# Global Premier Biologics Platforms to Enable and Expedite Innovations

Recent Business Update (2269.HK)

November 2021





#### **Forward-Looking Statements**



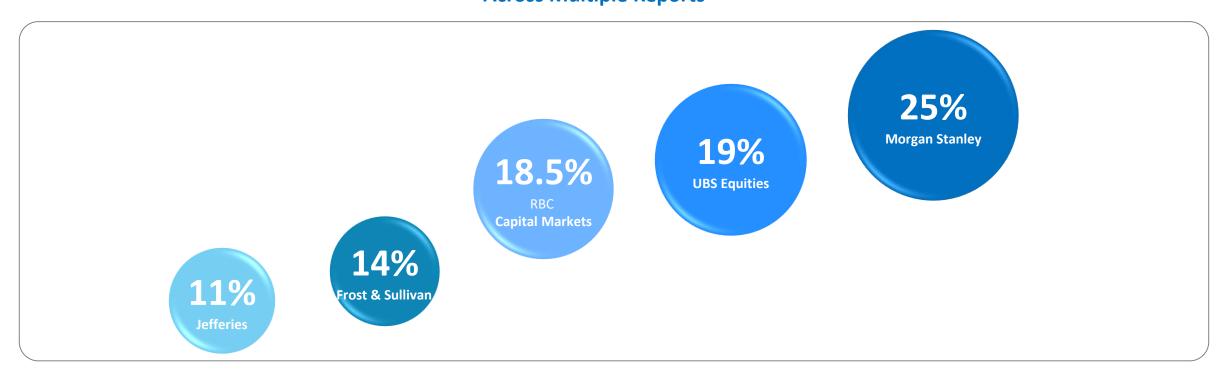
This presentation may contain certain "forward-looking statements" which are not historical facts, but instead are predictions about future events based on our beliefs as well as assumptions made by and information currently available to our management. Although we believe that our predictions are reasonable, future events are inherently uncertain and our forward-looking statements may turn out to be incorrect. Our forward-looking statements are subject to risks relating to, among other things, the ability of our service offerings to compete effectively, our ability to meet timelines for the expansion of our service offerings, and our ability to protect our clients' intellectual property. Our forward-looking statements in this presentation speak only as of the date on which they are made, and we assume no obligation to update any forwardlooking statements except as required by applicable law or listing rules. Accordingly, you are strongly cautioned that reliance on any forward-looking statements involves known and unknown risks and uncertainties. All forward-looking statements contained herein are qualified by reference to the cautionary statements set forth in this section.

#### **Sustainable Growth of Global CDMOs**



- Strong growing momentum with surging demands in biologics CDMO industry supports the acceleration of recent capacity expansion, but the balance remains favorable
- This was concluded prior to approval of Aducanumab. Now global CMOs will likely face capacity shortage in the short term

#### Biologics CDMO 2021-24 CAGR Across Multiple Reports



## Supply and Demand Dynamic – is CDMO Revenue Growth Sustainable?





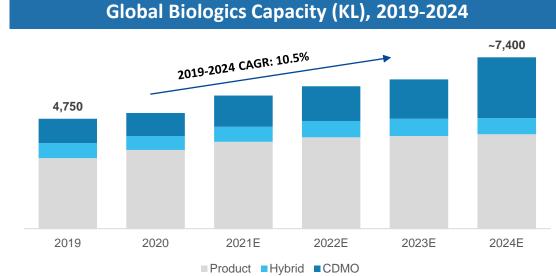
Global biologics capacity expected to increase by 10.5% over 2019-2024

- The key driver is capacity expansions from CDMO players (+21%) followed by hybrid manufacturers (+8%) and product companies (+5%)
- Growth estimates at the start of 2020

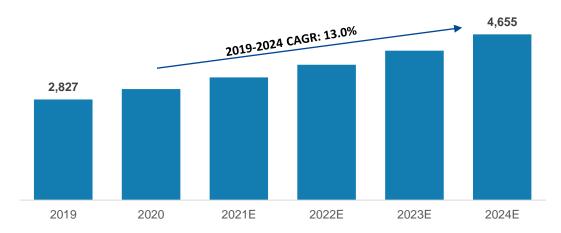
\*

#### **Biologics demand expected to** increase by 13% over 2019-2024

- Demand growth in biologics is expected to outstrip supply with 13% growth
- Growth in commercial segment is expected to be c.9% with c.20% demand growth in clinical
- This growth does not factor in any upside from recent approvals in Alzheimer's disease therapies, COVID-19 mAbs, and strong uptake of antibody-drug conjugates



#### Global Biologics Demand (KL), 2019-2024



Source: MS BDO BioTRAK

# Q3 2021 Highlights: Business Continues to Accelerate



#### **Robust Project Growth**

Added record high 114 new integrated projects to total of 441: business momentum continues to accelerate, 96 organic growth without CMAB acquisition

#### Regulatory

- Gloria's PD-1 approved by NMPA
- U.S. FDA accepted BLA filings for Amicus' AT-GAA for treating Pompe Disease: from concept to commercialization

#### Banner Year for CMO

- Total 6 CMO projects YTD, total of 7 expected in 2021
- Expecting 2-4 in 2022-2023 and 4-6 in 2024-2025, respectively

#### "Win-the-Molecule"

- Won 13 external projects including 5 phase-III or later: "Win-the-Molecule" became another growth driver
- Won commercial manufacturing of a potential blockbuster from a global large pharma

#### **Vaccine Business**

- Signed DS/DP manufacturing contract for another COVID-19 vaccine and additional COVID contracts of US\$100+ mm
- Negotiating manufacturing contracts on mRNA vaccines and therapeutics

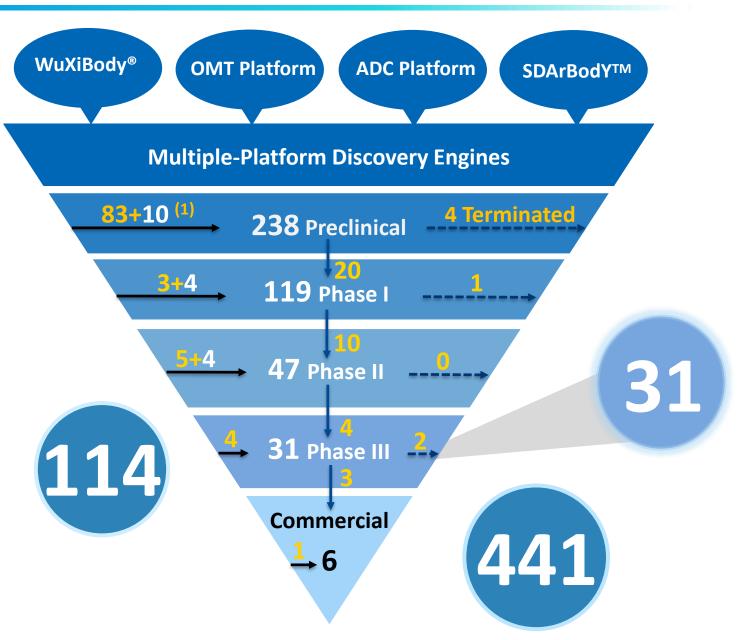
#### Business Progress On Track

- Positive free cash flow targeted for 2022
- Capacity expansion on track and talent recruitment is ahead of plan
- All 3 acquisitions turned to revenue mode

## **Business Momentum Continues to Accelerate in 3Q 2021**



- 114 new integrated projects added as of Sept. 30, 2021, including 18 projects acquired from CMAB. Continues to gain more market share
- **31** Phase III projects: drive near-term growth
- "Win-the-Molecule" Strategy continued: 13 external projects transferred into the pipeline
- Total 1,513 projects including 1,072 non-integrated CDO projects and 441 integrated projects
- Added 4 more commercial projects by the end of 3Q



#### Notes:

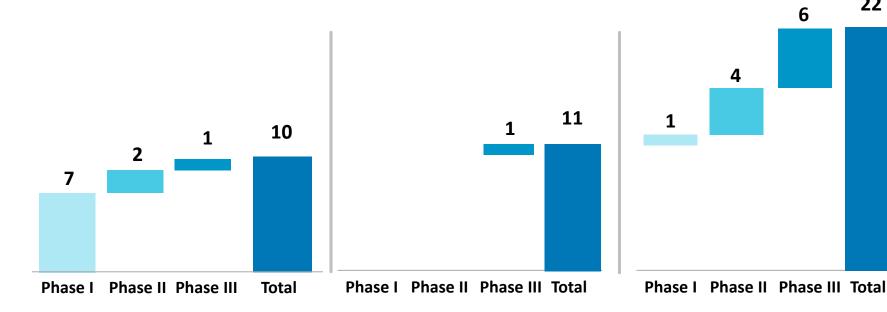
1. As of Sept. 30, 2021

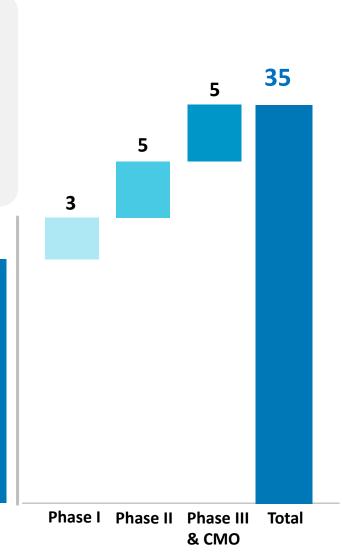
2. 10 Preclinical , 4 Phase I and 4 Phase II programs were from CMAB (total 18)

3. The arrows in black are the projects newly added from outside; the arrows in blue are the projects progressing from earlier stage; the dashed arrows are terminated projects

#### "Win-the-Molecule" Strategy: New Driver to Expand Pipeline and WuXi Biologics **Drive Additional Near-term Growth Global Solution Provide** 2018 2019 2020 2021.09.30

- Total **35** external projects at different R&D Stages (Phase I, II and III + CMO) ٠ have transferred to WuXi Bio since 2018
- Leading technology, best timeline and excellent execution underpin WuXi Bio ٠ "Win-the-Molecule" strategy
- Global leading enabling platforms continue to win customers from existing ٠ market



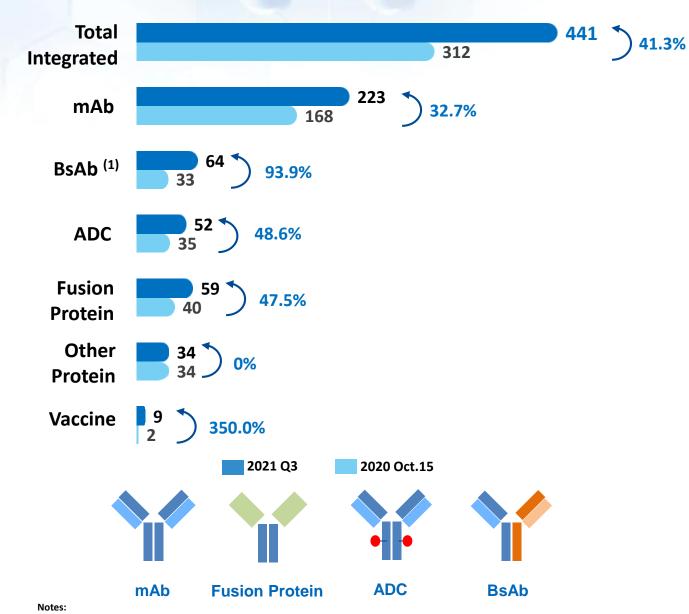


22

6

# **Rich Pipeline across All Biologics Modalities**







#### **169** First-in-class programs



9 vaccine projects, including 6 non-COVID vaccines



8 CNS (Central Nervous System) programs from domestic and global companies with exciting potential



Expanding global leading technology platforms providing mRNA-based vaccine full CDMO services (DS+DP)



One of the largest portfolios of complex biologics, consisting of mAbs, bispecifics, multispecifics, ADCs, fusion proteins and vaccines etc.

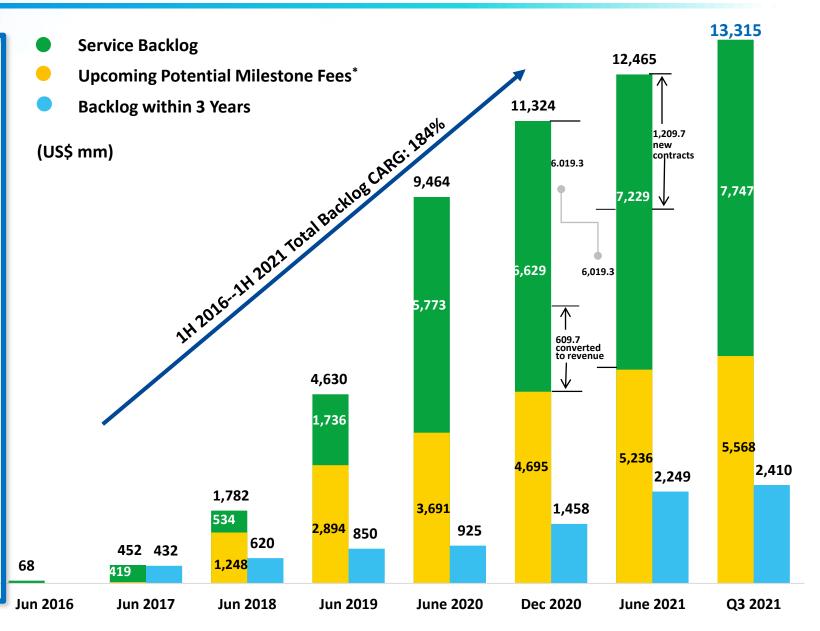
1. As of Sept. 30, 2021, compared with projects number as of Oct 15, 2020

2. Bispecific Antibody (BsAb) Included both WuXiBody® projects and non-WuXiBody ® projects

# **Strong Backlog Growth Underpins Sustainable High Growth**



- As of Sept. 30, 2021, total backlog grew to US\$13.3 bn, strong momentum continued
- Service backlog reached US\$7.7 bn, mainly attributed to long-term vaccine CMO contract, and more market share from non-COVID business which will drive the long-term growth
- Upcoming potential milestone fees <sup>(1)</sup> up to US\$5.6 bn, will be the key to improve margin profile
- As of Sept. 30, 2021, backlog within 3 years increased 65.3% compared with the end of 2020, short-term high growth is secured
- ~82% total backlog is for year 3 and beyond while ~18% is for revenue within 3 years.
- US\$7.7 bn service backlog only included 4 phase-III projects with long-term service signed, huge backlog potential from 27 remaining phase-III projects
- Strong backlog does not indicate lack of capacity for new projects. Any projects can be initiated within 4 weeks

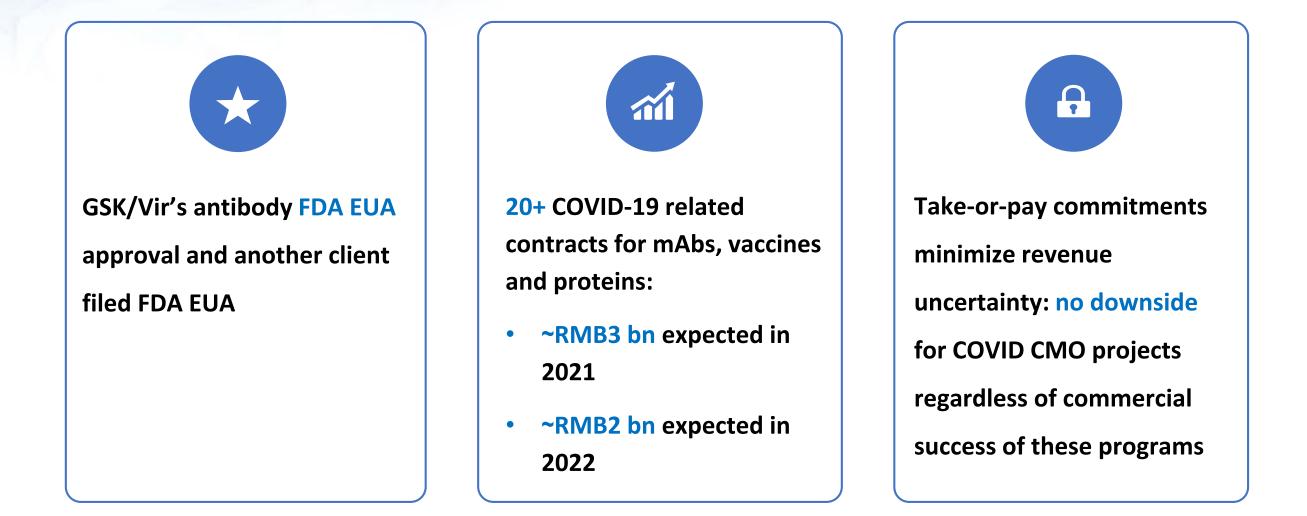


#### Disclaimer

1. The upcoming potential milestone fees take a longer term to charge at various development stages. The potential to realize these milestone fees is subject to the success rate of the projects and the project progress

## WuXi Bio Contributes for Fighting Against COVID-19 Secured Contract Revenue with No Downside in 2021 and 2022





# **EXECUTION: Excellent Operational Metrics**

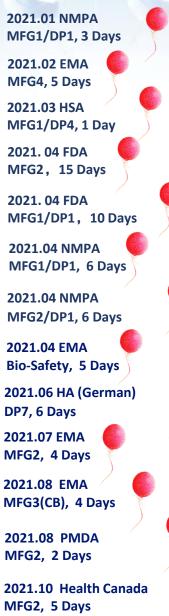


Track Record	<ul> <li>226 INDs, 8 BLA/MAAs approved, 7 US EUA approved, 8 BLAs/MAAs/NDAs filed <sup>(1)</sup></li> <li>441 integrated biologics in development including 64 bispecific and 52 ADCs</li> <li>31 on-going WuXiBody<sup>®</sup> bispecific antibody projects</li> <li>Total 20+ COVID-19 programs in progress and 29 INDs approved</li> <li>Capacity of 120 INDs and 12 BLA/MAAs enabled per year</li> <li>1,513 projects including 441 integrated and other non-integrated CDO projects</li> </ul>
Operational Excellence	<ul> <li>11 facilities with 150,000L DS capacity in 2021 expanded to ~430,000L after 2024</li> <li>9 facilities for drug product filling, including 1 dedicated to bioconjugates in 2021</li> <li>13 facilities will be online in 2021 including 6 from internal and 7 from M&amp;A</li> <li>Building 13 facilities globally</li> <li>1,400+ DS batches completed with 98% success rate</li> <li>1,200+ DP batches completed with 99%+ success rate, 100+ media fills with 100% success rate</li> <li>214 DS batches completed in MFG3 with 100% success since Apr. 2018</li> <li>ROI for MFG1 and MFG3 exceed 50%</li> </ul>

# **QUALITY: Tried-and-True Quality Systems**









**19** Regulatory Inspections (**13** YTD)



**5** Commercial Products approved by **10** Regulatory Agencies (FDA, EMA, NMPA, PHA, etc.)



**9** Facilities Certified (MFG1, MFG2P, MFG2F, MFG3(CB), MFG4 DP1, DP4, DP7, Biosafety)



**10** Different Global Regulatory Agencies



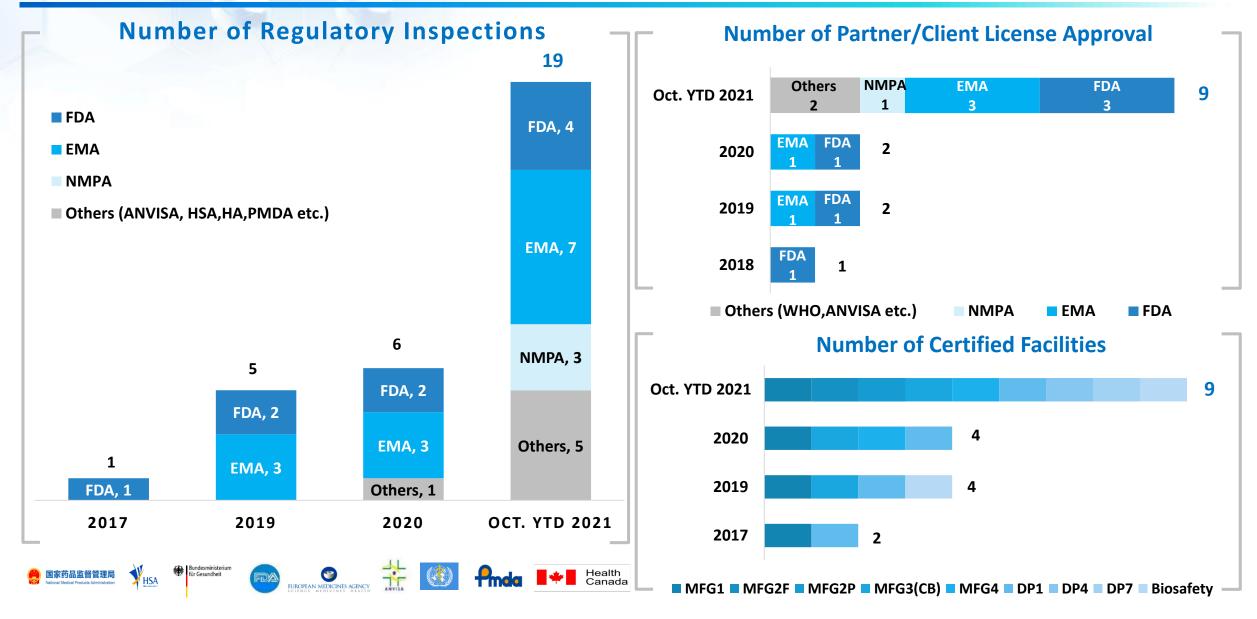
**O** Major Observation in EMA PAI

-@-

**O** Observation by Health Canada

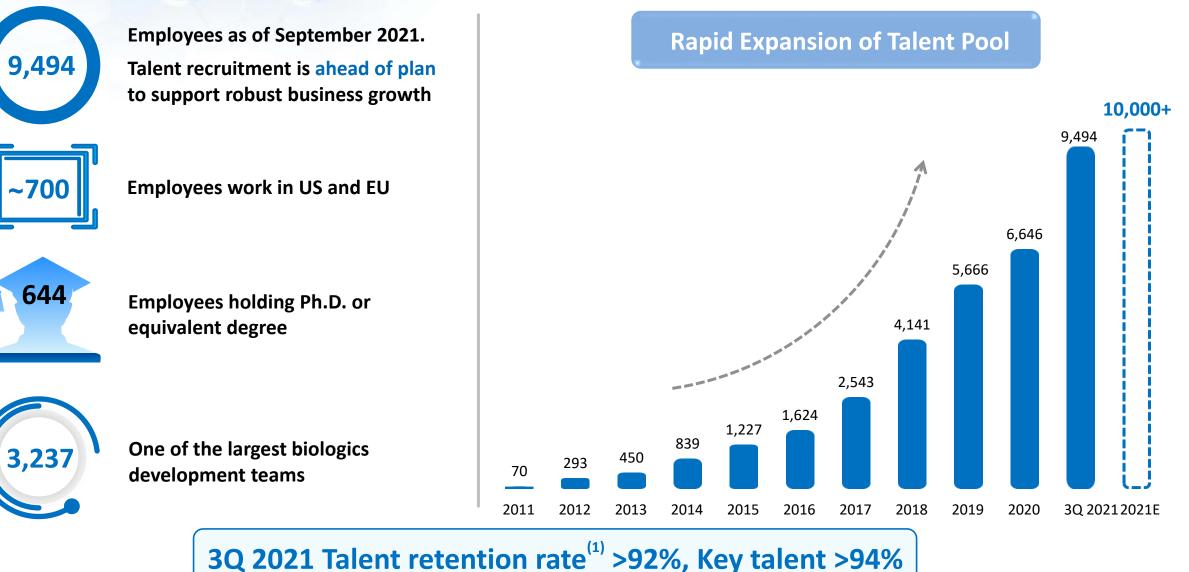


#### **QUALITY: Global Regulatory Inspections**



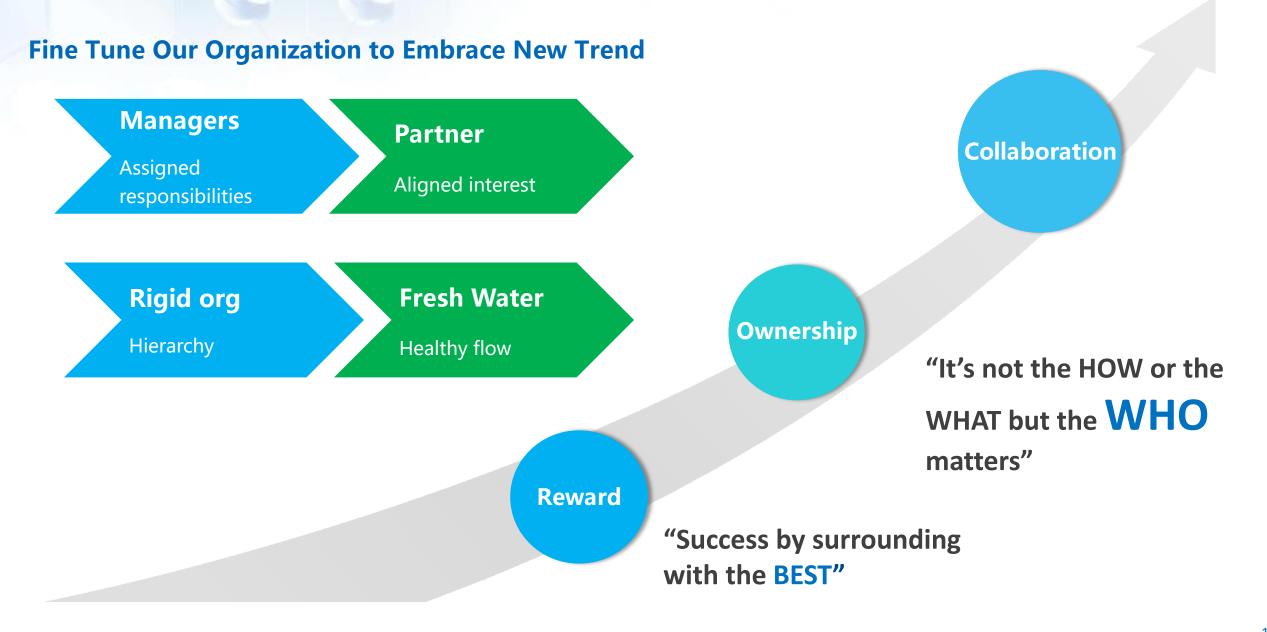
# **PEOPLE: Talents Form the Prerequisite for Business Success**





# **PEOPLE: Global Partner Program Anchors Future Success**





# **Everyone Can be a Partner at WuXi Biologics!**



**Global Partner** 

The new Partnership Plan replaced pre-IPO option scheme and will be instrumental for the growth of the next 10 years

- Set up dual tracks of technical and management paths to support the development of people
- Help employees find right places in the organization to meet business targets and realize personal goals

- Develop mission-based mindsets to maximize the value of the shareholders and the Company
- Advocate and practice PROUD culture as role models
- Continue to be star employees to drive and sustain Company's fast growth
- Encourage "Partners" to grow their business together with the Company while developing their careers
- Align with the Company-level targets and continue to achieve high performance

Partner

(Junior Employees)

**Future Partner** 

## **Profiles on Global Partners Showcase Success of HR Strategy**

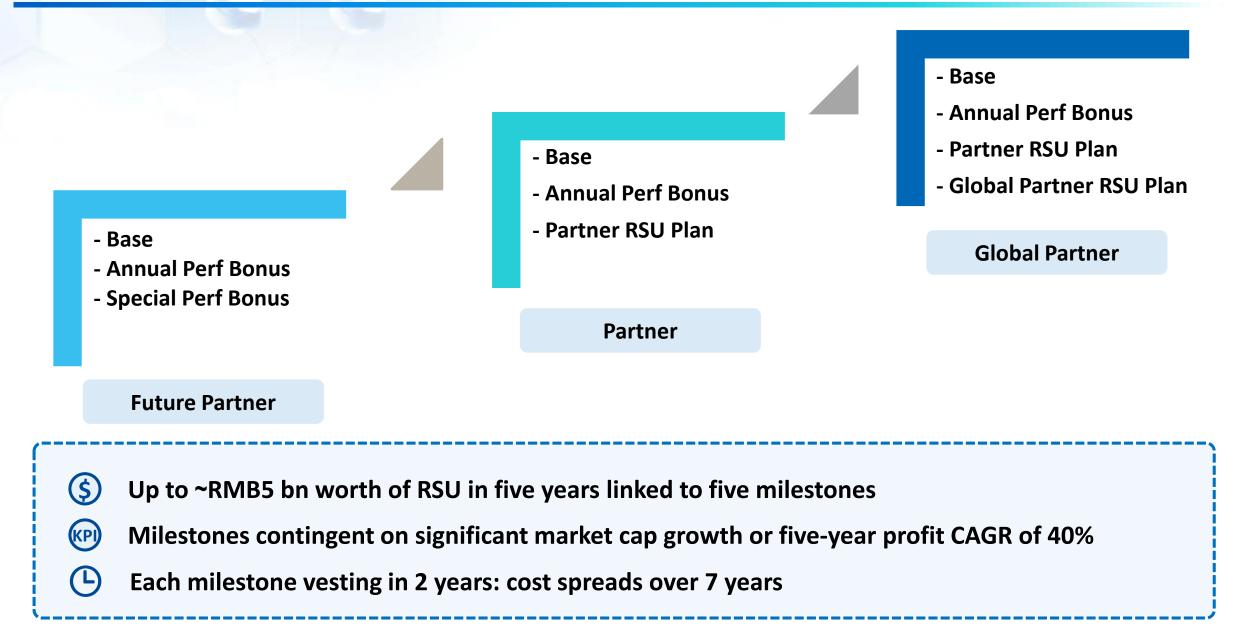




	Number
Ireland	4
Australia	2
Germany	1
Netherland	1
Canada	2
Malaysia	1
US	46
Sweden	1
Singapore	1
UK	1
Greater China	143

#### **Rewards of Global Partners Contingent on Investor Returns and Profit CAGR**





#### Site Update: MFG5 at Wuxi Site





36,000L Line

- The world's largest 9 x 4,000L biomanufacturing line using single-use bioreactors
- Capable of running 12,000-16,000L scale and compete with any stainless steel facility in COGS
- Full utilization rate since GMP release in Feb.
   2021, 100% technical success, fully booked 2022

#### 24,000L Line

- The first commercial manufacturing facility with the capacity of WuXiUP<sup>™</sup> downstream purification & continuous downstream technology
- Capable of running 4,000-10,000L scale
- GMP released in Sept. 2021, fully booked 2022

#### **Site Update: Former Pfizer Facility at Hangzhou**





#### MFG20: Commercial Mfg at 2,000L



#### **DP9: Commercial liquid/lyo vials**

- DS: Completed several batches with 100% success rate and several projects introduced
- DS: 2 months from project kicking off to PPQ run, demonstrated speed, flexibility and quality
- DP: First Batch manufactured within 33 days post acquisition
- Both started to contribute revenue in Q3
- Both passed audits from clients and secured large scale manufacturing contracts in 2022

### Site Update: Former CMAB Facility at Suzhou





#### MFG21: Clinical facility at 500-2,000L scale

- Completed the manufacturing for first WuXi Bio's project within only 47 days
- Consecutively succeeded dozens of batches as of September 2021 and started to contribute revenue
- Doubled manufacturing capacity post acquisition



#### **DP11: Clinical liquid vials**

- Completed media fill and production with 100% success rate
- First PPQ project initiated and in the process of signing contracts for 2021 Q4 and 2022
- Improvement of manufacturing capacity by ~50%

#### **Site Update: Former Bayer's Facility in Germany**





MFG 19, Wuppertal, Germany: Commercial mfg at 2,000-6,000L

- Final Layout of antibody suite is ready and design of mRNA suite is ongoing
- Antibody MFG : ~50 Batches/year
- Already hired 60+ employees



DP7, Leverkusen, Germany: Commercial liquid/lyo vials

- Passed Germany Authority's GMP inspection (EMA/PEI)
- Obtained the first GMP manufacturing license outside of China
- Commercial manufacturing initiated

# **Global Supply Chain: No Revenue Impacted by Supply Chain**





# of platform Mat & % Achieved Safety Stock Level Purchased >US\$1 bn raw materials to support all our projects since COVID-19

- Leveraged WuXi Biologics' platform materials, and built up safety stocks (6-9 months)

Developed "Dual Source, Dual Factory" sourcing strategy to secure supply for critical materials



Continue to work with global key suppliers to mitigate on-going supply risks due to their capacity/material shortage

# No Impact to Operations Despite Recent Power Shortage in China





Government's power rationing policy has no impact on our sites



Proactive measures taken to conserve energy and reduce carbon emission; Business Continuity Plan in place

- Biopharmaceutical industry is not energy-intensive
- WuXi Bio facilities are mainly located in pharmaceutical industrial parks, and enjoy prioritized power supply
- Effective communication with government at all levels to ensure our operation continuity
- All 9 sites in China aren't impacted by power shortage

- All sites advocate daily energy conservation to further reduce non-R&D and non-manufacturing departments' electricity use
- Pilot solar power generation project at Wuxi site
- Business continuity plan and back-up solution in place in case of potential power shortage













# **Recent Regulatory Reforms in China will Drive Higher Growth at WuXi Biologics**





All recent guidelines aim to enable a more innovative and robust healthcare industry in China which will favor WuXi Biologics



**Recent CDE guideline on oncology clinical trials** 

- Proceduralized a common practice of top companies in China
- Will eliminate low-quality assets from the development and benefit top biotech companies and top CDMO such as WuXi Biologics
- Will drive the local industry to focus on best-inclass and first-in-class: WuXi Biologics will play a critical role

# Summary

Have not seen discontinued

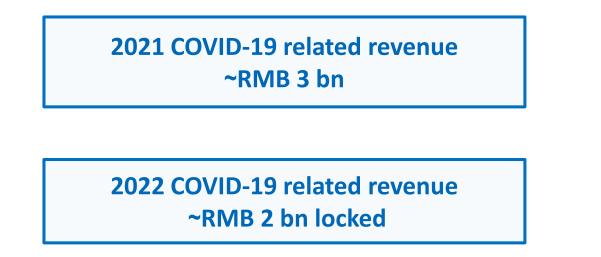
projects due to CDE

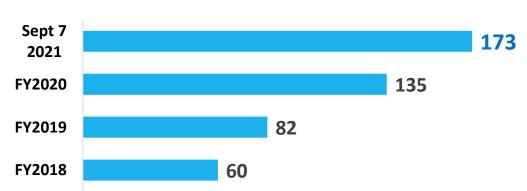
- guidelines
- Projects from China increased significantly in 2021

# **Exciting Growth Outlook amid COVID-19 Uncertainties**



- 2021 revenue growth remains incredibly robust
  - None of these limiting our growth: electricity shortage, global material shortage and equipment delay, talent, recent regulatory guidelines in China, trade tension
  - COVID-19 ~30% of total revenue
- 2022
  - COVID-19 backlog remains strong with ~RMB2 bn revenue locked: additional COVID-19 revenue as bonus
  - Non-COVID programs expect to see tremendous growth and compensate if COVID-19 revenue slows
- 2023: non-COVID accelerate, potential COVID-19 revenue as bonus

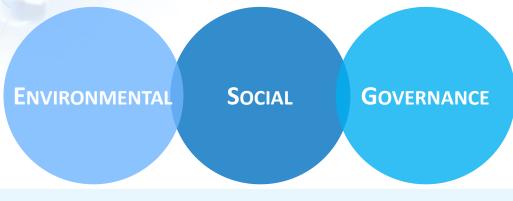




#### Growth of New Clients

#### Well Recognized by Global ESG Rating Agencies





- ESG Committee at the board led by CEO
- Advocate low-carbon and sustainable development, set mid-to-long term emission reduction target, reduce greenhouse gas (Scope 1+2) emission density by 50% by 2030
- Disposable bioreactors consume 90% less water and energy and eliminate 100% detergent during cGMP production
- Least resources consumed, lower emission and less waste produced
- WuXi Biologics has been well recognized for its good ESG performance by: MSCI, DJSI, FTSE Russel















# **Toward More Equitable Societies in China and Abroad**

- Established WuXi Biologics Charity Foundation in 2020
- Donated RMB 10 mm for Henan disaster-relief efforts
- All annual gifts for employees purchased from poor rural areas to support local economies
- Global partners will donate 10-20% of RSU to the charity foundation







Focused on public health, educational and charity programs

- Work with Chinese Organization for Rare Disorders and The Illness Challenge Foundation to support patients
- Collaborated with China Population Welfare Foundation and donated RMB 500,000 to purchase first-aid kits
- Partnered with Ireland Crumlin Children's Hospital to raise money for sick children

Established company-wide volunteers' associations at our sites in China, Germany, US, and Ireland and give back to local communities



# **PROUD Culture With Diversity, Equality and Inclusion**

11

WuXi Biologics provides equal opportunities to employees based on their professional and academic achievements regardless of religion, disability, age, race, color, sex, gender identity, sexual orientation, or marital status

<b>Diversified Culture</b>	Global employees with diversified culture background	WALK BROKEN
People-oriented	<ul> <li>Create a people-oriented work environment</li> <li>Promote the concept of work-life with various cultural and sports clubs and activities</li> <li>Global volunteers served more than 1,600 hours, 70% of whom are women</li> </ul>	
Women in Leadership	<ul> <li>Advanced Women leadership through training and seminars around the world</li> <li>Established dedicated D&amp;I team to promote D&amp;I culture</li> </ul>	
Equal Employment	Hired 30 people with disabilities	





# **Develop a Culture of Sustainability, Integrity and Compliance**

**Building a professional** 

compliance system



- The Compliance Committee is established and led by CEO
- Formulated Code of Business Conduct
- Established hundreds of SOP management regulation
- Organize daily compliance meeting
- Hosted various compliance training programs, e.g. virtual compliance training course, "Compliance Classroom" on company WeChat

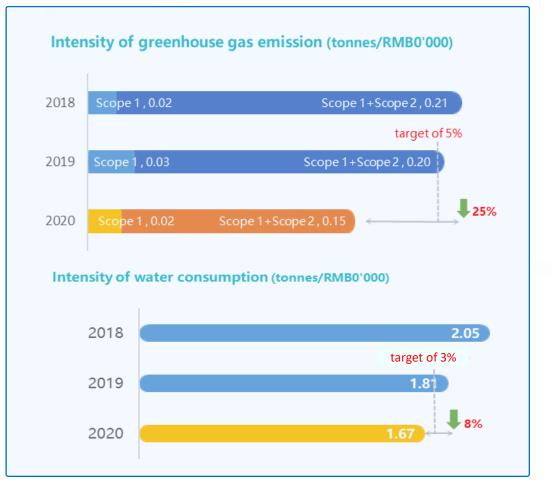


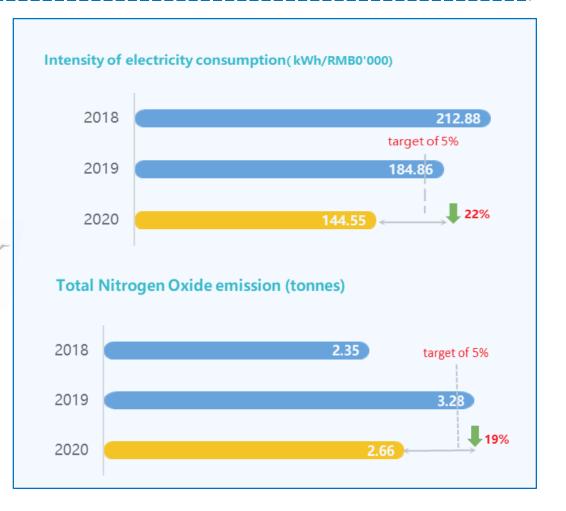
¢	IP is our shared lifeline to customers	<ul> <li>Formulated Trade Secret Compliance Management Policy and offered training course</li> <li>Strengthened information security technology and safety operating system</li> </ul>	IP Protection
<u>}</u>	Zero tolerance to corruption and bribery	<ul> <li>Established Report and Investigation Policy</li> <li>Multiple report channels, including CEO mailbox, Compliance mailbox, Legal mailbox, and Complaint hotline</li> <li>Continue to enforce Anti-corruption policies</li> </ul>	#STOP THECORRUPT

### **Effectively Reduce Energy Consumption and Emission**



In response to climate change, target minimum reduction of 5% per year for GHG emission intensity Improve resource efficiency, target minimum reduction of 3% per year for water consumption intensity





# Will There Be Another WuXi Biologics?





The most Opportune Time Enabled WuXi Biologics: from CMO to CDMO to CRDMO, driven by innovation from global biotech, increase of outsourcing by large pharma, and development of biotech in China



WuXi Biologics captured the largely unmet needs of small and medium companies and developed two pioneering strategies: one-stop shop integrated service and "follow-and-win-the-molecule"



WuXi Biologics leveraged the engineer dividend and scaled the CRDMO business at an unprecedented rate



WuXi Biologics developed an operating system that cannot be easily copied: proactive investment in cutting-edge technology, recruit, development and retention of talents, strategic collaboration with global supplies on equipment and materials, and global import and export system



Execution track record aims to satisfy and retain every client: FASTER, BETTER, AND CHEAPER



Global premier quality system; Continue to develop a culture of compliance and strengthen IP protection

## **Future of Biologics CDMOs**



#### Robust Growth Expected for Global Biologics CDMO

- Innovation from global biotech
- Large pharmas continue to increase outsource
- Tremendous growth and needs in China
- Huge unmet needs in developing countries
- Uncharted territories on vaccines

#### **Advantages of Top Companies**

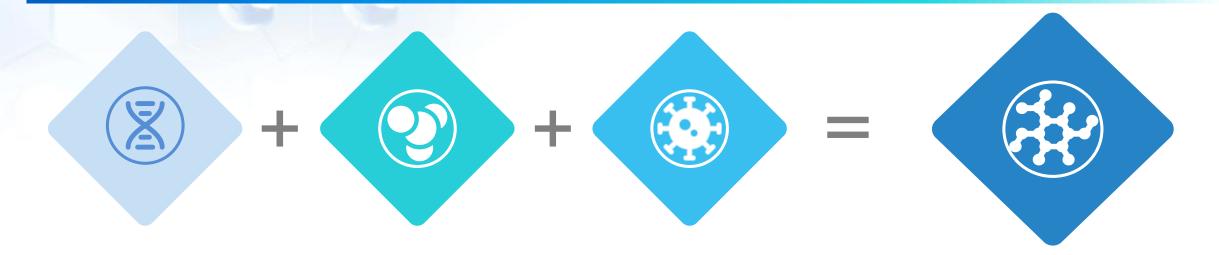
 Top companies will take more market share due to quality, regulatory, track record, talent and technology

#### **Expect Consolidation in Global CDMOs**

- Currently 100+ companies with Top 10 taking ~40% market share
- Expect Top 10 to achieve ~80% market share in 2025

#### **Sustainable High Growth**





- Business fundamentals remain very robust with expanded market share
- Strong backlog to sustain growth for next few years
- Well positioned in global competition with innovative technology platform including bispecifics, ADC, Vaccine and mRNA

Global capacity expansion on track and excellent talent

- "Follow & Win the Molecule" strategies reinforce pipeline growth
- Non-COVID projects drive future growth
- Good ESG practices support growth in the long run

# Sustainable high growth in 2021 and beyond

# **WuXi Bio Vision**

"Every drug can be made and every disease can be treated" by building an open-access platform with the most comprehensive capabilities and technologies in the global biologics industry

