

#### Disclaimer\*

#### Forward-Looking Statement

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 forward-looking 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.

#### Use of Adjusted Financial Measures (Non-HKFRS Measures)

We have provided adjusted net profit,, which excludes the share-based compensation expenses are not required by, or presented in accordance with, HKFRS. We believe that the adjusted financial measures used in this presentation are useful for understanding and assessing underlying business performance and operating trends, and we believe that management and investors may benefit from referring to these adjusted financial measures in assessing our financial performance by eliminating the impact of certain unusual and non-recurring items that we do not consider indicative of the performance of our business. However, the presentation of these non-HKFRS financial measures is not intended to be considered in isolation or as a substitute for the financial information prepared and presented in accordance with HKFRS. You should not view adjusted results on a stand-alone basis or as a substitute for results under HKFRS, or as being comparable to results reported or forecasted by other companies.

\*This presentation is for investor relations purposes only – Not for product promotional purposes

# About GenScript

#### **Company Overview**

Our History

Global Footprint

Talents

Financial Snapshot

#### **Business Segments**

Life Science

**Biologics CDMO** 

Industrial Synthetic Biology Products

Cell Therapy

**Business Strategies** 

#### **Key Investment Highlights**





2002

Founded in New Jersey, US



2013

Established Bestzyme

(Industrial Synthetic Biology Product Segment)





2015

GenScript was listed on HKEX

(stock code: HK.1548)



2018

**Established Biologics CDMO** Segment

(GenScript ProBio)



2021

Group, ProBio and Legend Biotech received funding of \$1 billion from Hillhouse Capital

2022







GenScript
Life Science Group





#### 2014

Founded Legend Biotech

(Cell Therapy Segment)



#### 2017

Legend Biotech and Janssen entered into global strategic collaboration on cilta-cel





#### 2020

Legend Biotech was listed on Nasdaq (NASDAQ: LEGN)

Launched GenScript ProBio





CARVYKTI® granted

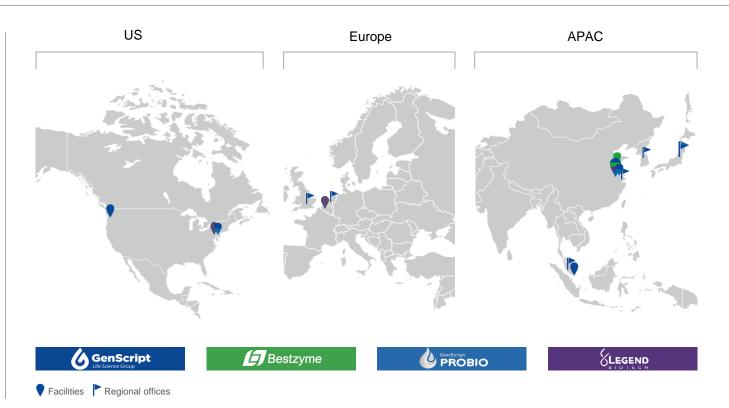
and Japan MHLW

approval by US FDA, EC

# Global Footprint\*



- Global Presence
   US, Europe, APAC
- Services
   100+ countries and regions
   200,000+ customers
- 190+ granted patents
   820+ patent applications



"As of June 30, 2022

# Talents — Foundation for Long-term Growth

Robust Talent Pool and R&D Team<sup>1</sup>

> 5,500

> 800

~98%

Global employees

R&D team

Employee training coverage

Diverse Workforce<sup>1</sup>

57%

40%

17%

Female employees

Master's degree or higher

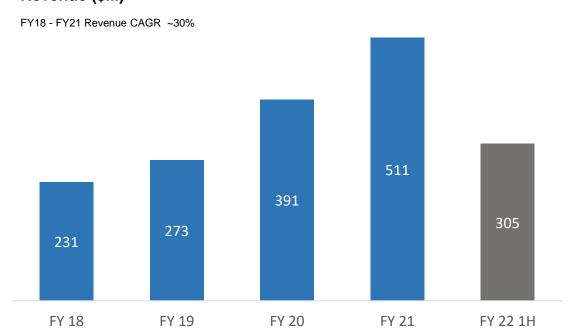
Overseas employees<sup>2</sup>



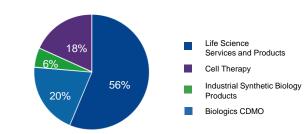
# Financial Snapshot



#### Revenue (\$M)<sup>1</sup>



#### Diversified Revenue Composition<sup>1</sup>



#### ~\$1,264M Cash Position<sup>1</sup>

- ✓ Non-cell therapy cash position at \$474.5M
- ✓ Cell Therapy cash position at \$789.0M

#### ~\$305M Revenue<sup>1</sup>

- ✓ Non-cell therapy revenue at ~ \$283M
- ✓ Cell Therapy revenue at ~\$57M

#### ~1591% ROI since IPO2

- ✓ HK\$1.31 @ IPO
- ✓ HK\$22.15 @ 12/25/2022

# **Business Platforms**







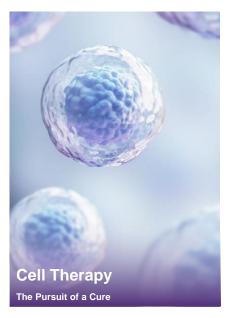








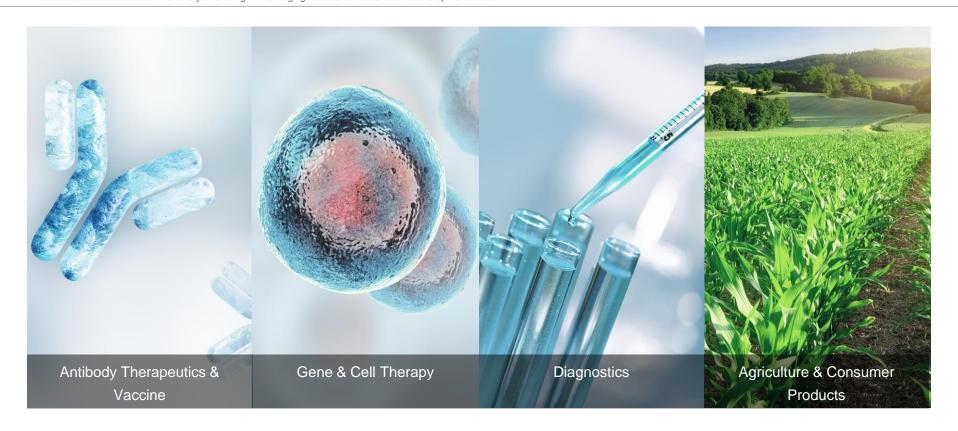






# GenScript Life Science Group – Make Research Easy

The GenScript Life Science Group is the world-leading enabling platform serving the scientific community by providing reliable, high quality and innovative reagents and instruments with superior customer service to enable success across a wide variety of existing and emerging life science research and development areas.



#### Services and Products Portfolio



# Services

#### Gene Synthesis

- World's largest gene synthesis provider\*
- 99.95% success rate, 99% on-time delivery\*
- Longest synthetic gene fragment up to 200kb\*
- Proprietary GenSmart<sup>TM</sup>, VectroArk<sup>TM</sup> and CloneArk<sup>TM</sup> for synthesis

#### Oligo Synthesis and CRISPR

- >18 years of experience in oligo synthesis
- ISO9001 and ISO13485 certified cleanrooms and sgRNA for IND filing and IVD product IND filing
- Chemical modification of nucleotides supports various applications

#### Peptide Synthesis

- >17 years of experience in peptide synthesis
- Solid and liquid phase peptide synthesis and microwave technologies with 98% one-time success rate\*
- Multi-channel large-scale synthesis up to kg level

#### Protein Production

- >18 years of experience in protein synthesis with purity up to 98%\*
- TurboCHO<sup>™</sup> high-throughput system delivers high-quality, challenging proteins
- Gene synthesis to proteins or antibodies in just 6 days

#### **Antibody Development**

- >18 years of experience with 150,000 projects delivered
- MonoRab™ B cell cloning platform for rapid development of diverse antibodies in just 11 weeks
- OLAW and AAALAC certified animal facilities

#### Products



#### Reagents and Instruments

- Total solutions for protein electrophoresis and blotting
- Stable cell line
- IVD antibodies, antibody products
- Protein Purification

#### Gene and Cell Therapy

- CytoSinct<sup>™</sup> cell separation solution
- AmMag<sup>™</sup> Quatro automated solution for plasmid purification
- GenCRISPR™/Cas9 gene editing tool

10 14 rd June 2022

# Innovation Drives Long-term Sustainable Growth





- Empowered by HTP gene synthesis platform and proprietary TurboCHO<sup>™</sup> transient expression technology
- As fast as 10 days from sequence to purified product
- Wide range of purified antibody products (e.g., IgGs, Fab, scFv, VHH, bi-specific antibodies, and more) in quantities (from ug to mg)



- Out-of-the-Box Solution
- Purify up to 24 samples with a 4-module setup in 2 hours
- Modular design provides throughput scalability with individual module operation, with each module purifying up to 6 samples
- High yield, low endotoxin, transfection grade plasmid DNA



- For precision gene editing, higher efficiency, lower immunogenicity, and larger payload content (up to 50kb)
- 8 patent filings for new products and production process protection
- Complete manufacture capability from RUO to GMP



- Complete Solution: Instrument, Protocols and Consumables
- Easy Operation: Guided tube installation, and intuitive touchscreen interface with an integrated barcode scanner
- Enclosed Solution: Sterile operation with a closed system
- High Quality: Excellent cell recovery, purity, viability and activation





# Life Science Group Capacity Expansion



2020 2021 2022 2023 2024





Zhenjiang Molecular Building **213,986** ft<sup>2</sup>

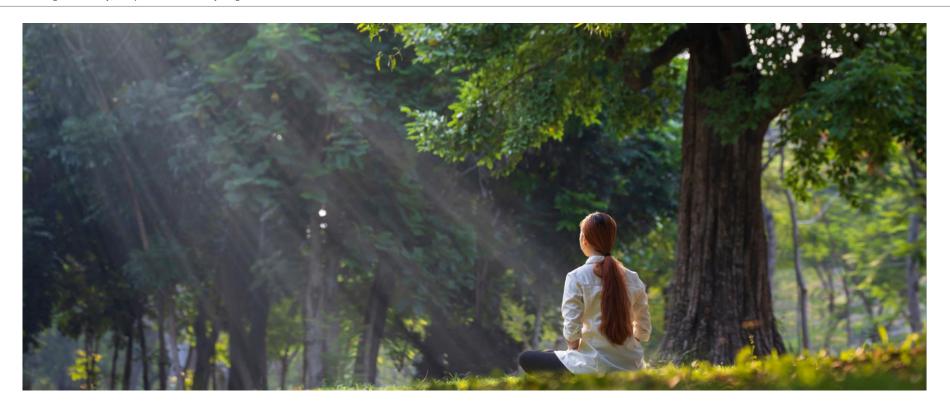


Nanjing Life Science Building 205,375 ft<sup>2</sup>



# GenScript ProBio — Innovation through Collaboration

With a one-stop biologics R&D and manufacturing platform, GenScript ProBio is committed to providing end-to-end CDMO services from target development to commercial manufacturing for GCT drugs, vaccines, biologics discovery, and protein and antibody drugs.



# One-stop End-to-end CDMO Services



- Antibody Discovery for mRNA Therapy
- CAR Candidate Molecule Discovery

- Plasmid, Virus, mRNA CMC
- Plasmid, Virus, mRNA manufacturing for preclinical research
- GMP Plasmid Manufacturing
- GMP Virus Manufacturing
- GMP mRNA Manufacturing

- GMP Plasmid Manufacturing for Commercial Use
- IN PLANNING: GMP Virus, mRNA Manufacturing for Commercial Use



#### Pre-clinical/ 🦠 🤣 Development :

#### **Early Stage** Clinical



#### Late Stage Clinical/ Commercialization 6



- State-of-the-Art ProSpeed™ Single B Cell Platform
- Fully Human Ab Discovery
- SMAB Bispecific Antibody Platform

- Fed-batch, intensified fed-batch. perfusion process development
- Proprietary Cell Line Development **Platform**
- Clinical Manufacturing

- Process Characterization, Process Validation
- Commercial Manufacturing

### Biologics

# Cutting-edge Platforms





#### Biologics

#### Fully Human Antibody Discovery

- √ 3 transgenic animal platforms
- As fast as 1 month to get fully human antibody sequence

#### Single B Cell Screening Platform

- ✓ Highly efficient, automated and comprehensive
- ✓ Expedited timeline to 1.5 months with mAb production

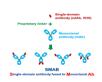
#### ProCLD Cell Line Development

- ✓ Host cell CHOK1-GenS
- ✓ Full history and traceability documentation, IP clear
- ✓ High productivity up to 8.7g/L, excellent stability in 60-90 generations

**SMABody** 

#### SMABody® Bispecific Antibody Platform

- Most natural bispecific antibody platform
- ✓ No sequence mutation
- Robust screening and engineering



#### Bispecific Antibody and Protein CMC

- DNA to Tox batch in 7 months for symmetric BsAb, 8 months for asymmetric BsAb
- Cell line, process and analytics toolkit to address mispairing and low expression
- Proprietary bioassay platform for customized bioassay design and construct
- High-density seeding, supernatant expression increased by 80%-150% in cell culture process validation

#### Optimized Process Development and Manufacturing Capacity

Perfusion Process Development

- Up to 80g/L titer, >10x higher productivity
- 6 months from DNA to Tox

**GMP Clinical Manufacturing** 

- 5 independent large-scale cell culture GMP upstream production lines
- 3 independent downstream purification production lines
- Tech Transfer in only 2 months
- Comply with NMPA, FDA, EMA regulations

Yas of Dec 2022

# Leading Gene and Cell Therapy CDMO





#### Lentiviral Vector Platform

- Ready-to-use LentiBone<sup>™</sup> with clear IP and traceability
- Reliable LVV Suspension System: superior yield, cost effective, high T cell transduction efficiency
- Enclosed upstream process for LVV Adherent System

#### One-stop Plasmid CDMO for Various Applications

- Various applications: CAR-T, TCR-T, UCART, CAR-NK, CRISPR, gene therapy, mRNA vaccine, DNA vaccine/DNA drug or LcDNA
- One-stop solution: CMC (IND filing), GMPro (clinical mfg.) to GMP (commercial mfg.)
- Clear IP and traceability of strain and ready-to-use LVV helper plasmids

#### **AAV Vector Platform**



- Proprietary Cell Line PowerS<sup>™</sup>-293: superior monoclonal dispersion, higher cell density and viability, shorter cell doubling time
- High titer performance in different AAV serotypes: 3E13-1E14 vg/L

#### One-stop mRNA Service

- Plasmid + IVT-mRNA + mRNA-LNP integrated solutions
- IVT-mRNA: Enzymatic & co-transcriptional capping (License in)
- mRNA-LNP: suitable for different LNP formulas, encapsulation efficiency up to 99.7%, excellent CQA characterization
- Comprehensive, in-house mRNA analysis platform: compliant with GMP requirements in China, US & Europe, multiple analysis methods to characterize mRNA





#### From Discovery to Clinical\* **Biologics** Multiple Discovery Platforms **GCT** 1,430+ 13 Global License-out projects 60+ Global CMC projects 82+ CMC & CMO projects **Preclinical** 24 IND approvals from NMPA, 82+ FDA, PMDA, MFDS: CAR-T, Development 20+ IND approvals from NMPA TCR-T, mRNA vaccine and and FDA: mAb, ADC, CRISPR related cell therapy recombinant protein 200+ Global Clinical mfg. 103+ GMP batches completed batches

\*As of Dec. 2022

# **CDMO Capacity Expansion**



#### **Biologics**

-2023 Nanjing

10,333 ft<sup>2</sup> Antibody Discovery & Pharmacology Lab

-2023 Zhenjiang

72,118 ft<sup>2</sup> Antibody Process Development
8\*2,000 L Biologics Commercial Manufacturing Center

#### Gene and Cell Therapy

-2023 Zhenjiang

72,118 ft<sup>2</sup> Plasmid cGMP Facility
72,118 ft<sup>2</sup> Virus cGMP Facility

-2024 Zhenjiang

365,972 ft<sup>2</sup> Plasmid, mRNA, Virus cGMP & QC Facility

-2024 New Jersey\*

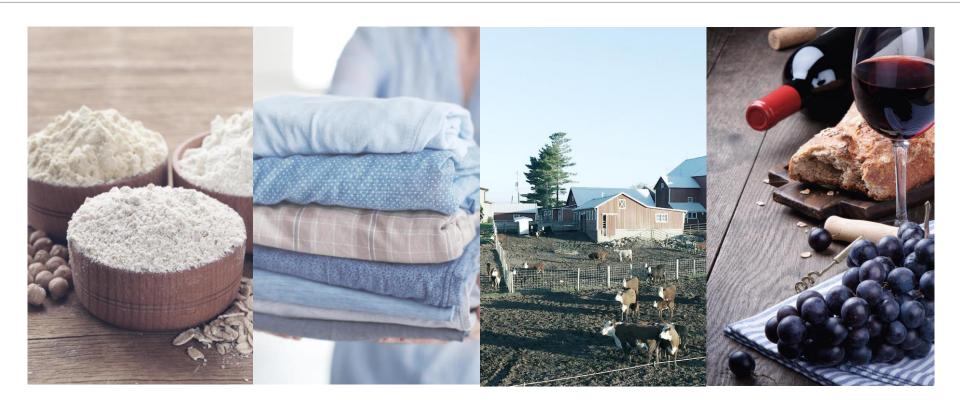
113,021 ft<sup>2</sup> Plasmid GMP Facility



# Bestzyme - Make the Best Enzyme



Leveraging independent R&D capabilities in synthetic biology, Bestzyme offers a wide range of enzyme products which can be applied in various industries such as feed, bio-ethanol, starch, textile and food.



# Create a Better World through Enzyme Innovation

#### Advanced R&D Platform

- √ >80 R&D staff\*
- √ ~55+ granted patents, ~45+ patents applications

#### State-of-the-Art Technology

- √ >6 industrial bacterial and fungal expression platforms
- ✓ Industry-leading enzyme molecule discovery and screening platform
- ✓ End-to-end delivery capability

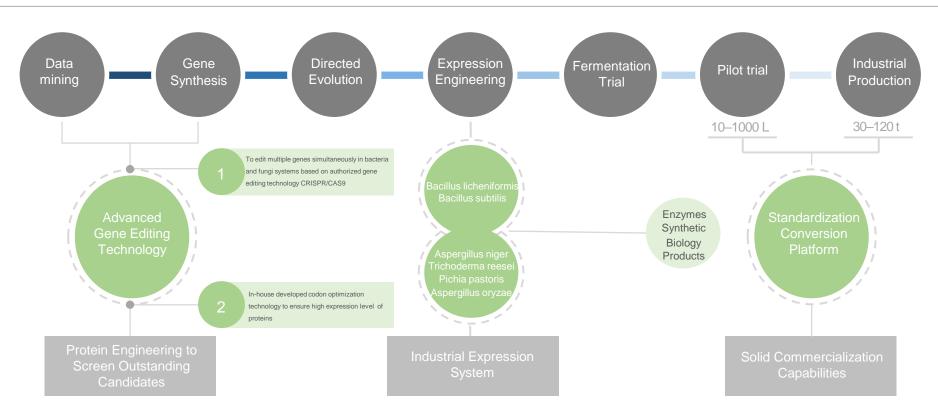
#### Market-oriented Business

- ✓ Automated production capacity of industrial enzyme >150,000 metric tons
- ✓ Integrated enzyme solutions provider
- ✓ Strategic partnerships with key accounts



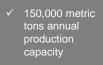


# **R&D Driven DNA to Commercial Enzymes**





# Comprehensive Product Portfolio & Production Capability



✓ Fully automated production line



One-key fermentation control system



Spray tower



Membrane filtration system



Automatic packing system

Industrial Enzyme Alcohol: SuperLIQ, HighDEX A, AlcGEN P Series

Baking: BestBAKER Series Home Care: PuriWise Series

Starch Sugar: SuperLIQ, LiqFINE, HighDEX, Dexfree Series

Textile: SuperLIQ TEX, Cata TEX

Compound Enzyme

ProMax: protease, phytase, energy enzyme, intestinal health enzyme, raw material pretreatment enzyme

**Feed Enzyme** 

Single enzyme: keratinase, amylase, NSP enzyme, lipase, cellulase, acid/neutral/alkaline protease, glucose oxidase, xylanase, mannanase, a-galactosidase

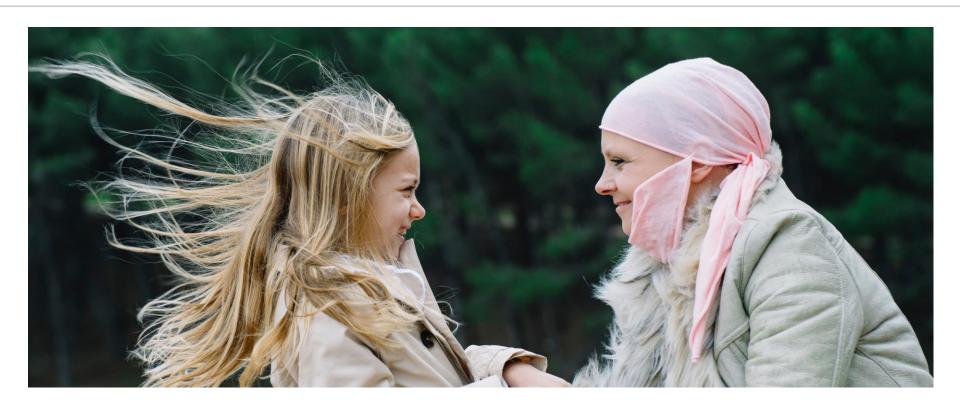
**Synthetic Biology** 

Functional protein: health and nutrition, better sensory experience, and low-carbon emission production solutions

# Legend Biotech - Pursuit of a Cure



Legend Biotech is a global biopharmaceutical company dedicated to R&D, clinical, production and commercial development of cell immunotherapies for the treatment of tumors. Legend Biotech is among top-tier cell therapy companies.



# Multiple Myeloma: Blood Cancer with a High Unmet Need



#### 3RD MOST COMMON BLOOD CANCER

accounting for 18% of all hematologic cancers1-3

176,404



NEW CASES WORLDWIDE IN 2020, accounting for 1% of worldwide new cancer cases <sup>3, 4</sup>



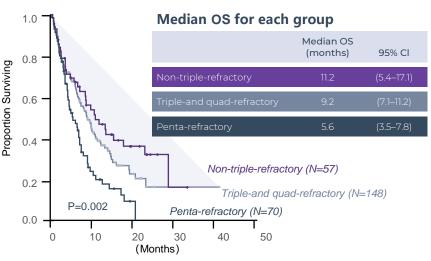
US: Incidence is 32,119, with mortality of 13,426<sup>5</sup>

EUROPE: Incidence is **50,918,** with mortality of 32,495<sup>6</sup>

CHINA: Incidence is **21,116,** with mortality of 16,182<sup>5</sup>

# POOR SURVIVAL OUTCOMES IN MULTIPLE REFRACTORY MM Median OS < 12 months

in patients refractory to anti-CD38, ≥ 1 PI(s) and/or ≥ 1 IMiD(s)<sup>8</sup>



Cl. confidence interval: Pl. Proteasome Inhibitor; IMID, immunmondulatory drug; MM, multiple myeloma; OS, overall survival
Cancer Stat Facts: Myeloma. https://geo.iarc.fr/noday/data/factsheets/cancers/35-Multiple-myeloma-fact-sheet.pdf. Accessed June 2021. 2. Facts and Statistics-Nutrible-myeloma-fact-sheet.pdf. Accessed June 2021. 4. Globocan
2020 World Fact Sheet: World: https://geo.iarc.fr/noday/data/factsheets/populations/900-world-fact-sheets.pdf. Accessed June 2021. 5. Globocan 2020 World Fact Sheet: United States of America. https://geo.iarc.fr/noday/data/factsheets/populations/900-europe-fact-sheets.pdf. Accessed June 2021. 6. Globocan 2020 World Fact Sheet: Europe.
https://geo.iarc.fr/noday/data/factsheets/populations/900-europe-fact-sheets.pdf. Accessed June 2021. 7. Globocan 2020 World Fact Sheet: China. https://geo.iarc.fr/noday/data/factsheets/populations/900-europe-fact-sheets.pdf. Accessed June 2021. 7. Globocan 2020 World Fact Sheet: China. https://geo.iarc.fr/noday/data/factsheets/populations/900-europe-fact-sheets.pdf. Accessed June 2021. 7. Globocan 2020 World Fact Sheet: China. https://geo.iarc.fr/noday/data/factsheets/populations/900-europe-fact-sheets.pdf. Accessed June 2021. 8. Gandhi UH, et al. Leukemia. 2019;33:2266-75. This presentation is for investor relations purposes only – Not for product promotional numoses

# Global Clinical Program for Cilta-cel



#### Late Line Studies of Therapy

# CARTITUDE-11 Phase 1b/2, multi-center registrational study of cilta-cel in RRMM Fully enrolled and ongoing in US and Japan NCT03758417 Phase II, multi-center registrational, confirmatory study of cilta-cel in RRMM Ongoing in China NCT03090659 Phase 1, multi-center study of LCAR-B38M CAR-T cells in RRMM Fully enrolled and ongoing in China

#### Earlier Lines of Therapy

#### **CARTITUDE-2**<sup>4</sup>

#### NCT04133636

- Global, multi-cohort study
- Phase II open-label study of cilta-cel in various clinical settings
- Enrolling

#### **CARTITUDE-4**<sup>5</sup>

#### NCT04181827

- Global, randomized, registrational study
- Phase III open-label study of cilta-cel vs DPd or PVd in patients with RRMM, 1–3 lines of prior therapy and refractory to lenalidomide
- Enrollment completed

#### CARTITUDE-56

#### NCT04923893

- Global, randomized, registrational study
- Phase III open-label study of VRd followed by cilta-cel vs.
   VRd followed by Rd maintenance, in patients with NDMM for whom ASCT is not planned as initial therapy
- Enrolling

#### **CARTITUDE-6**<sup>7</sup>

#### NCT05257083

- Global, randomized, registrational study
- Phase III open-label study comparing DVRd followed by cilta-cel vs. DVRd followed by ASCT in NDMM patients who are transplant eligible
- Not yet enrolling

ASCT, autologous stem cell transplant; DPd, daratumumab, pomalidomide, dexamethasone; DVRd, daratumumab, bortezomib, lenalidomide, dexamethasone; EU, European Union; JP, Japan; NDMM, newly diagnosed multiple myeloma; PVd, pomalidomide, bortezomib, dexamethasone; RRMM, relapsed and/or refractory multiple myeloma; SoC, standard of care; US, United States; VRd, bortezomib, lenalidomide, dexamethasone.

# Global Approval of Cilta-cel in the US, EU and Japan



# Consistent efficacy results across 3 datasets with a manageable safety profile

CARTITUDE-11 (N=97) 98% orr 83% sCR

mPFS Not Reached at 27.7 mo follow-up

≥3 prior therapies or double refractory, Prior PI, IMiD, anti-CD38 antibody exposure

Ongoing Ph 3
CARTITUDE-4

After 1–3 Prior Lines of Therapy and Lenalidomide Refractory CARTITUDE-2

Cohort A<sup>2</sup>(N=20

95% orr 90% sCR/CR

nPFS Not Reached at 17.1 mo follow-up

Progressive MM After 1–3 Prior Lines of Therapy and Lenalidomide Refractory

CARTITUDE-2
Cohort B<sup>3</sup> (N=19)

100% orr 90% sCR/CR

mPFS Not Reached at 18 mo follow-

Early relapse after front-line therapy including PI, IMiD or ASCT

#### CARVYKTI® (cilta-cel) Commercial Approvals

Approved by the US FDA on February 28, 2022



Conditional Approval by the EC on May 26, 2022



Approved by Japan MHLW on September 26, 2022



# Global Manufacturing Footprint



#### **US** Facilities



BCMA US / EU / JP / ROW Launch/ Commercial Site



US / EU / JP Legend Clinical Supply Site

#### **EU Facilities**



Future Commercial Site



**Future Commercial Site** 

#### China Facilities



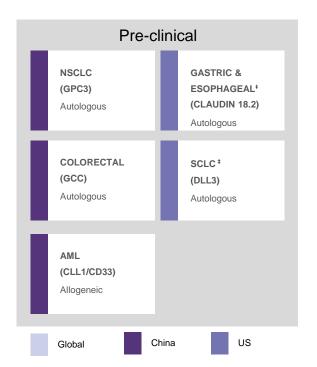
BCMA China Launch Site & Legend Clinical Supply Site

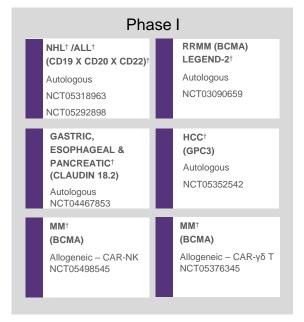


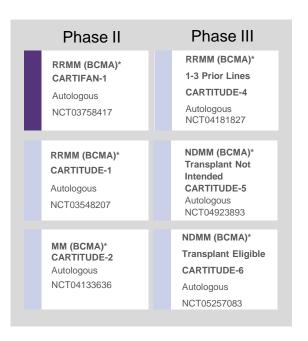
Future Commercial Site

# Robust Pipeline









<sup>\*</sup>In collaboration with Janssen, Pharmaceutical Companies of Johnson & Johnson. †Phase 1 IIT in China.

<sup>‡</sup>Multiple allogeneic platforms are being developed.

The safety and efficacy of the agents and/or uses under investigation have not been established. There is no assurance that the agents will receive health authority approval or become commercially available in any country for the uses being investigated. Additionally, as some programs are still confidential, certain candidates may not be included in this list.

ALL, acute ymphoblastic leukemia; AML, acute myeloid leukemia; BCMA, B-cell maturation antigen; DLL3, delta-like ligand 3, GPC3, glypican-3; GCC, guanylyl cyclase C; HCC, hepatocellular carcinoma; IIT, investigator-initiated trial; MM, multiple myeloma; ND, newly diagnosed; NHL, non-Hodgkin lymphoma; NSCLC, non small cell lung cancer; RRMM, relapsed or refractory multiple myeloma; SCC, small cell lung cancer.

# Business Strategies



- Increase R&D to enable GCT service & product
- Upgrade technology platforms: automation & high throughput
- Improve global capacity operation



- Expand our target customer segments to seek high quality business growth
- Build solid international business and scale up GMP capacity
- Become a leading GCT CDMO

# Bestzyme

- Enhance tech transfer from R&D to industrial-grade manufacturing
- Optimize product portfolio
- Increase international market penetration



- Improve cilta-cel production capacity to support commercialization
- Speed up early line clinical trials for cilta-cel
- Advance pipeline programs in liquid and solid tumors

# Key Investment Highlights

- Life Science Group: Sustainable revenue growth with solid profitability
- 2 GenScript ProBio: Strong revenue growth with upside potential
- Bestzyme: Improved profitability and synthetic biology market opportunities
- 4 Legend Biotech: Unlock CARVYKTI® potential and advance other pipelines
- Strong synergies across four segments



