinese Biopharma and Medtech companies listed on HKEX and STAR ranges from ~\$1.0 to ~\$4.6B depending on the company stage, whereas Chinese Medtech companies on ChiNext are valued at ~\$750MM at offering.
- For KRX and TSE, the median valuation at offering of Biopharma and Medtech companies ranges from ~\$100MM to \$250MM.
- Approximately 8 to 35% of growth-stage Chinese Biopharma / Medtech companies were valued higher than their offering price.

Introduction

Healthcare listings slowed down dramatically in 2022 due to weak equity markets. Despite the volatility in the public market, we observed an increasing number of early-stage private financing in APAC, especially in China. We foresee a good supply of companies maturing in the next 3-5 years and going public. As a result, we analyzed the 5-year historical listings in five stock exchanges in Asia Pacific. This article illustrates an overview of listing activities and sector mix for HKEX, STAR, ChiNext, KRX and TSE, and focuses into Biopharma and Medtech sectors to look at their market cap at offering and post-listing performance.

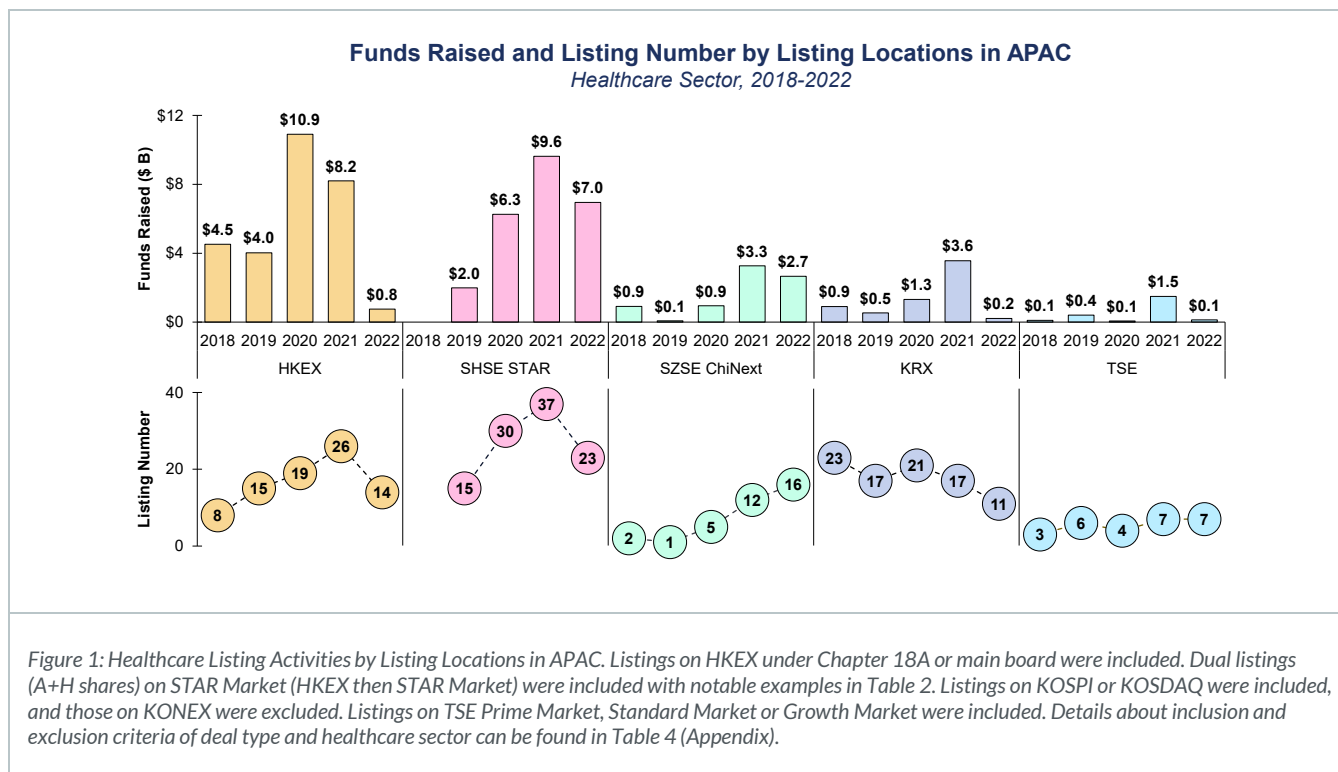
Boards / Listing Rules for Growth-Stage Healthcare Companies

Healthcare, especially growth-stage Biopharma and Medtech, is an R&D, sales and marketing intensive sector. Gaining access to public market capital greatly benefits growth-stage companies in advancing their pipeline programs to commercialization. To support companies unable to meet the financial requirements of traditional listing rules/main boards, exchanges in Hong Kong, China, Korea, and Japan have set up alternative listing requirements under the following boards/listing rules (Table 1).

	Year Founded	Financial Requirements		Issuer Type
		Revenue	Market Cap	
HKEX Chapter 18A	Apr 2018	Pre-revenue	\$190MM ¹	Companies primarily engaged in the R&D, application, and commercialization of Biotech Products ¹
SHSE STAR	Jun 2019	Revenue-generating	\$150-450MM ²	Sci-tech and innovative enterprises that align with national strategies, hold core and breakthrough technologies and enjoy a high degree of market recognition ³
		Pre-revenue	\$570MM ²	
SZSE ChiNext	Oct 2009 ⁴	Revenue-generating	\$150-720MM ⁵	Innovative and growth-oriented enterprises ⁶
KRX KOSDAQ	July 1996 ⁷	Revenue-generating	\$8-17MM ⁸	Start-ups and SMEs in high-tech industries (IT, biotech, and cultural technology) ⁷
		Pre-revenue	\$25-83MM ⁸ \$8MM (Special Technology Assessment Track) ^{8,9}	
TSE Growth Market	Nov 1999 ¹⁰	Pre-revenue	\$5MM ^{11,12}	Companies with high growth potential ¹⁰

Table 1: Boards/listing rules for growth-stage healthcare companies. Remarks: Fx (HKD/USD) = 7.8, Fx (CNY/USD) = 6.7, Fx (KRW/USD) = 1,200, Fx (JPY/USD) = 100. TSE restructured its stock market into 3 new segments, i.e., Prime Market, Standard Market and Growth Market in Apr 2022. Healthcare companies formerly listed on TSE Mothers and JASDAQ Growth¹³ were transitioned to TSE Growth Market.

Overview of Listing Activities



China

HKEX has been the major fundraising hub for Chinese healthcare companies, especially after the introduction of Chapter 18A in Apr 2018 opened doors for pre-revenue biotech listing. However, in 2022, funds raised in HKEX plunged by ~90%, following the overall dramatic IPO slowdown in HKEX¹⁴.

STAR, having started ~1 year later than Chapter 18A, became the largest board in funds raised since 2021. In 2022, the listing number dropped but still recorded ~\$7.0B funds raised (only ~27% decline), largely attributed to the largest STAR IPO of United Imaging (~\$1.6B¹⁵) and two other large deals by Mabwell Bioscience and MGI Tech raising over \$500MM apiece.

ChiNext, with a longer history than STAR, has been a key location for innovative and fast-

growing Chinese companies. In 2022, it was the only board with an increased listing number and recorded an ~18% decline in funds raised mainly driven by the listing of Industry Service and Medtech companies.

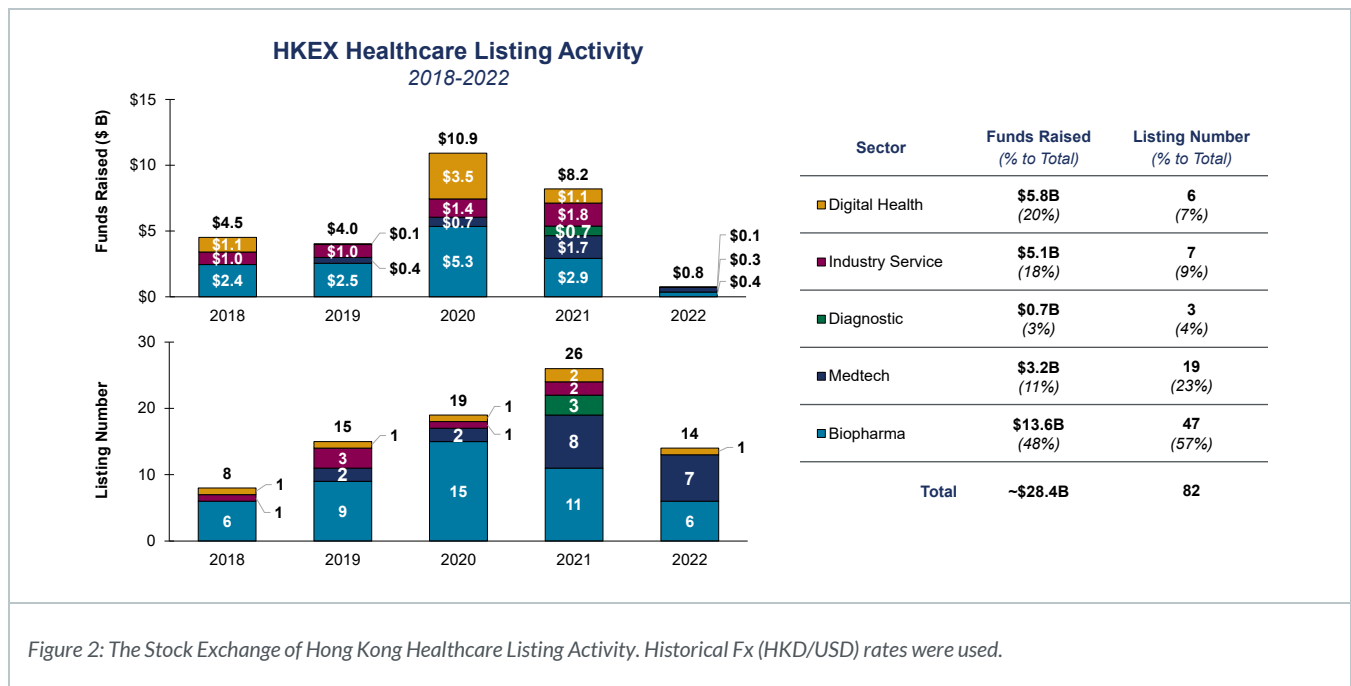
Japan and Korea

Despite Japan being one of the major countries for biotech innovation, TSE has been less active¹⁶ in healthcare listings. One of the reasons can be the low valuation (Figure 8 in Section 5).

KRX has recorded at least 10-30 new listings per year dominated by domestic companies. Despite raising the most funds in 2021, KRX failed to maintain momentum in 2022 amidst sluggish market sentiment.

Sector Mix by Listing Locations

HKEX



Sector mix in HKEX is primarily dominated by Biopharma. Medtech, which has become more active since 2021 and accounts for ~23% of total listing number. Industry Service and Digital Health are primarily skewed to several mega-deals, JD Health (~\$3.5B), Tigermed (~\$1.4B) and Ping An Good Doctor (~\$1.2B). Overall,

sector mix in 2018-2019 dramatically differs from that in 2021-2022. In coming years, we believe Biopharma and Medtech will remain the leading drivers of new listings, and we expect a more diverse sector mix, especially from Diagnostic, Digital Health, and Industry Service (e.g., healthcare supply chain).

STAR

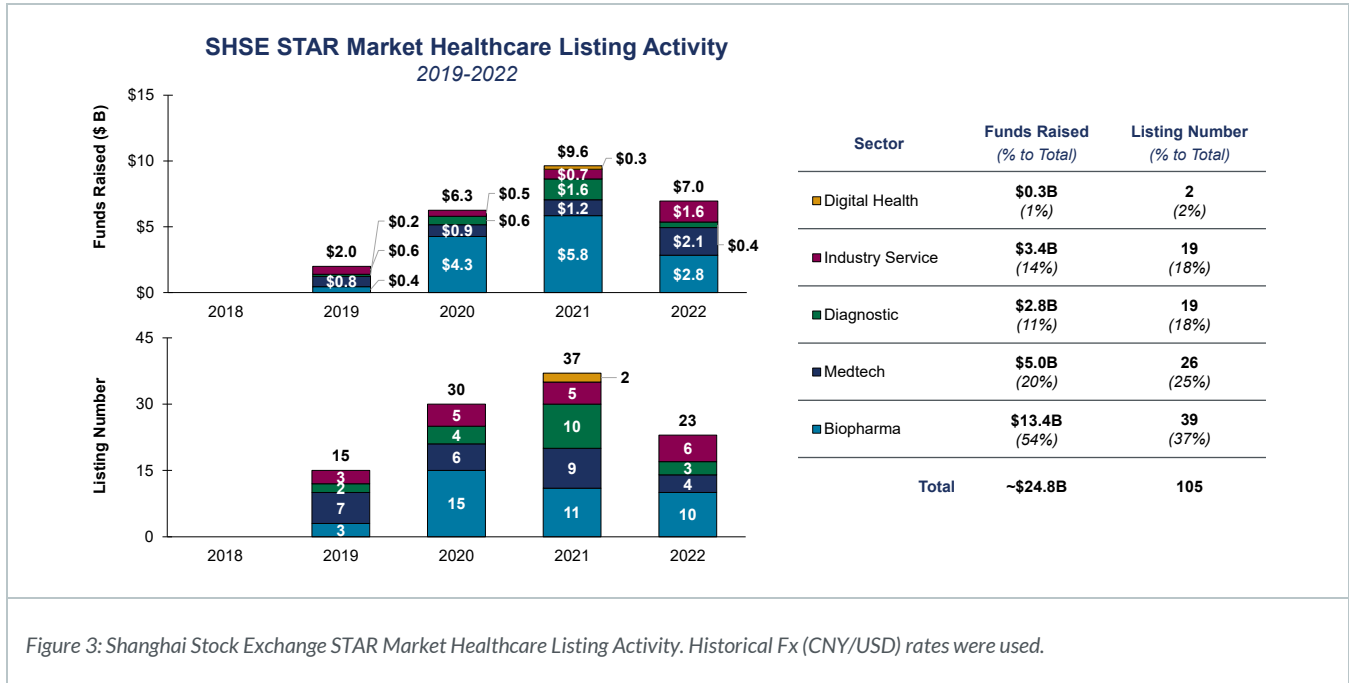


Figure 3: Shanghai Stock Exchange STAR Market Healthcare Listing Activity. Historical Fx (CNY/USD) rates were used.

Sector mix in STAR slightly varies from that in HKEX, with Diagnostic contributing more to STAR listing activity. COVID-19 accelerated diagnostic listings: 7 out of 10 listings in 2021 reported COVID testing revenue in 2020. Like HKEX, Biopharma is the dominant sector, but funds raised are skewed to dual listings of Biopharma companies already listed on HKEX

(Table 2). Medtech is another key driver to listing activity and accounts for ~25% of total listing number. There is a steady increase in Industry Service listing where Life Science Reagents/Tools is the major service type. Overall, the sector mix across four years does not change much except for 2021 due to COVID impact.

Issuer	HKEX		SHSE STAR Market	
	Offering Date	Funds Raised	Offering Date	Funds Raised
BeiGene	Aug 2018	~\$903MM	Dec 2021	~\$3.5B
CanSinoBIO	Mar 2019	~\$160MM	Aug 2020	~\$750MM
INNOCARE 信达生物	Mar 2020	~\$289MM	Sep 2022	~\$415MM
君实生物 TopAlliance	Dec 2018	~\$393MM	Jul 2020	~\$690MM
RemeGen	Nov 2020	~\$514MM	Mar 2022	~\$411MM

Table 2: Notable companies with dual-listed A/H shares

ChiNext

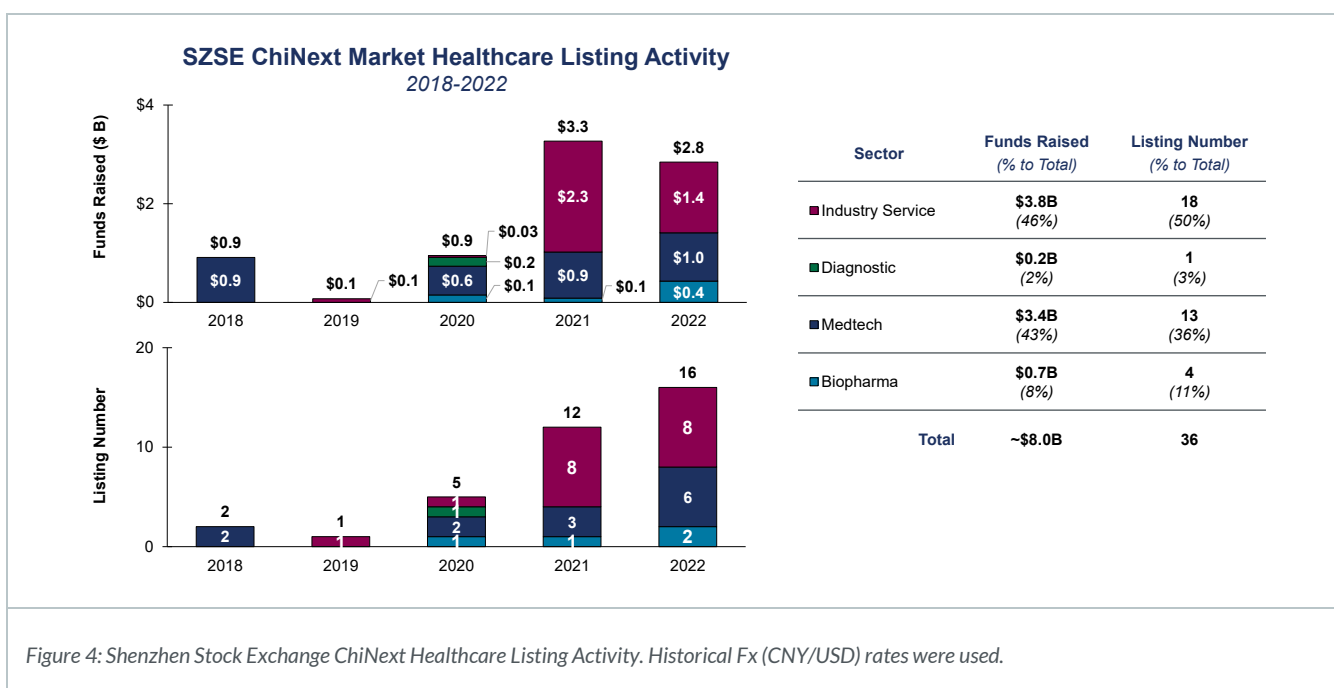


Figure 4: Shenzhen Stock Exchange ChiNext Healthcare Listing Activity. Historical Fx (CNY/USD) rates were used.

Sector mix in ChiNext greatly differs from those in HKEX and STAR where Industry Service dominates and accounts for ~50% of total listing number in ChiNext. The difference is attributed to ChiNext's financial requirements (Table 1) hampering the listing application of pre-revenue biopharma companies. For Industry Service, Life

Science Reagents/Tools, CRO, and Pharmaceutical APIs are the major service types. For Medtech, listings are from EBIT-positive companies, with notable deals of Mindray (Medtech conglomerate) and IMEIK (Medical Aesthetic) raising ~\$860MM and \$520MM, respectively.

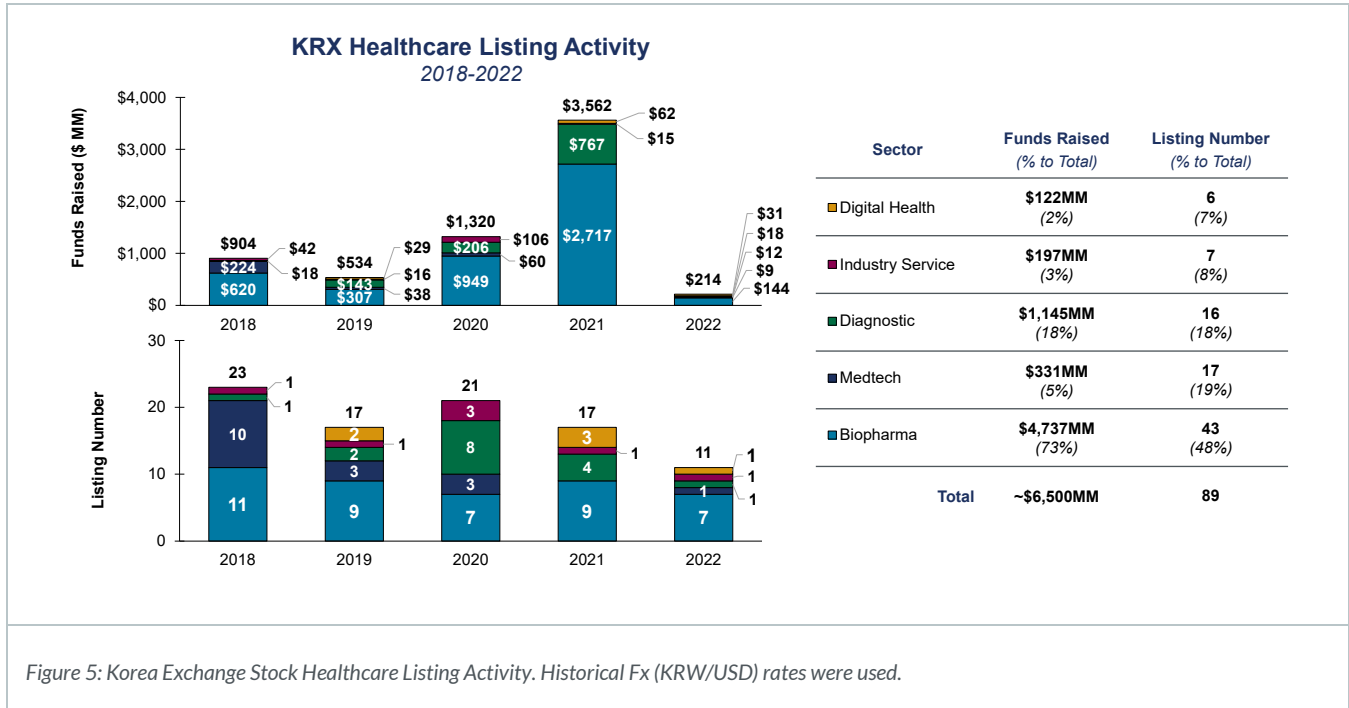


Figure 5: Korea Exchange Stock Healthcare Listing Activity. Historical Fx (KRW/USD) rates were used.

KRX’s sector mix is dominated by Biopharma, which accounts for 48% of the total listing. An increase in 2021 funding is attributed to three successful IPOs in the Biopharma and Diagnostic sectors: SK Bioscience (~\$1.3B), HK Inno.N (~\$500MM) and SD Biosensor (~\$700MM). The IPOs of VUNO and Lunit in Digital Health sector stand out, having raised ~\$40MM and ~\$30MM respectively. With their medical image diagnostic software, these two companies are

the first to receive MFDS approval for AI-based software as a medical device (“SaMD”)17. We observe that listings have been declining in the last few years, which may be linked to KRX’s stricter listing approval standards18,19,20 for companies to list on the KOSDAQ via the Special Technology Assessment track. In addition, there is fiercer competition for listing due to the sharp increase in healthcare companies21.

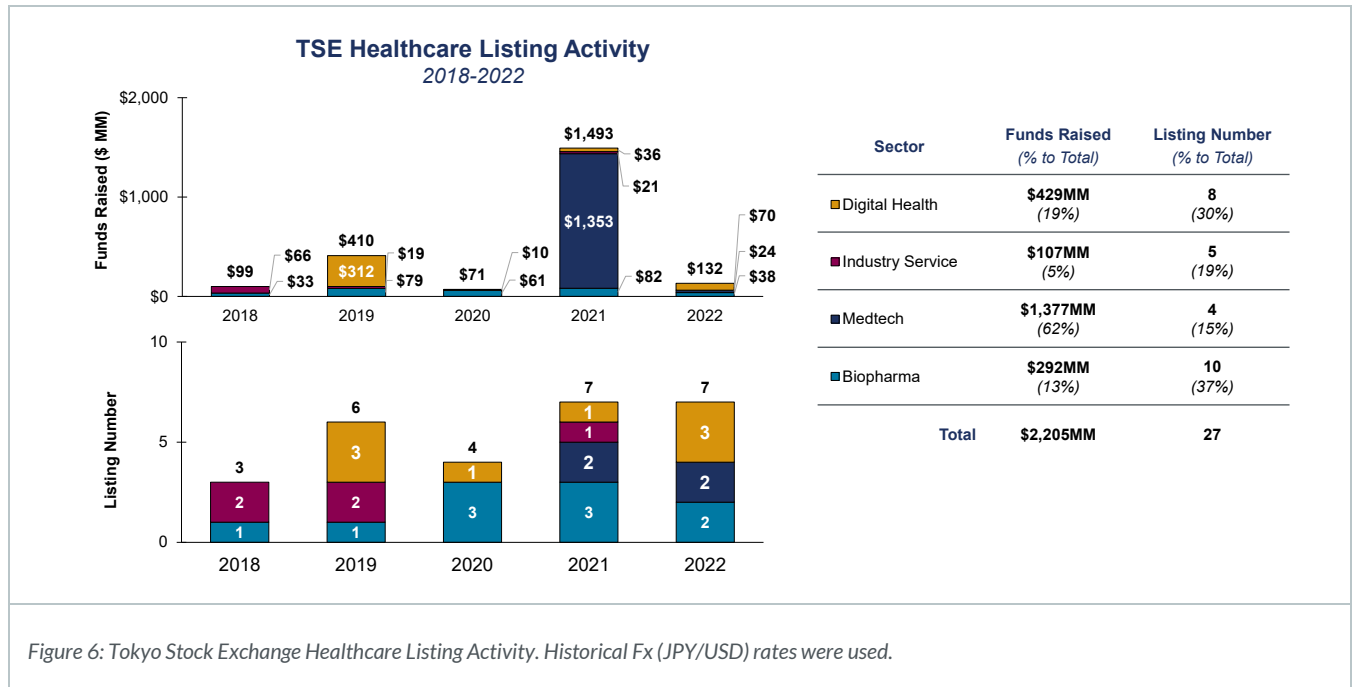


Figure 6: Tokyo Stock Exchange Healthcare Listing Activity. Historical Fx (JPY/USD) rates were used.

Sector mix in TSE is distinctive from that in other exchanges. Digital Health accounts for ~30% of total listing number in TSE, implying the growing Japanese innovation in digital health, which aligns with our previous analysis¹⁷. The common themes of the 8 Digital Health listings are electronic health records, online doctors, and telemedicine. Biopharma has the largest share of

the listing number and Japan is one of the pioneering countries²² in stem cell research. It is not surprising to see the listings (Table 3) with a regenerative medicine theme for the past five years. For Medtech, funds raised is skewed mainly to the IPO of PHC Holdings (~\$1.4B)²³, a diversified diagnostic, life sciences, and medical device company.

Company	Sector	Theme
	Industry Service	Cord Blood
	Industry Service	Adipose-derived Stem Cells
	Biopharma	3D Tissue-engineering
	Biopharma	Regeneration-inducing Medicine

Table 3: Listings with Regenerative Medicine Theme

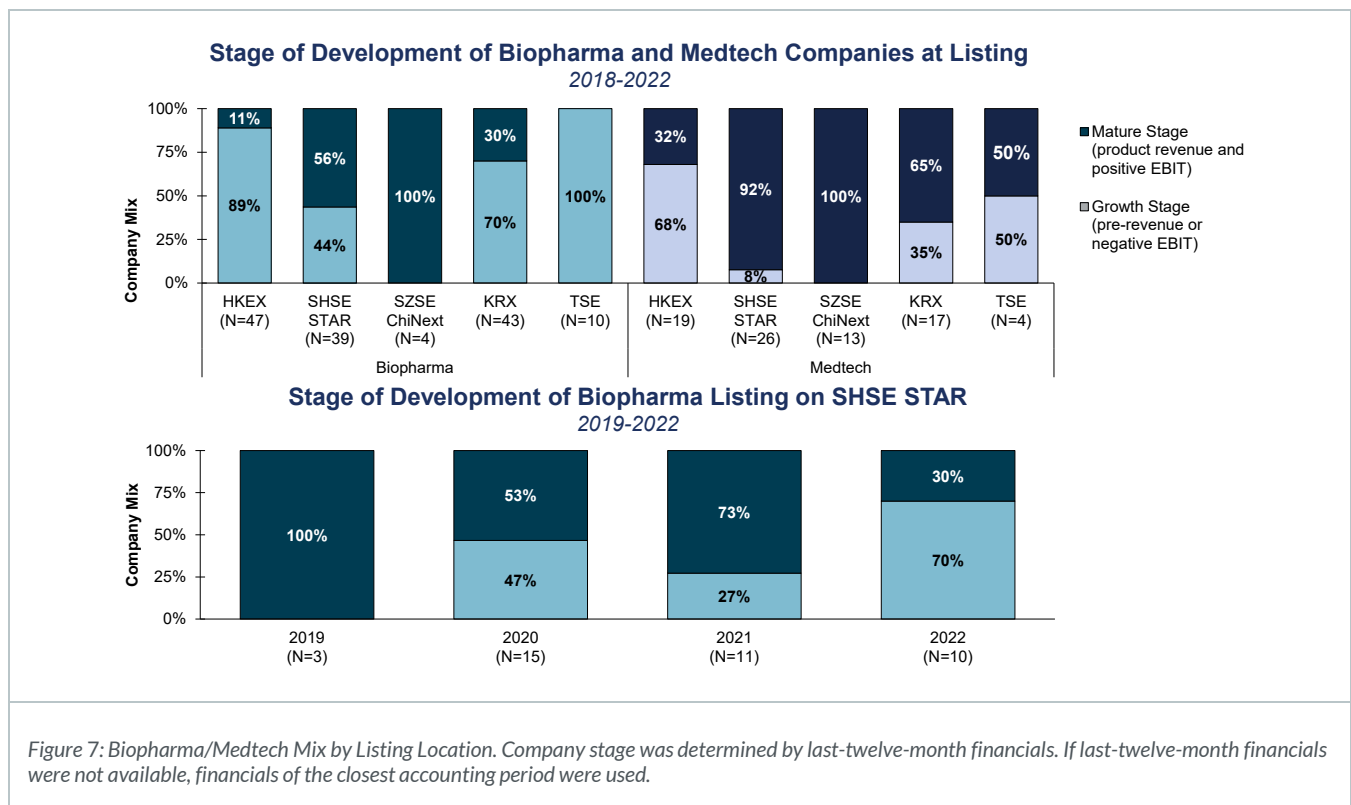
Biopharma and Medtech Listing

Company Type

HKEX is a more popular location for growth-stage Biopharma or Medtech, whereas ChiNext and STAR are the destinations for mature-stage Medtech. Growth-stage Biopharma companies account for 44% of all biopharma listings in STAR Market, and there is a trend of increasing share, especially in 2022, e.g., Mabwell (Shanghai), Yahong Meditech, InventisBio. We believe growth-stage Biopharma will continue playing a key role in STAR Market listing activity driven by dual-listing (A+H dual shares) of pre-revenue companies already listed on HKEX (Table 2). The dual-listing allows companies to access Chinese capital and use Hong Kong entities for overseas

development²⁴. Also, we expect an increasing share of growth-stage Medtech driven by the implementation of the updated guideline in Jun 2022 (5th set of listing standards), similar to Chapter 18A, for pre-revenue Medtech.

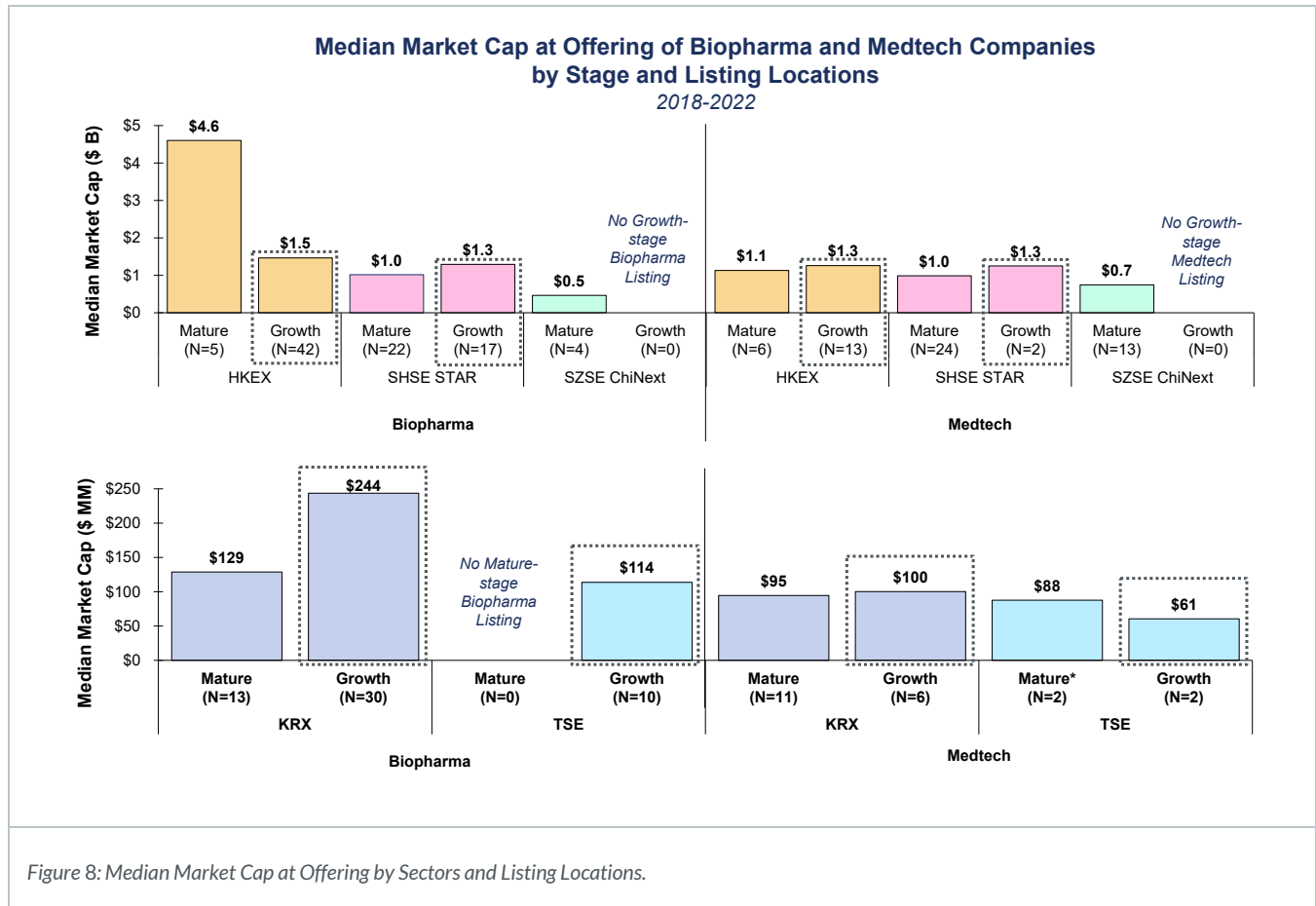
KRX has attracted a large proportion of growth-stage Biopharma companies to list in KOSDAQ with their Special Technology Assessment Track since its founding in 2005. Growth-stage Biopharma companies comprise 70% of the overall Biopharma listings in KRX, whereas TSE listings are 100% of growth-stage Biopharma companies.



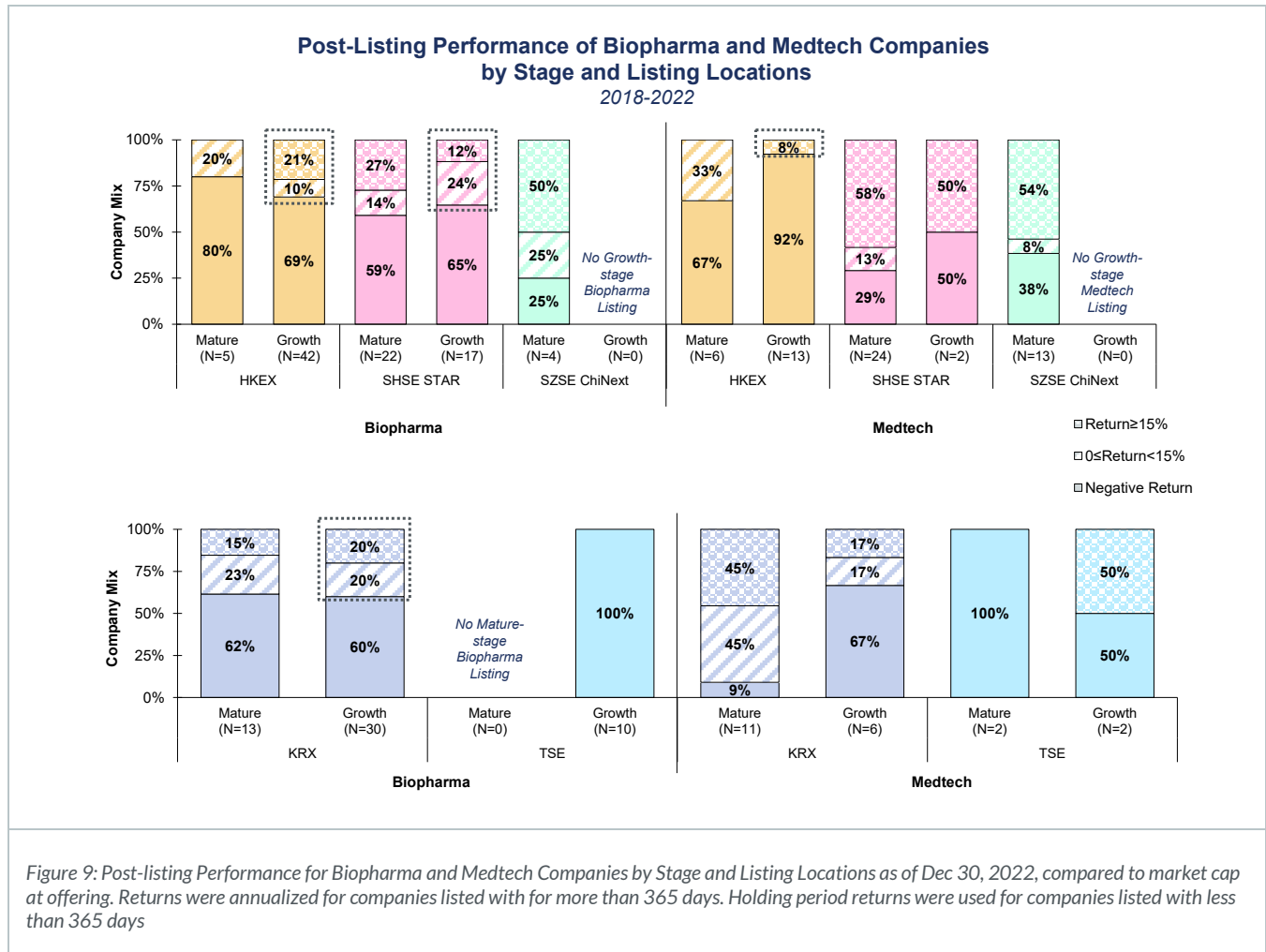
Company Valuation

For offering price of growth-stage Chinese Biopharma, they are valued at \$1.3B on STAR, slightly lower than \$1.5B on HKEX, whereas the median market cap of growth-stage Chinese Medtech is ~\$1.3B on both HKEX and STAR (Figure 8).

For KRX and TSE, the median valuation at offering of Biopharma and Medtech companies ranges from ~\$100MM to \$250MM (Figure 8).



Company Valuation after Listing



Despite the negative sentiment on growth-stage healthcare companies in 2022, there are still success stories. About 8-35% of growth-stage Chinese and ~40% of Korean Biopharma/Medtech companies were valued higher than their offering price. (Figure 9; only listing locations with more than 10 growth-stage companies were analyzed).

We often hear about interests from companies and investors in learning from these success stories and their strategies, e.g.,

- What is their product positioning?
- Which major pre-IPO investors have participated?
- Are they looking at domestic market or ambitious on global markets?
- What is their track record in commercial deals with large Biopharma/Medtech companies?

Contact Health Advances if you are interested in diving into any of the above areas of interest. Health Advances is experienced in working with Asia Pacific-based companies to optimize their commercial and development strategies for long-term value creation.

Appendix

	Inclusion	Exclusion
Company Type	Biopharma (incl. Generics, Biosimilars and Novel), Medtech, Diagnostic, Industry Service (incl. Life Science Reagents/Tools, CRO, CDMO, CMO and Pharmaceutical APIs/Intermediates Supplier), Digital Health/Health IT	Animal Health, AgriTech, Nutraceutical, Consumer Healthcare, Traditional Chinese Medicine, Healthcare Service Provider (incl. Hospital and Clinical Diagnostic Service), Other Industry Service (incl. Distributor and Healthcare Marketing Solution)
Financial Metrics for Industry Service	At least 50% Revenue from Pharmaceutical / Medtech / Diagnostic	Less than 50% Revenue from Pharmaceutical / Medtech / Diagnostic
Deal Type	IPO, Follow-on Offering (Offering at new Stock Exchange)	Follow-on Offering (Offering at the same Stock Exchange) with exception of transfer from KONEX to KOSDAQ (KRX)

Table 4: Deal inclusion and exclusion criteria

About the Authors



Gary Cheng
Vice President

- Extensive experience in life sciences and healthcare across Asia Pacific (pharma/biotech/diagnostics/medtech)
- Key areas of expertise in general management, mergers and acquisitions, target identification, valuation, cross border transactions, licensing and partnering
- Stout Bluepeak Asia Ltd, Partner and Managing Director
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- Alere, Director M&A and Marketing
- Novartis, Global Marketing
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- CFA Charterholder

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Notes

¹ HKEX.

² PWC.

³ SSE.

⁴ HKEX.

⁵ PWC.

⁶ SZSE.

⁷ Lexology.

⁸ KRX.

⁹ Korea Financial Services Commission.

¹⁰ TSE.

¹¹ TSE.

¹² CFA Society Japan.

¹³ TSE.

¹⁴ SCMP.

¹⁵ Reuters.

¹⁶ BioCentury.

¹⁷ Health Advances.

¹⁸ Scrip.

¹⁹ The Korea Economic Daily.

²⁰ The Korea Economic Daily.

²¹ Scrip.

²² Gov.UK.

²³ Nikkei Asia.

²⁴ Shanghai Securities News.