



# Disclaimer

We caution you that this presentation contains forward-looking statements.

All statements other than statements of historical facts contained in this presentation, including statements regarding our future results of operations and financial position, expected cash runway, business strategy, our expectations regarding the application of, and the rate and degree of market acceptance of, our technology platform and other technologies, our expectations regarding the addressable markets for our technologies, including the growth rate of the markets in which we operate and the need for antibody-related discovery technologies, the timing of the initiation or completion of preclinical studies and clinical trials by our partners, expectations regarding product approvals and potential for future revenue growth, launches by our partners and the timing thereof, the anticipated introduction of new technologies and innovations and enhancement of our technology stack and partners' experiences, the continued innovation around and the expected performance of our technologies and the opportunities they may create, the ability to add new partners and programs, the headcount required to support growth in our portfolio of partnerships and continued innovation and anticipated efficiencies relating thereto, and the potential for and timing of receipt of milestones and royalties under our license agreements with partners, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar expressions. The inclusion of forward-looking statements should not be regarded as a representation by us that any of our plans will be achieved. Actual results may differ from those set forth in this presentation due to the risks and uncertainties inherent in our business, including, without limitation: our future success is dependent on acceptance of our technology platform and technologies by new and existing partners, as well as on the eventual development, approval and commercialization of products developed by our partners for which we have no control over the development plan, regulatory strategy or commercialization efforts; biopharmaceutical development is inherently uncertain, risks arising from changes in technology; the competitive environment in the life sciences and biotechnology platform market; our failure to maintain, protect and defend our intellectual property rights; difficulties with performance of third parties we will rely on for our business; regulatory developments in the United States and foreign countries; unstable market and economic conditions, may have serious adverse consequences on our business, financial condition and stock price; we may use our capital resources sooner than we expect; and other risks described in our press releases and filings with the SEC. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date made, and except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. All forward-looking statements are qualified in their entirety by this cautionary statement, which is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

Information regarding partnered products and programs comes from information publicly released by our partners.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about the antibody industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.



# Today's Presenters



**Matt Foehr**  
CEO



**Kurt Gustafson**  
CFO



**Todd Pettingill**  
VP  
Business Development  
and Strategy



**Bill Harriman, PhD**  
SVP  
Antibody Discovery



**Bob Chen, PhD**  
Senior Director  
Discovery Systems



**Doug Krafte, PhD**  
SVP  
Ion Channels

# Today's Agenda

Topics	Slides
Opening Remarks & Business Updates - Matt Foehr	6 – 18
Creating Value for our Partners - Todd Pettingill	19 – 27
OmniAb™ Technology - Bill Harriman	28 - 37
Enhancing Discovery with OmniDeep™ - Bob Chen	38 – 48
The Ion Channel Opportunity - Doug Krafte	49 - 56
Financials - Kurt Gustafson	57 - 66

Q&A

# Mission

Our mission is to enable the rapid development of innovative therapeutics by **pushing the frontiers of drug discovery technologies.**

# Our Business

LEVERAGING OUR PROPRIETARY DISCOVERY TECHNOLOGY PLATFORM WORLDWIDE



## Technology Offering Addresses Most Critical Challenges of Discovery

*Create, Screen, Deliver* antibodies leveraging industry's only 4-species platform with differentiated tech and core competencies

## One of the Largest Greenfields in the Pharma Industry



\$279 billion total addressable market for antibodies by 2025

**POISED FOR GROWTH TO MEET A GLOBAL INDUSTRY NEED**



## Leading and Proven Technology

Growing numbers of partners and programs

## Innovation and Intelligent Expansion of Our Technology



New technology launches and an efficient internal innovation engine

# OmniAb, Inc.

- One year as OABI, and all of the pieces have aligned - our work is centered on driving the business, accelerating innovation around the platform and consistently staying ahead of our partners' discovery needs
  - 112 employees across three US sites, with ex-US business development presence
  - Only minimal future headcount growth needed to support projected growth in our portfolio of partnerships and our continued innovation
- Despite the macro landscape in the pharma tools/technologies space, our business metrics continue to demonstrate the value that our platform brings to the industry
  - Substantial growth in new partners and new programs over the last 24 months
  - Partner program advancement, with 5 new clinical entrants this year

# OmniAb, Inc.

- Our work and our technologies are having important impacts on our partners' R&D pipelines and are also having positive impacts on patients' lives
  - Over 170 active or completed clinical trials testing OmniAb-derived therapeutics, with over 30,000 subjects
  - 3 approved OmniAb-derived drugs in cancer
  
- Our business is designed and funded for continued innovation and intelligent technology expansion
  - Exciting new technology launching now, while our internal innovation engine is also becoming more efficient
  - Other novel technologies and partner experience enhancements planned in 2024 and beyond

# We Serve a Growing Antibody Market

\$279B in  
antibody sales  
projected by  
2025  
(up from \$238B in  
2022)

There were 51  
blockbuster  
(over \$1B in sales)  
antibodies in  
2022

The 5 best-  
selling  
antibodies  
had approx.  
\$75B in sales  
in 2022

# Discovery Technology is Increasingly Important

Decades of foundational and basic biology research and scientific advancement are helping to create continuing industry need for cutting edge antibody-related discovery technologies

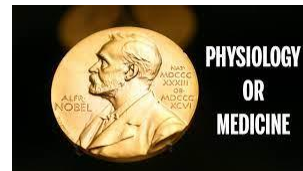
## National Cancer Act

Investment in basic research helped to define the biology of cancer pathways



## Hybridoma

Nobel Prize for Hybridoma Technique for production of monoclonal antibodies



## Cloning

Opened new possibilities for studying disease



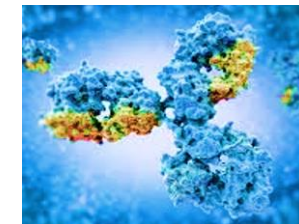
## Human Genome Project + Proteomics

Evidence on genetic variations that can lead to disease or increase risks



## Advancements in Immunology, Molecular Biology and Computing

Accelerating new therapeutic opportunities



# Demand for Discovery Technology is Increasing

Higher industry success rates and other factors are driving an acceleration of antibody-based investment by the pharmaceutical industry

Higher Success Rates  
vs.  
Small Molecules

Historical overall success rates for antibodies have been significantly higher than for small molecules.<sup>(1)</sup>

Inflation Reduction  
Act (IRA)

**Provision for drug price negotiations between Medicare and drug makers**

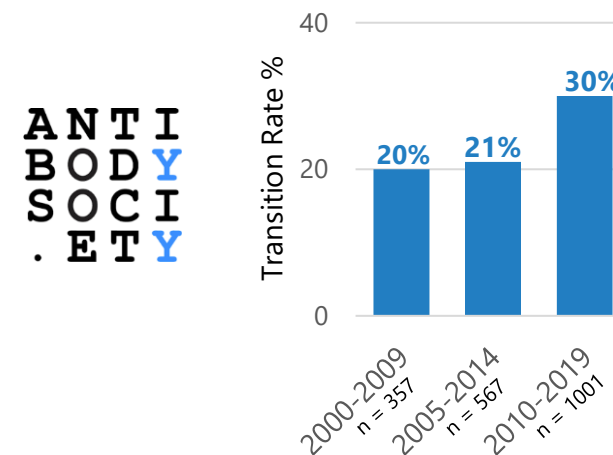
Small molecule drugs are eligible for negotiation 7 years after approval while large molecule are not eligible until 11 years after approval.

In a PhRMA survey of biopharmaceutical companies, 63% said they expect to shift R&D investment away from small molecule medicines as a result of the IRA.<sup>(2)</sup>

Recent data from *The Antibody Society* suggests the industry is further improving clinical success rates for antibodies

## Phase 1 to Any Approval - Success Rates over Time<sup>3</sup>

Phase Transition and Approval Success Rates  
(for antibody therapeutics which entered clinical studies 2000 – 2019)



Reference: *Trends in Commercial Development of Antibody Therapeutics*  
October 24, 2023; The Antibody Society, Inc.

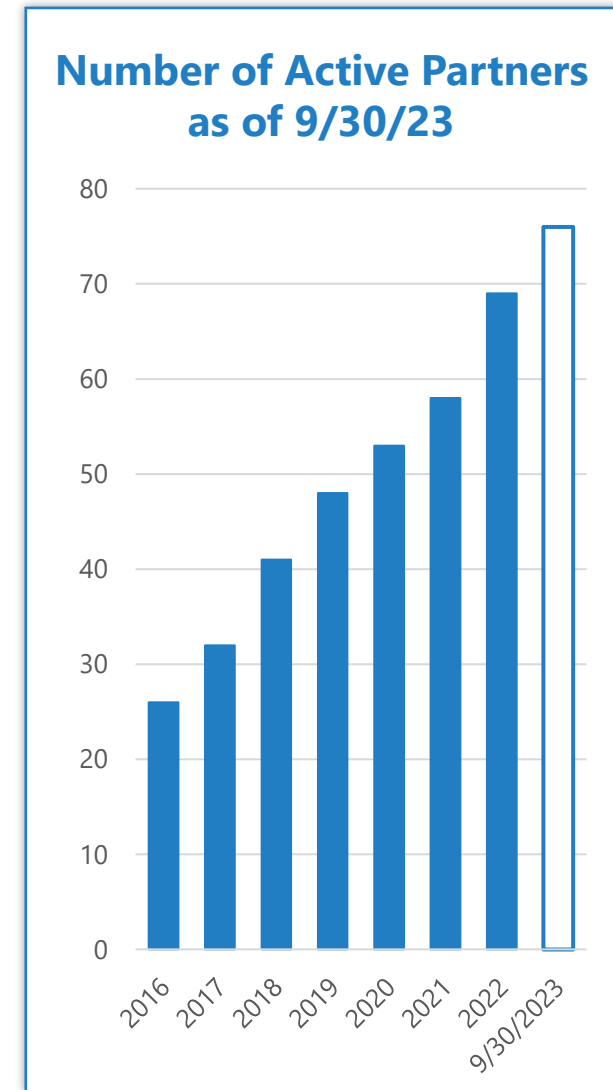
(1) BIO | QLS Advisors | Informa Feb 2021 Report; Applied Clinical Trials

(2) phrma.org; <https://phrma.org/en/Blog/WTAS-Inflation-Reduction-Act-already-impacting-RD-decisions>

(3) Trends in Commercial Development of Antibody Therapeutics, The Antibody Society, Inc., October 24, 2023; <https://www.antibodysociety.org/learningcenter/antibodies-to-watch-webinar-series/>

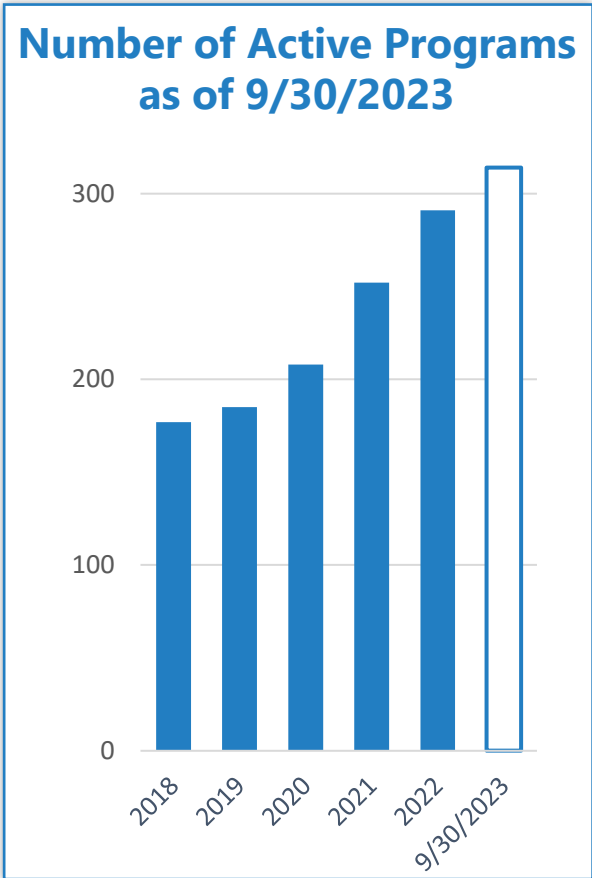
# Growth in Active Partners

- 8 new license agreements have been signed so far this year
  - New platform license agreements with GigaMune and Polaris signed in Q3
  - New platform license agreement with global pharma company signed recently
- As we continue to innovate around our technology, we bring increased value to our stakeholders
- Diversity in types of partners can help to build multiple paths to value creation



# Growth and Advancement of Active Programs

We started this year with 291 Active Programs. We have 314 as of 9/30/23, net of attrition.



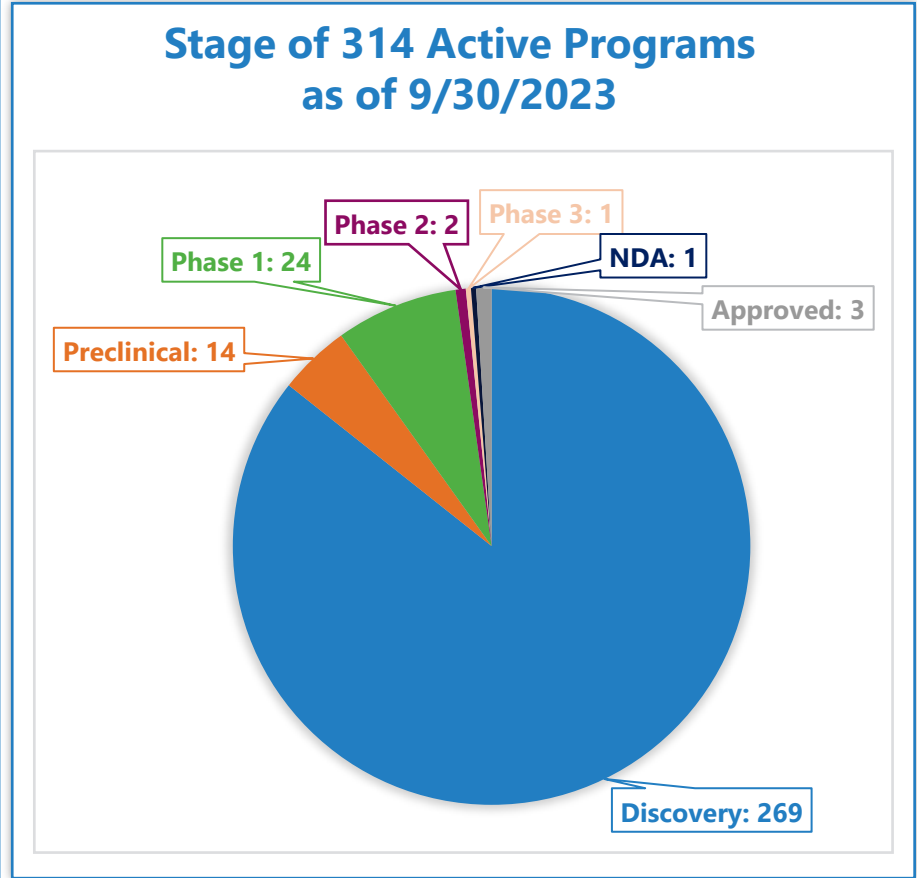
### So far in 2023:

Active **Discovery** programs have grown from 251 to 269

6 programs have successfully transitioned from **Discovery** to **Preclinical**

5 programs have transitioned from **Preclinical** to **Phase 1**

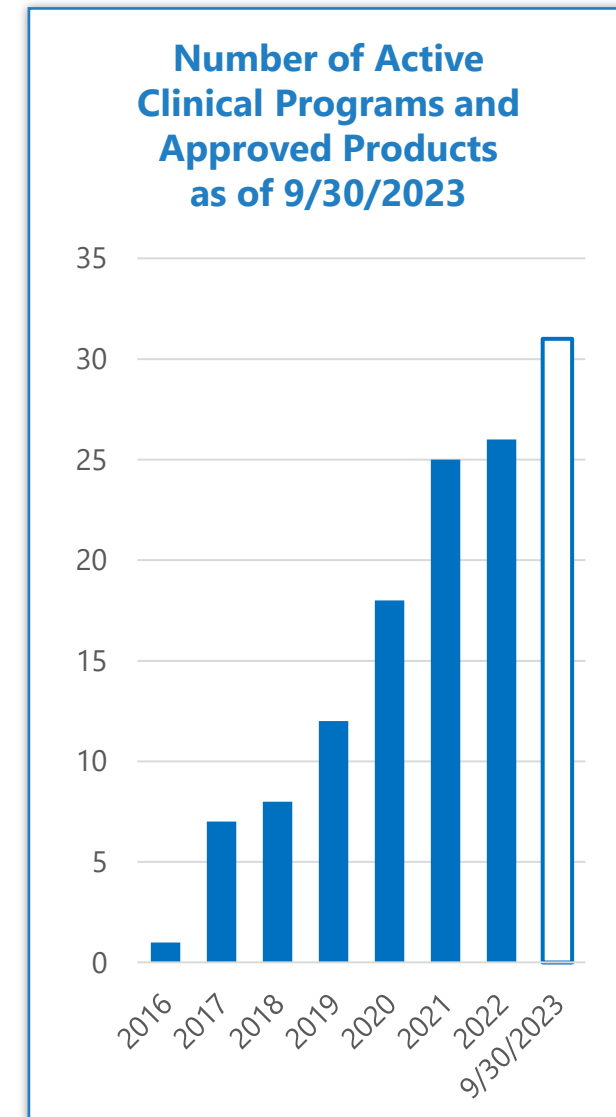
1 Program transitioned from **Phase 3** to **NDA** (China filing)



Reported numbers above are net of attrition, as of 9/30/2023. Preclinical stage programs are programs that are confirmed to be in pre-IND studies by partners.

# Growth in Active Clinical Programs

- We started 2023 with the expectation of 3-5 new clinical starts
- 5 new OmniAb-derived programs have entered the clinic so far this year:
  1. **SGN-BB228 (Seagen):** Anti-CD228 x 4-1BB Anticalin
  2. **IMVT-1402 (Immunovant):** Next-generation FcRn antagonist
  3. **GLS-012 (Gloria):** anti-LAG-3
  4. **RO7515629<sup>1</sup> (Roche):** HLA-G x CD3
  5. **CSX-1004 (Cessation):** anti-fentanyl
- We continue to follow the progress of **14 Preclinical** stage programs as they approach **Phase 1** clinical trials




(1) RO7515629 HLA-G x CD3 program with Roche subject of a grandfathered fully-paid license with OMT, Inc. executed prior to acquisition of OMT. Reported numbers are net of attrition, as of 9/30/2023. Preclinical stage programs are programs that are confirmed to be in pre-IND studies by partners.

# Approved, Under Regulatory Review and Clinical-Stage Partner Pipeline AS OF 09/30/2023

Partner	Program	Source Animal	Therapy Area	Target	Phase 1	Phase 2	Phase 3	Registration	Approved
gloria 嘉德生物 ARCUS GILEAD	Zimberelimab	OmniRat	Oncology	PD-1					
基石药业 Pfizer	Sugemalimab	OmniRat	Oncology	PD-L1					
Janssen	Teclistamab	OmniRat	Oncology	BCMA x CD3					
HANALL HARBOUR IMMUNOVANT	Batoclimab	OmniRat	Immunology	FcRn					
Genentech	Tiragolumab	OmniRat	Oncology	TIGIT					
Genmab BIONTECH	GEN1046	OmniRat	Oncology	PD-L1 x 4-1BB					
MERCK	M6223	OmniRat	Oncology	TIGIT					
Genmab	GEN1047	OmniRat	Oncology	B7H4 x CD3					
Janssen	JNJ-70218902	OmniRat	Oncology	TMEFF2 x CD3					
Janssen	JNJ-78306358	OmniRat	Oncology	HLA-G x CD3					
Aptevo	APVO436	OmniMouse	Oncology	CD123 x CD3					
CTTO	S095017	OmniRat	Oncology	LAG-3					
symphogen	S095018	OmniRat	Oncology	TIM-3					
symphogen	S095024	OmniRat	Oncology	CD73					
symphogen	S095029	OmniRat	Oncology	NKG2A					
abbvie	ABBV-383	OmniFlic	Oncology	BCMA x CD3					
AstraZeneca	TNB-486	OmniFlic	Oncology	CD19 x CD3					
AMGEN	AMG 340	OmniFlic	Oncology	PSMA x CD3					
SalubrisBio	SAL003	OmniRat	Metabolic	PCSK9					
Zhilkang Hongyi	Undisclosed	OmniRat	Oncology	Undisclosed					
CURON	CN1	OmniRat	Oncology	Undisclosed					
Boehringer Ingelheim	Undisclosed	OmniChicken	Undisclosed	Undisclosed					
Undisclosed	Undisclosed	OmniRat	Gastrointestinal	Undisclosed					
MERCK	M9140	OmniRat	Oncology	CEACAM-5					
Genmab BIONTECH	GEN1053	OmniRat	Oncology	CD27					
Janssen	JNJ-79635322	OmniRat	Oncology	Undisclosed					
Seagen	SGEN-BB228	OmniRat	Oncology	CD228 x 4-1BB					
HANALL HARBOUR IMMUNOVANT	IMVT-1402	OmniRat	Immunology	FcRn					
gloria 嘉德生物	GLS-012	OmniRat	Oncology	LAG-3					
Roche	RO7515629	OmniRat	Oncology	HLA-G x CD3					
CESSATION	CSX1004	OmniRat	Drug overdose	Fentanyl					

**Animal launch year:** OmniRat 2012; OmniMouse 2014; OmniFlic 2014; OmniChicken 2016; OmniClic 2019; OmniTaur 2020; OmnidAb 2023

**Notes:** Most advanced status for each program shown. Zimberelimab and Sugemalimab are approved and marketed in China. Teclistamab is approved and marketed in the US and EU with \$35M launch milestones paid.

 Indicates program with fully paid license from OMT, Inc. prior to acquisition.

 Programs discovered by Teneobio under a fully paid license. Future programs discovered under license agreement are subject to downstream economics. On October 31, 2023 Amgen announced plans to discontinue Phase 1 study of AMG 340 in mCRPC.

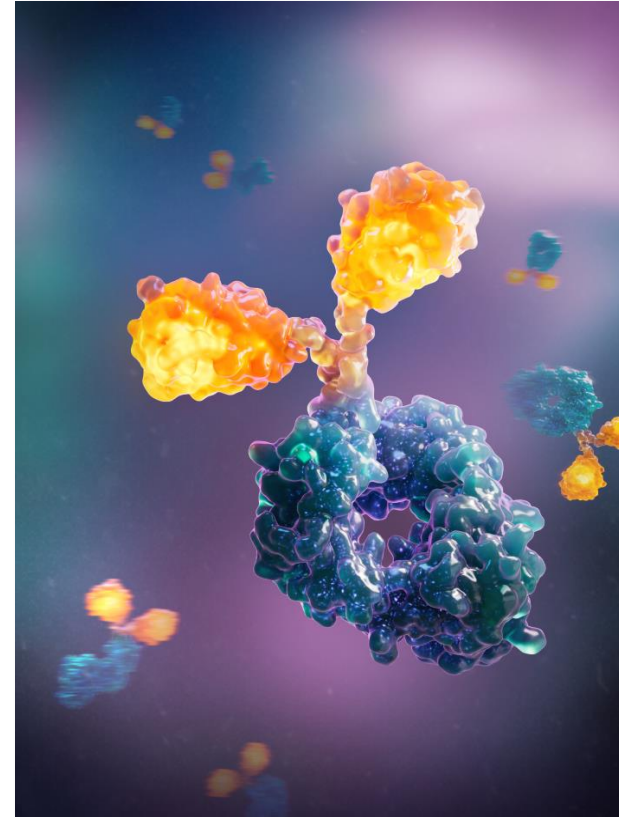
# We are Launching OmnidAb™

PARTNERS ARE NOW LEVERAGING OUR NEWEST TECHNOLOGY IN ACTIVE PROGRAMS

## OmnidAb™

OmnidAb is the first and only transgenic chicken producing single domain antibodies (sdAb), a novel class of antibody found naturally in camelids that is being increasingly exploited for a variety of therapeutic applications.

OmnidAb is an *in vivo* platform for sdAbs based upon a human VH scaffold that affinity matures in a chicken host environment to provide a functionally diverse immune repertoire unavailable from mammalian systems.



# Our Key Areas of Focus

WE BELIEVE WE ARE WELL-POSITIONED FOR FUTURE GROWTH WHILE WE MAKE AN ENDURING AND SIGNIFICANT IMPACT ON THE INDUSTRY AND GLOBAL HUMAN HEALTH

We Leverage a Highly Scalable Business where Investments in Technologies and Innovation are Informed by Discovery Relationships with our Partners



Partnered Pipeline Development, Expansion and Advancement



Continued Workflow Versatility Initiatives



Expanding the Reach of our Platform



New Technology Development and Launches

## A FOCUS ON KEY STAKEHOLDERS IS AT OUR FOUNDATION



### Team

Strong culture - develop, motivate the best



### Partners

Focus on customer service and future needs



### Investors

Superior business execution to create value



### Community

Lead with integrity and responsibility

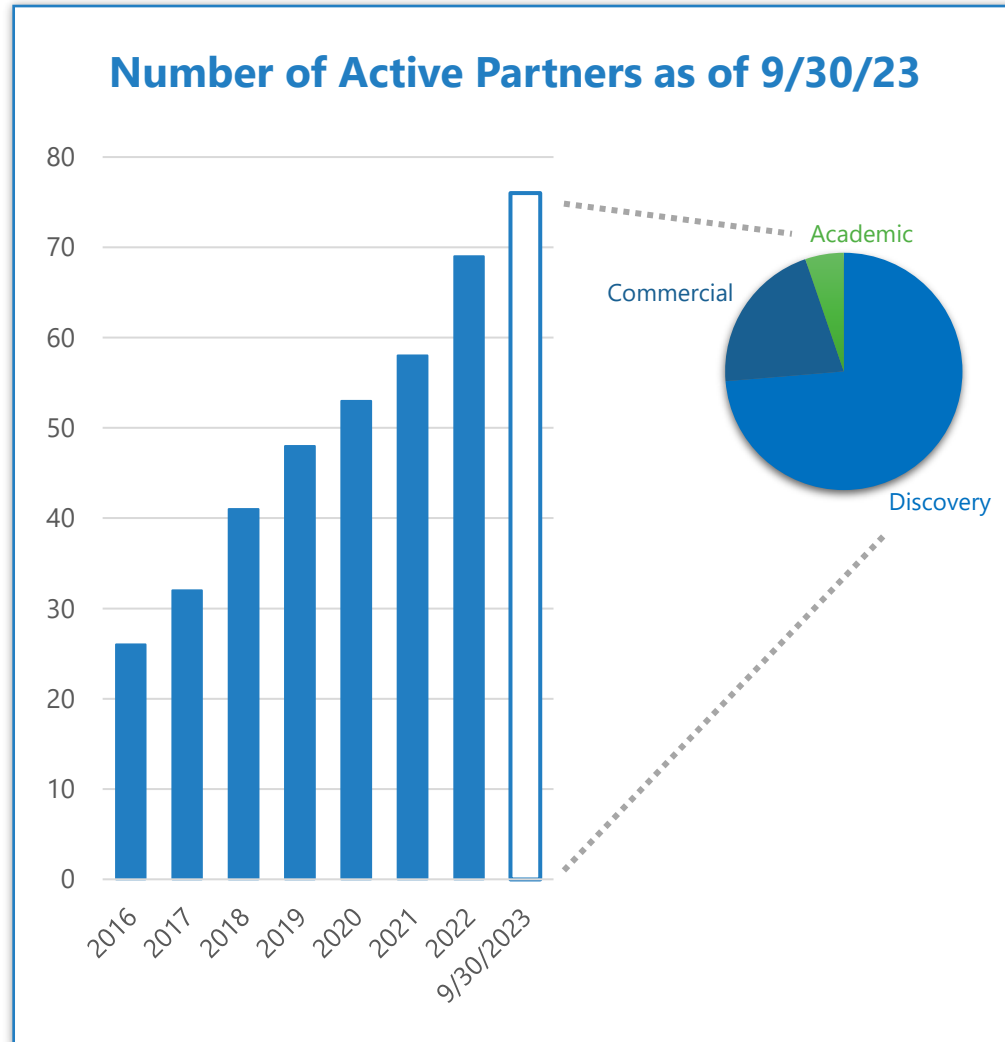
OmniAb<sup>®</sup>



# Creating Value for Partners

Todd Pettingill

# Our Partnership Base is Growing

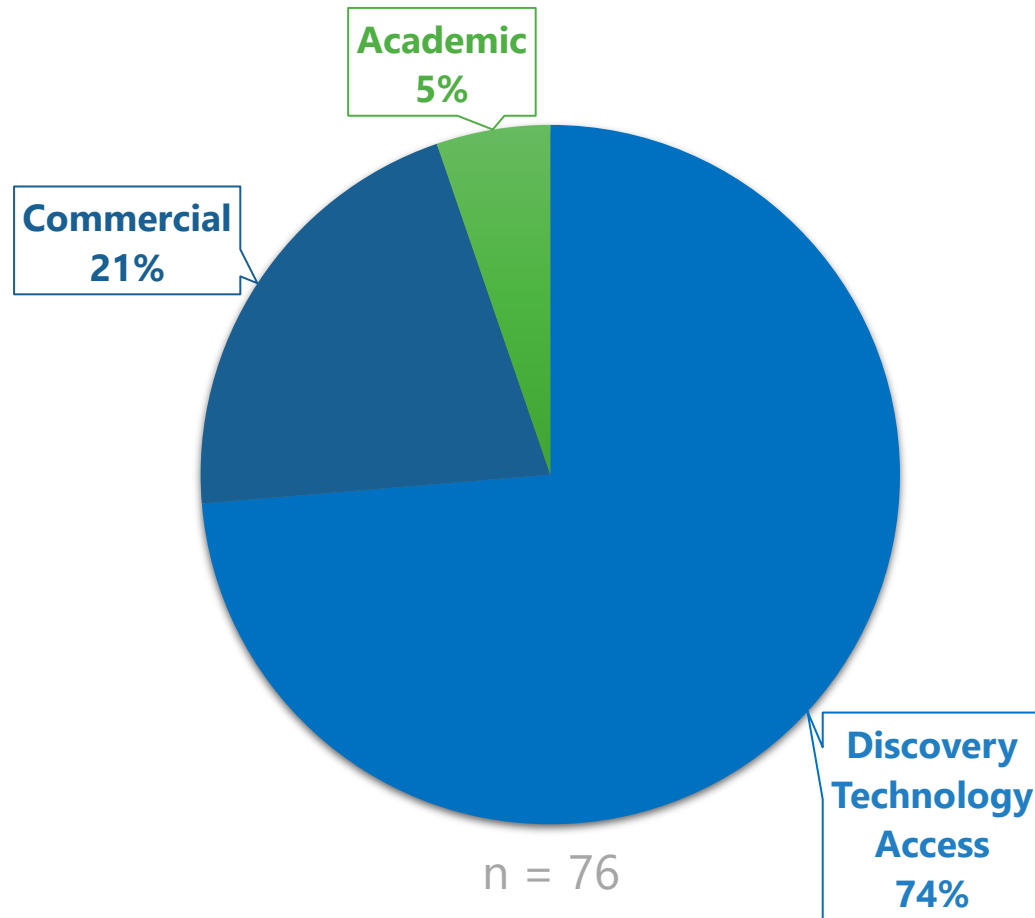


Reported numbers are net of attrition, as of 9/30/2023

- The last 24 months have been highly productive in new partner additions, driven primarily by a few factors:
  - Platform visibility and clinical/commercial validation
  - Expanded business development and marketing presence, backed by cutting-edge science
  - Creativity in licensing to align our interests with partners
- We are attracting a diverse set of partners

# Our Partners

ACTIVE PARTNERS BY TYPE AS OF 9/30/2023

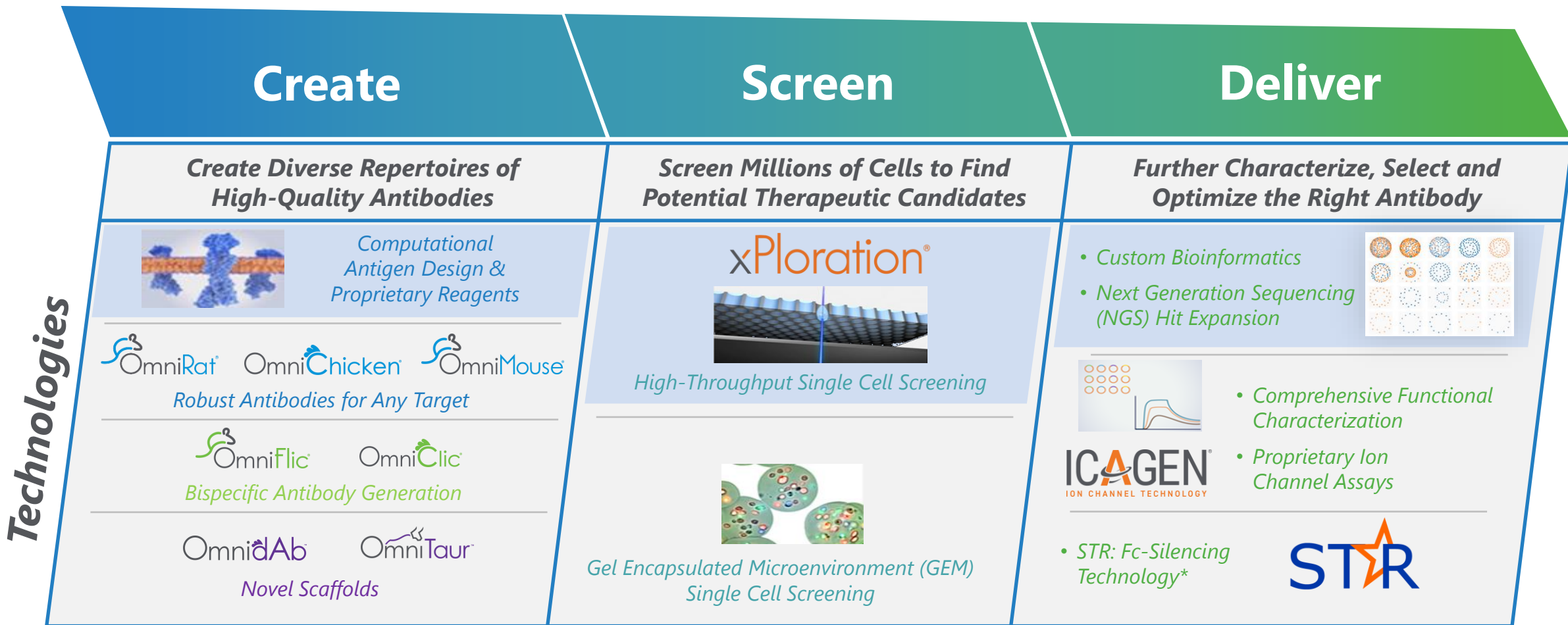


Deal structures align interests with our partners and create an engine for future growth

- **Discovery Technology Access** partners have access to the platform for current or new/potential programs as well as rights to develop and commercialize OmniAb-derived antibodies
- **Commercial** partners have geographic or therapy area rights to a commercial or development-stage OmniAb-derived antibody
- **Academic** partner licenses are designed for revenue sharing, with discovery technology platform access and an understanding that programs can be spun out into development or commercial entities

# The OmniAb Technology Offering is Expanding

TECHNOLOGY OFFERING ADDRESSES THE MOST CRITICAL CHALLENGES OF ANTIBODY DISCOVERY





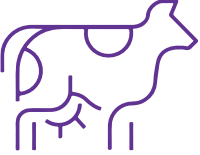

**OmniDeep<sup>™</sup>** Suite of in silico tools for discovery and optimization that are woven throughout our various technologies and capabilities. Includes structural modeling, large multi-species antibody databases, molecular dynamics simulations, AI, and machine and deep learning sequence models, and more

\*OmniAb entered into an agreement with mAbsolve Ltd. for STR, mAbsolve's Fc-silencing platform technology, which provides OmniAb with exclusive, sublicensable right to incorporate the STR technology with antibodies that have been generated using OmniAb's antibody discovery platform.

# What is *Biological Intelligence*<sup>™</sup>?

- We believe that antibodies generated *in vivo* are superior to ones from other sources because they are **naturally optimized** through an iterative process that preferentially selects for antibodies with excellent specificity and developability profiles
- The ability of the immune system in our engineered transgenic animals to create optimized antibodies for human therapeutics is what we call ***Biological Intelligence***
- We believe this approach **increases the efficiency and probability of success** of therapeutic antibody discovery and may help limit the attrition of antibody product candidates in the clinic

# Some Differentiating Features of our Technology

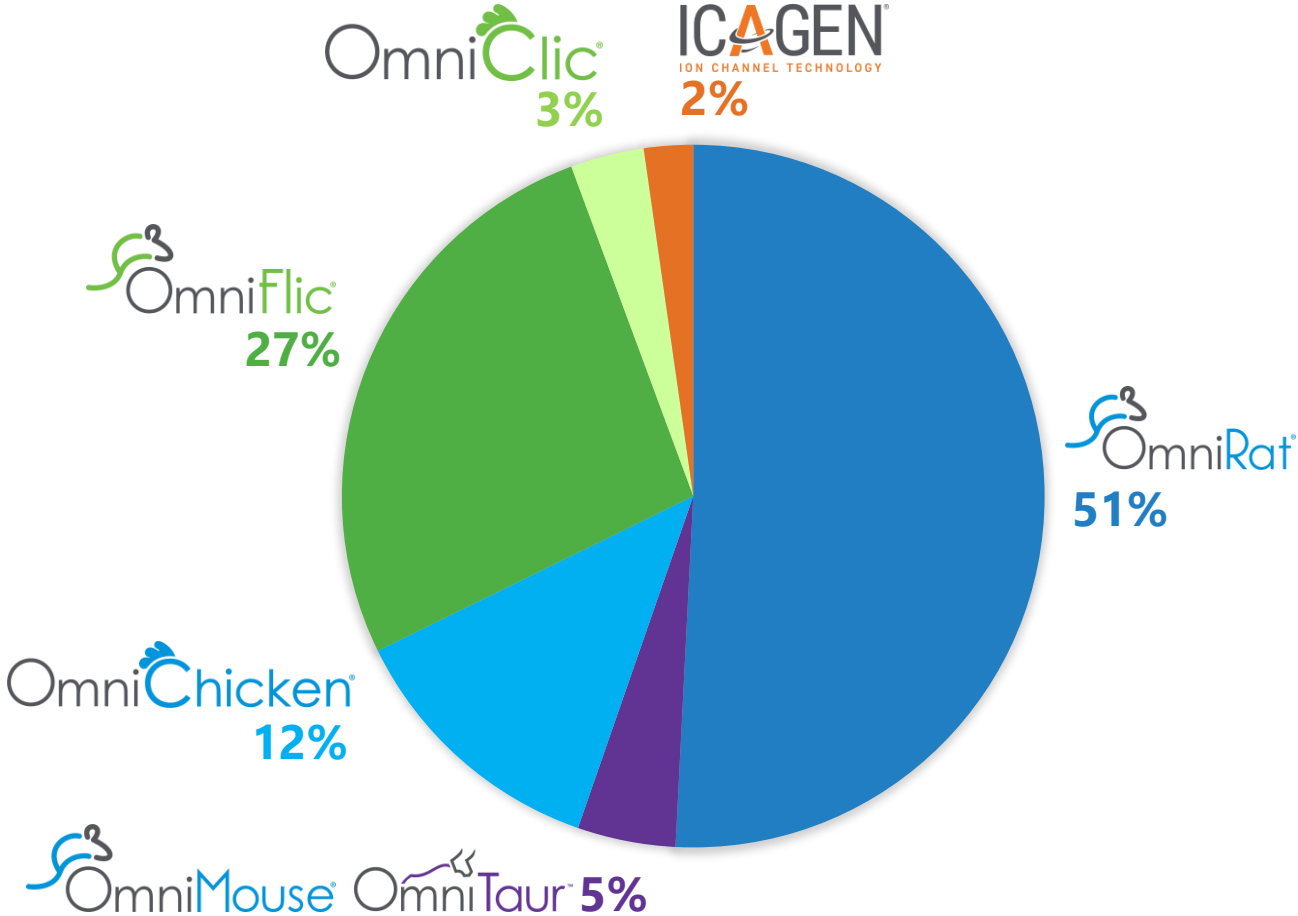
			
<p>OmniChicken<sup>®</sup> OmniClic<sup>®</sup> OmniAb<sup>®</sup></p>	<p>OmniRat<sup>®</sup> OmniFlic<sup>®</sup></p>	<p>OmniTaur<sup>®</sup></p>	<p>xPloration<sup>®</sup></p>
<ul style="list-style-type: none"> <li>• Evolutionary distance advantage vs. mammals</li> <li>• Broad epitope coverage on a wide-range of targets</li> </ul>	<ul style="list-style-type: none"> <li>• Rat species difference from mice, with similar ease-of-use</li> <li>• B-cell quantity advantage vs. mice</li> <li>• Approved antibodies, US/EU/Asia</li> </ul>	<ul style="list-style-type: none"> <li>• Ultra-long CDRs enable targeting ion channel interiors and other epitopes thought of as physically inaccessible to antibodies</li> <li>• CDRs cleavable into picobody™ knobs</li> </ul>	<ul style="list-style-type: none"> <li>• High throughput B-cell screening platform; 1.5M simultaneously</li> <li>• Integrated AI and sequencing to maximize repertoire mining</li> </ul>

Our platform is attracting new partners and enables our existing partners to expand use

# Active Programs by Source Technology

AS OF 09/30/2023

- Distribution of source technology becoming more diverse
  - Diversification of source is a gradual process given the size of our portfolio of active partnered programs

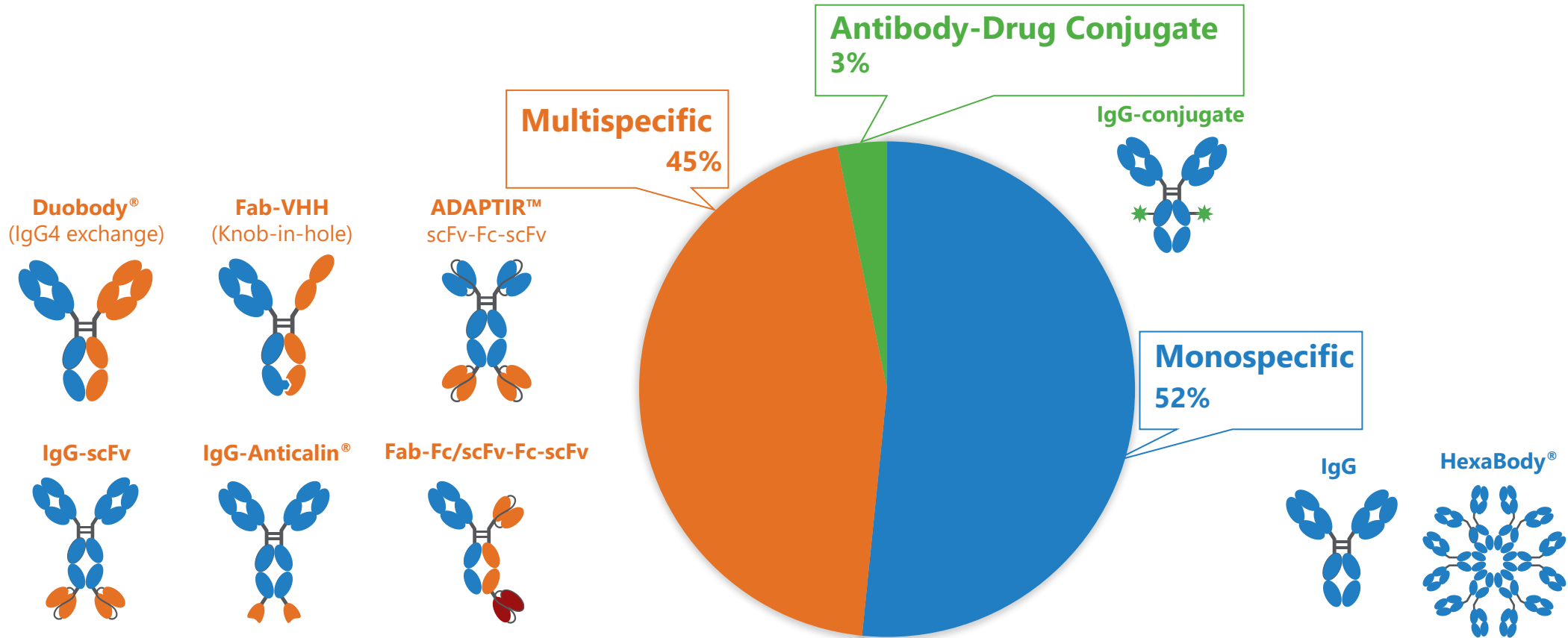


Our continued innovation and launch of new technologies is expected to drive further diversification of source technology

As of 09/30/2023, combination of sources allocated to contributing source used based on percentage of end therapeutic

# Diverse Formats of Current OmniAb Clinical Molecules

AS OF 09/30/2023



Continuing to support a range of formats is a part of our innovation plans

Duobody® is a registered trademark of Genmab A/S. ADAPTIR™ is a trademark of Aptevo Research and Development LLC (a subsidiary of Aptevo Therapeutics Inc.). Anticalin® is a registered trademark of Pieris Pharmaceuticals GMBH. Hexabody® is a registered trademark of Genmab BV (a subsidiary of Genmab A/S).

# OmnidAb™ - Partner Feedback and Launch

INITIAL FEEDBACK FROM OUR PARTNERS

## What is driving our partners' initial interest in OmnidAb?

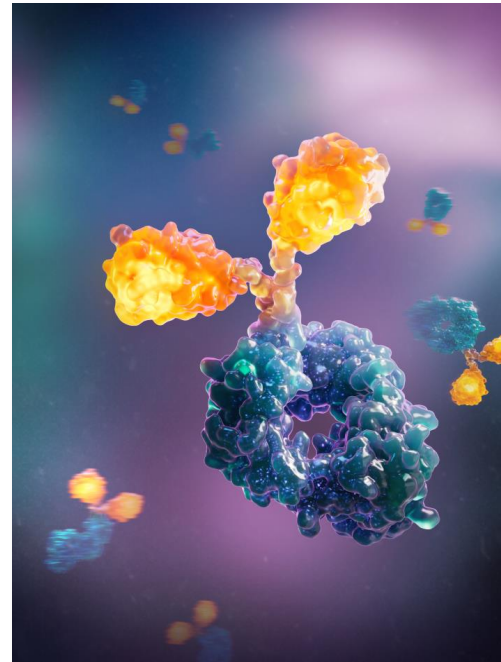
*"we are building a **panel of multispecific molecules** based on tethered sdAbs"*

*"rapid generation of **high affinity human sequence** sdAb candidate molecules"*

*"we are looking to deliver payloads **deep into solid tumors**"*

*"transporting across the **blood brain barrier** via a highly conserved receptor"*

*"looking for sdAb immune cell engager that can be **linked** to a variety of targeting molecules"*



# OmnidAb™

## Upcoming Scientific Presentations:



**November 15<sup>th</sup>** Seminar at PEGS Summit Europe (Lisbon)



**December 14<sup>th</sup>** Seminar at Antibody Engineering & Therapeutics (San Diego)



**January 2024** OmnidAb webinar series presentation

OmniAb<sup>®</sup>



# OmniAb<sup>™</sup> Technology

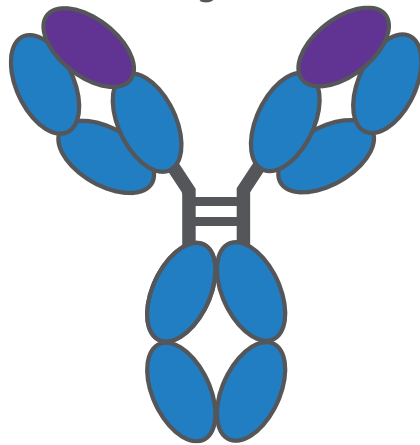
Bill Harriman, Ph.D.

# What is a Single-Domain Antibody (sdAb)?

ALSO KNOWN AS VHH ANTIBODIES OR NANOBODIES®

## Conventional antibody (IgG)

Comprised of 2 heavy chains and 2 light chains



Total MW ~150kD  
Binding domain is VH x VL

## sdAb

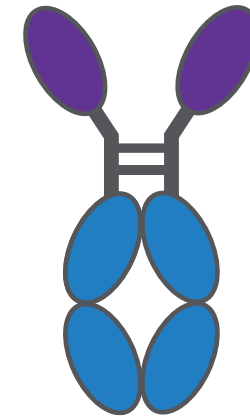
VH domain of HcAb can be expressed independently as an autonomous sdAb unit



Compact format of sdAb (~15kD)  
opens new and important opportunities

## Heavy chain-only antibody (HcAb)

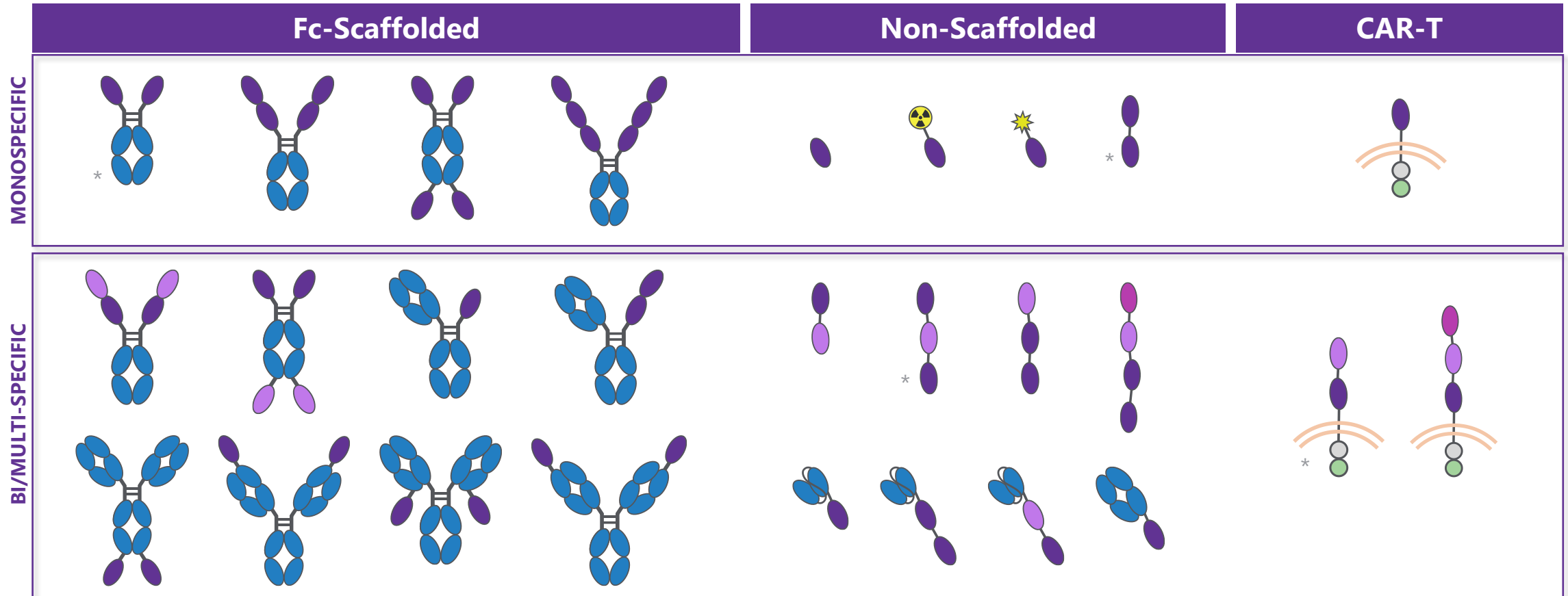
Found naturally in camelids, comprised of 2 heavy chains, no light chain



Total MW ~100kD  
Binding domain is VH only

# sdAbs Provide Modular Building Blocks

SDABS CAN BE ASSEMBLED INTO VARIOUS FORMATS TO "FIT THE BIOLOGY" OF AN APPLICATION



- Assembly into larger or custom formats unlocks versatility to "fit the biology"; also well-suited to bi/multi-specifics
- Small formats enable convenient routes of administration (inhalable & oral), penetration to the brain/CNS and fast clearance, compatible with the decay half-life of radio-isotopes used in imaging, diagnostics, and radiotherapy

\* Indicates a regulatory body currently-approved format

# Opportunities for sdAbs in Medicine



## Alternate routes of administration

*Injectable, inhalable & oral*



## Penetration + fast/tunable clearance

*Blood-brain barrier, tissue, tumor*



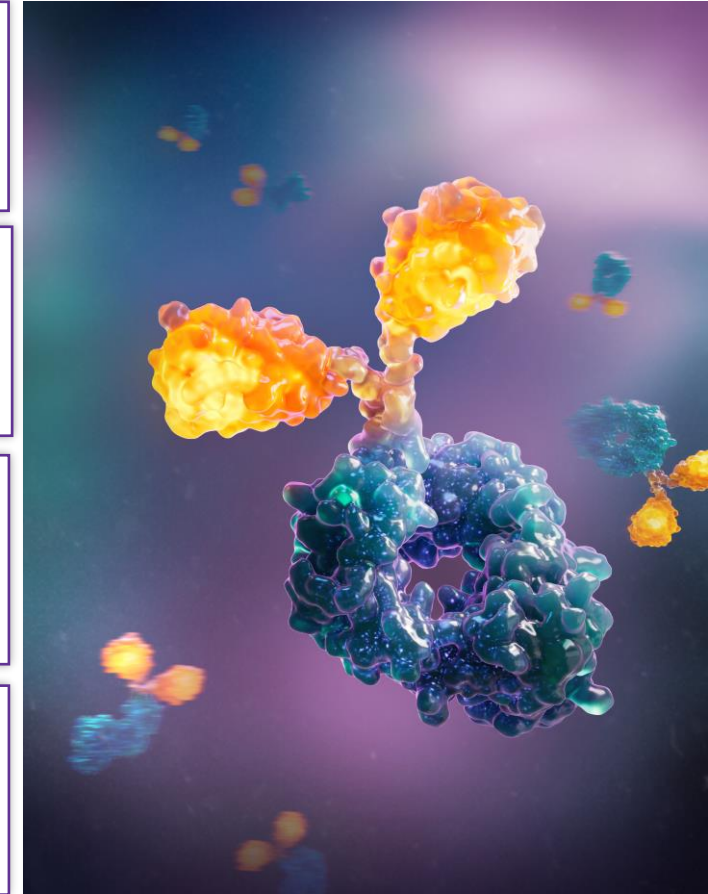
## Imaging/diagnostics/theranostics

*Small size compatible with PET/CT imaging radiolabels*



## Broad therapeutic applications

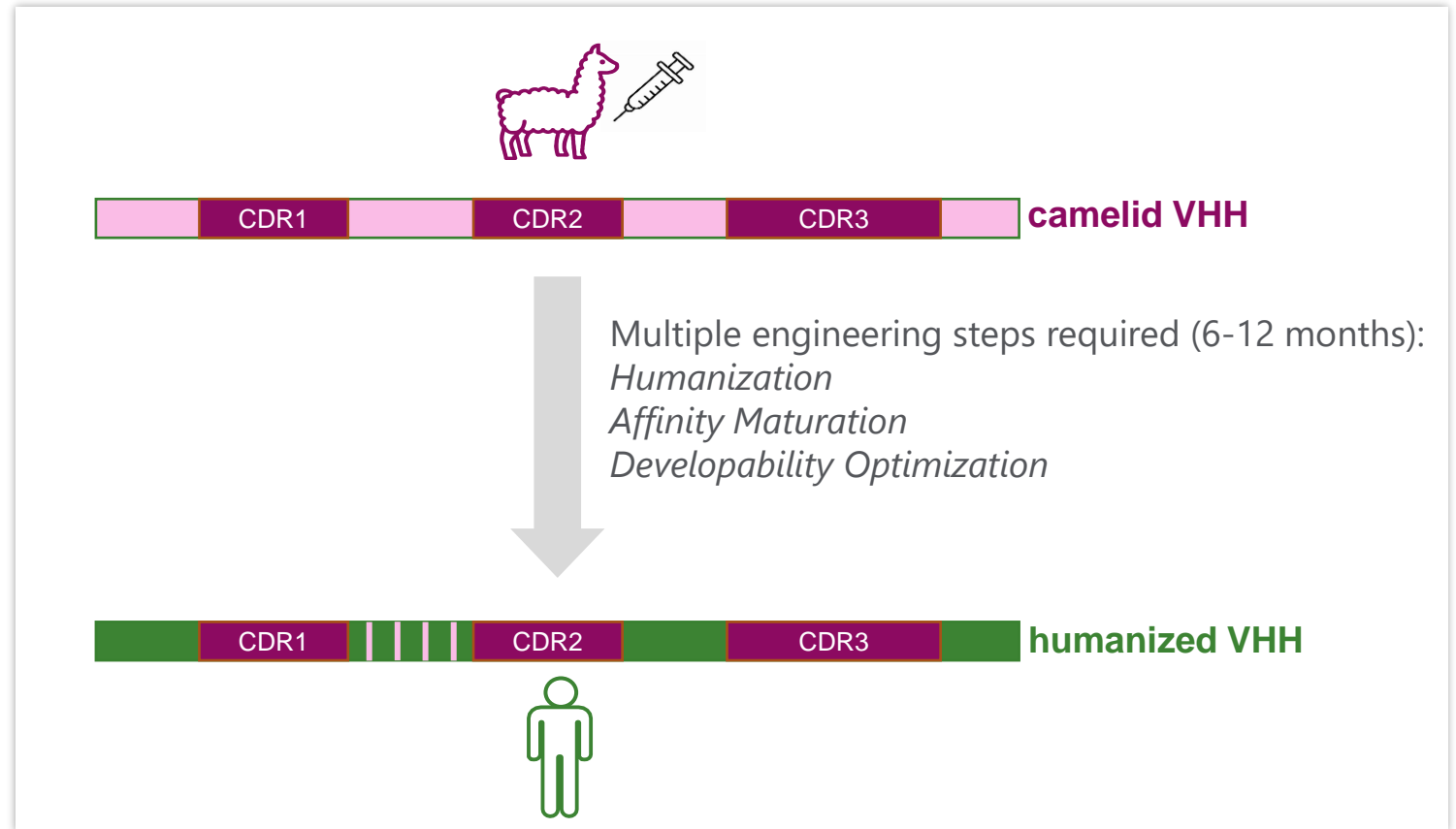
*Central nervous system and neurodegenerative diseases  
Infectious and Autoimmune diseases  
Cancer (especially bi/multi-specifics & CAR-T)*



Unique physical properties of sdAbs can be leveraged for important applications

# Current Discovery Strategy for Therapeutic sdAbs

- Current established process requires large animal immunization as well as engineering - including humanization and optimization - which adds time and can increase risks
- *OmniAb*<sup>™</sup> creates opportunity to improve this at a time when there is growing industry interest in the modality

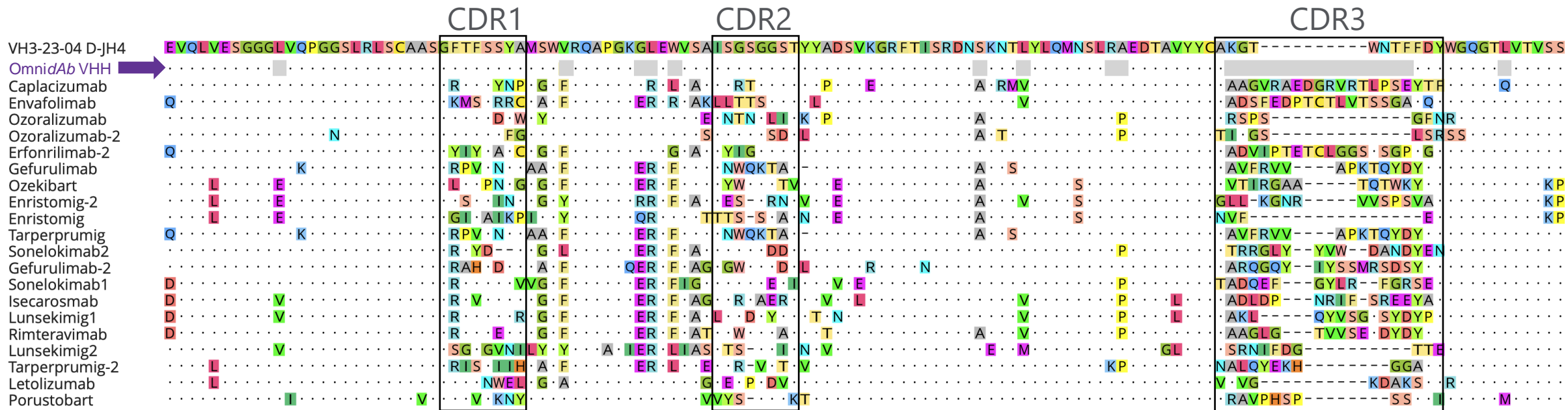


Despite medical promise and opportunity, there are only four approved sdAb-based therapeutics

# Engineered Attributes are Built into OmnidAb™

OFFERS A MORE EFFICIENT APPROACH VIA BIOLOGICAL INTELLIGENCE™

OmnidAb vs.  
other clinical-stage molecules:



OmnidAb is designed to capture ideal attributes of clinical molecules, bypassing need for extensive *in vitro* engineering

# Our Chicken Platforms - Powered by Evolution

GREATER EVOLUTIONARY DISTANCE YIELDS GREATER IMMUNOGENICITY AND MORE ANTIBODY DIVERSITY

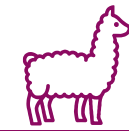
**PRIMORDIAL TARGET GENE**  
*Early form of gene prior to avian/mammalian evolutionary split*

300 MILLION YEARS AGO

AVIAN LINEAGE

MAMMALIAN LINEAGE

~95 MILLION YEARS AGO



HUMAN ORTHOLOGUE



MURINE ORTHOLOGUE



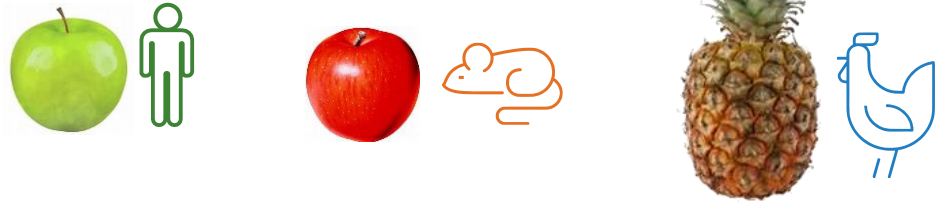
CAMELID ORTHOLOGUE



CHICKEN ORTHOLOGUE

# How OmnidAb™ Could Revolutionize sdAb Discovery

NOVEL HOST SYSTEM WITH PRE-ENGINEERED SCAFFOLD



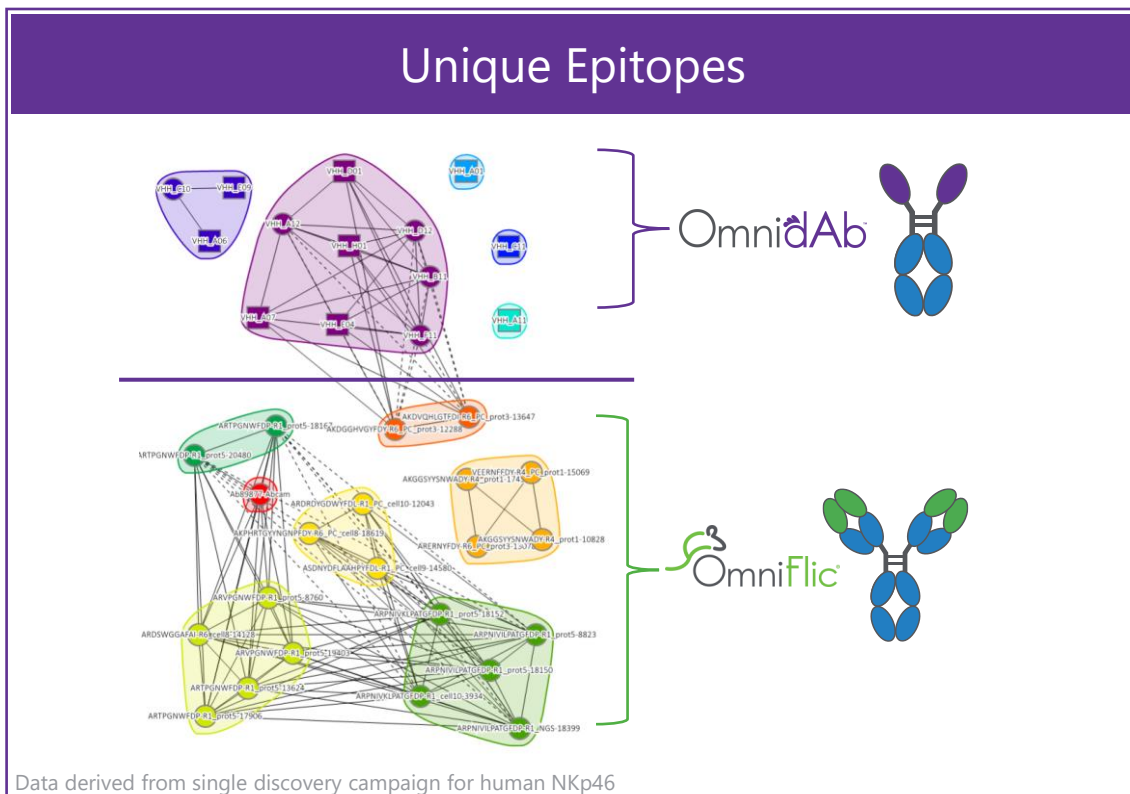
## THE CHICKEN ADVANTAGE

Chickens “see” human targets as more foreign than mammals do, resulting in a more robust and diverse immune response

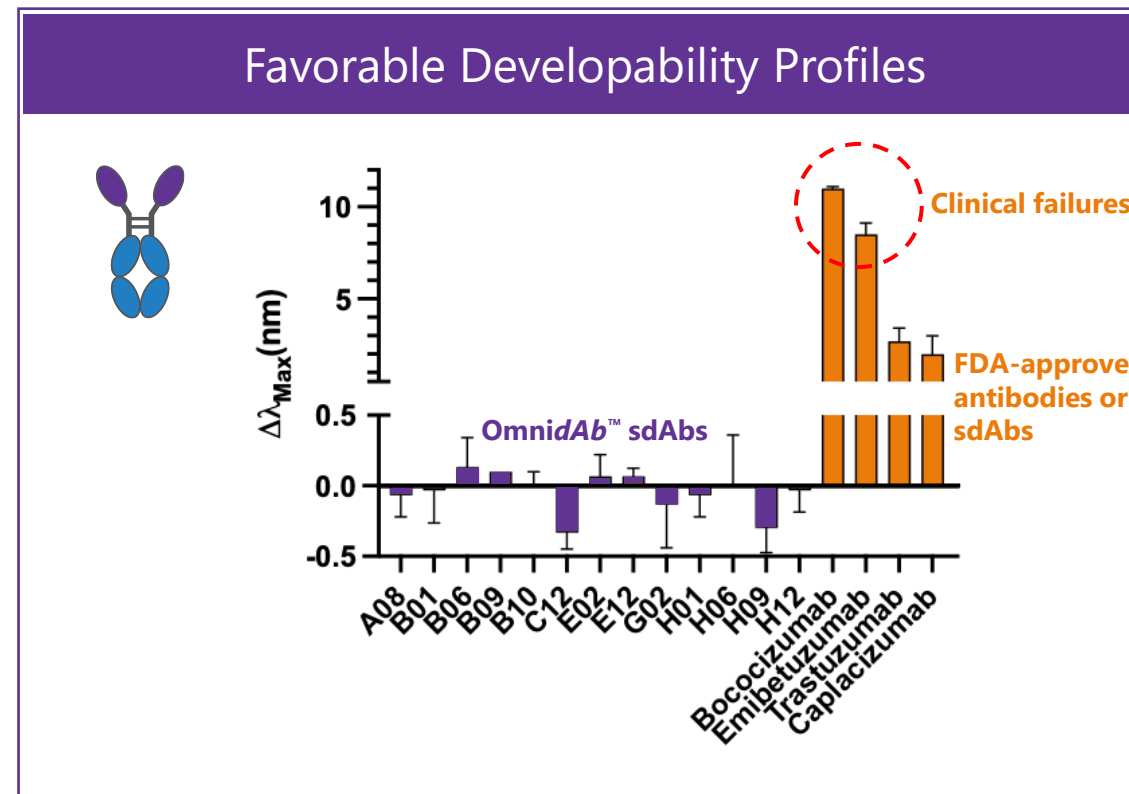
- Enhanced epitope coverage
  - Leverages the chicken host system to drive novel epitope/antigen recognition
  - Ideal for species cross-reactive epitopes and conserved targets
- Less engineering
  - Built-in use of optimized human scaffold combined with efficient *in-vivo* affinity maturation minimizes the need for downstream engineering
  - Transgene design strategy that builds on success of OmniChicken® legacy

# Advantages of OmnidAb™

ANTIBODIES TARGET UNIQUE EPITOPES AND HAVE FAVORABLE DEVELOPABILITY PROFILES



OmnidAb epitope coverage is distinct from that of rat on model antigen NKp46



Low AC-SINS score is a key developability metric

# OmniAb™

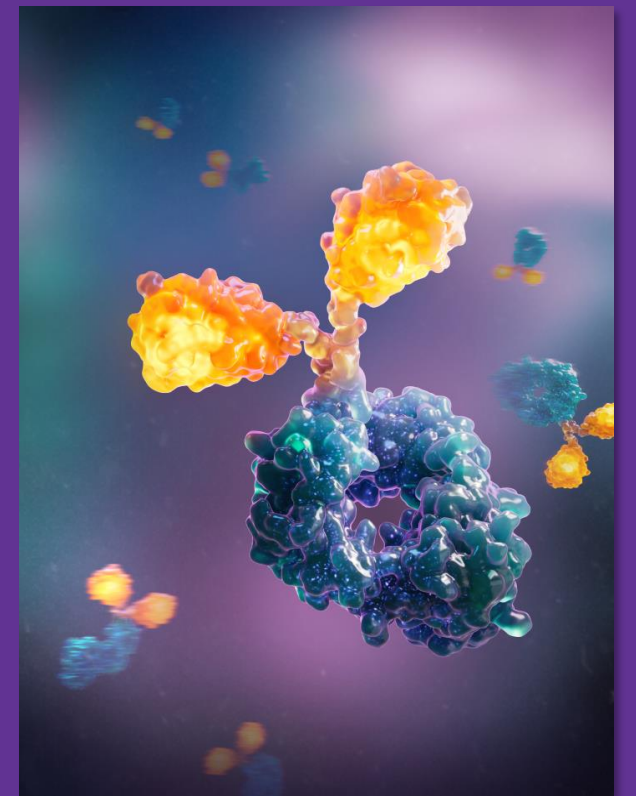
OmniAb™ transgenic chickens:

Express an optimized single domain human framework

Target distinct epitopes

Produce robust titers upon immunization and develop functionally diverse repertoires of sdAb sequences

Generate high-affinity, antigen-specific mAbs with favorable developability and high expression levels in mammalian cells



OmniAb<sup>®</sup>



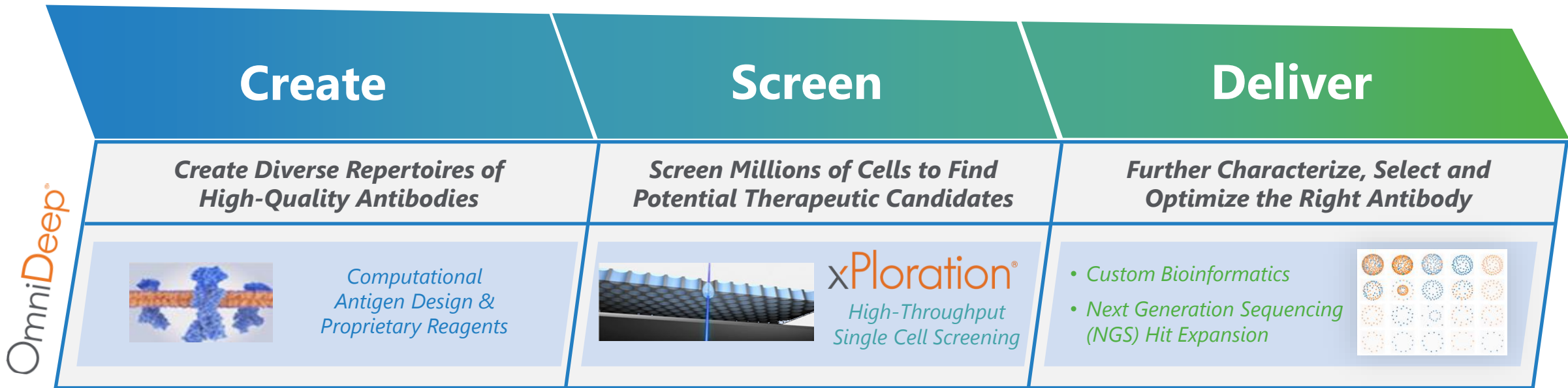
# Enhancing Discovery with OmniDeep<sup>™</sup>

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Bob Chen, Ph.D.

# OmniDeep™ Streamlines and Assists Drug Discovery

OmniDeep is a suite of *in silico* tools for therapeutic discovery and optimization that are woven throughout our various technologies and capabilities



Deep Repertoires

Deep Sequencing

Deep Screening

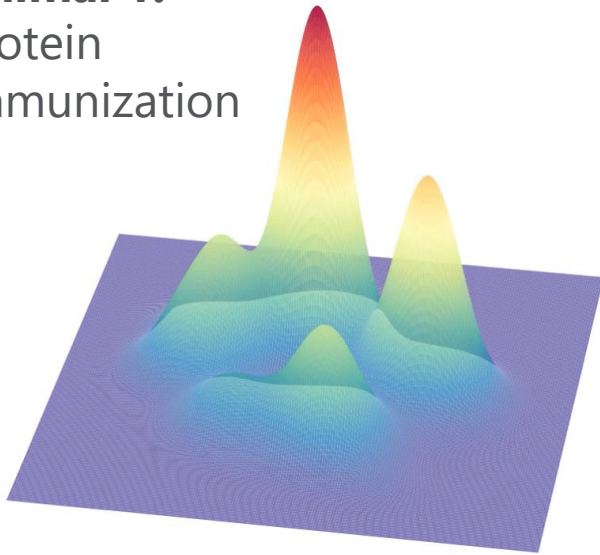
OmniDeep™

Deep Learning

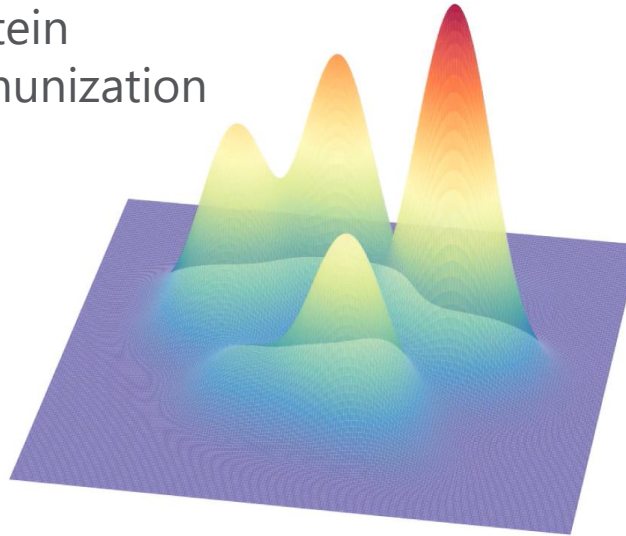
# Deep Antibody Repertoires from OmniAb Animals

**Biological Intelligence™**: Interplay between rational genetic design and powerful *in vivo* processes

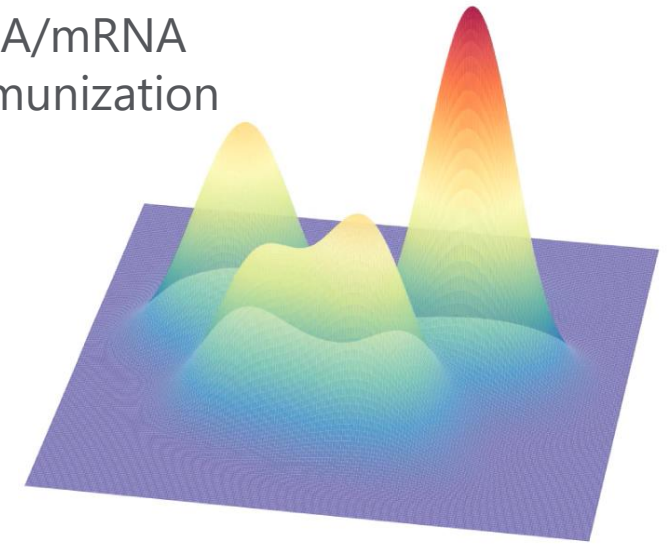
**Animal 1:**  
Protein  
immunization



**Animal 2:**  
Protein  
immunization



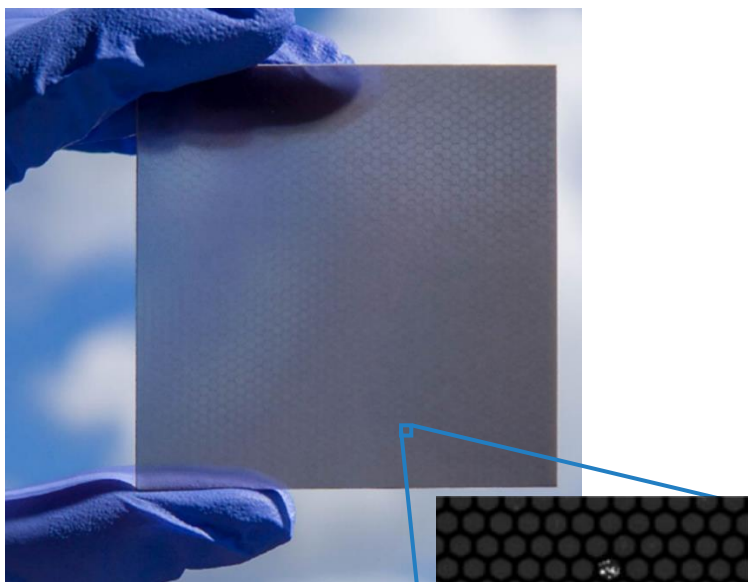
**Animal 3:**  
DNA/mRNA  
immunization



*Biological Intelligence* can create a vast and diverse antibody repertoire within and across animals

# xPloration<sup>®</sup>: AI-Driven Deep Functional Screening

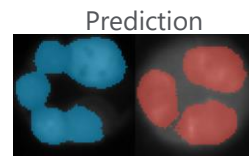
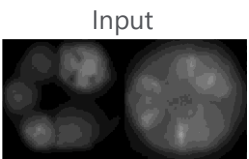
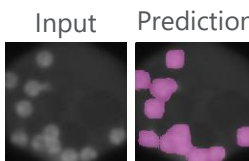
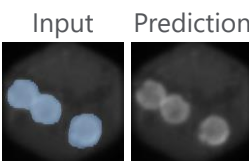
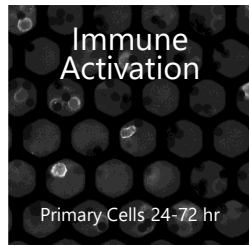
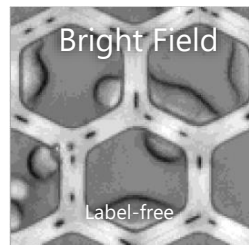
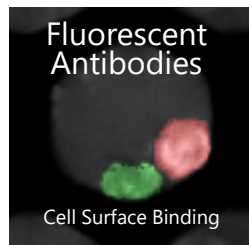
## 1 | Loading



1.5 million, 40 μm microcapillaries

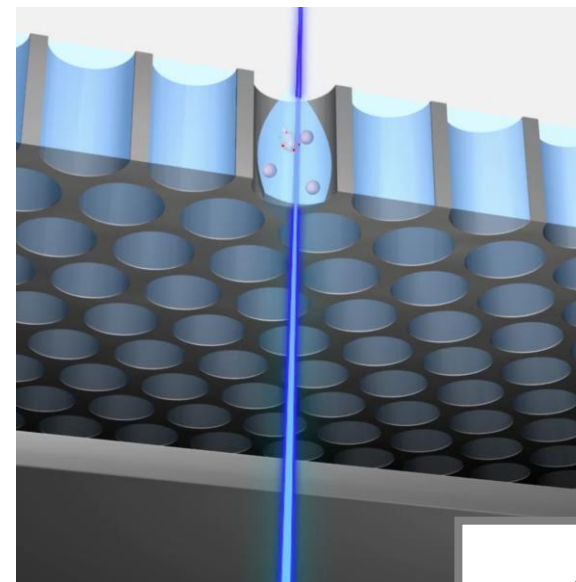
Unique through-hole format

## 2 | Assay + Machine Vision



Machine Vision Hit Detection

## 3 | Recovery & Single-Cell NGS



Precise laser-based recovery  
Single-cell barcoding or pooled

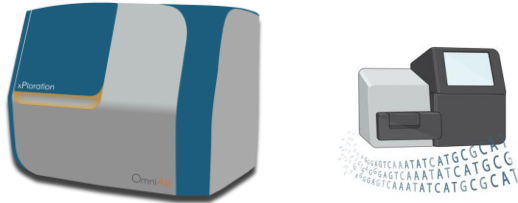
# Integrating Biological Intelligence™ with AI

IN SILICO TOOLS TO BETTER MINE DIVERSE IMMUNE REPERTOIRES

Biological Intelligence



Deep Screening + Deep Sequencing

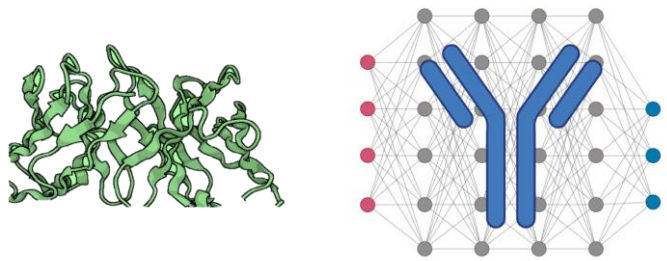


Large-scale data collection




Structure-based design tools

Deep Learning models



Proprietary Databases



Multi-species databases



# OmniDeep™ Empowers Large-Scale Antibody Discovery

## OmniDeep™

**Biological  
Intelligence™**



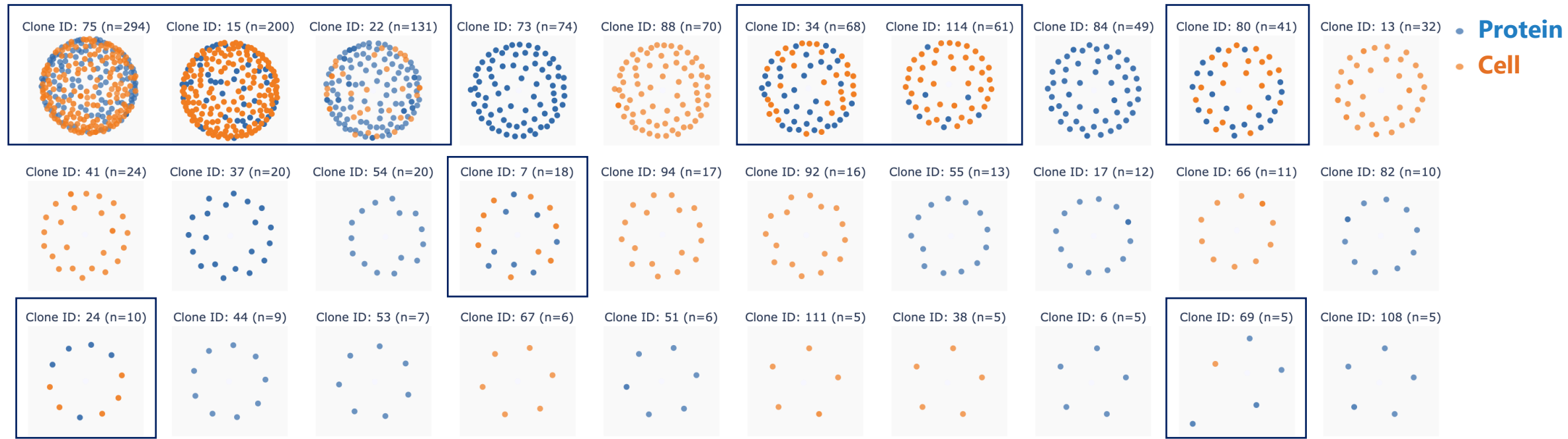
**+ xPloration®**

Example OmniFlic® Immunization<sup>(1)</sup>

Type	Quantity
Total cells screened	27,500,000
Total hits recovered	3,024
Unique sequences	1,375
Unique lineages	124

(1) Immunized 3 OmniFlic animals

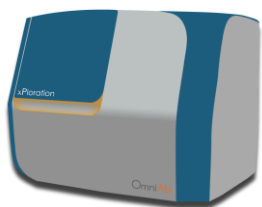
# Example OmniFlic<sup>®</sup> Repertoire Space



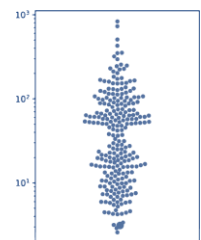
- Deliver large numbers of antibodies to our partners
- Apply *in silico* tools to intelligently prioritize and select therapeutic candidates from functional antibody pool

# OmniDeep™ Leverages Deep Learning

## High-Quality Input Data



xPloration hits

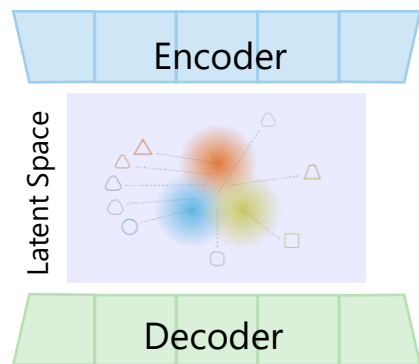


Assay data



Animal NGS data

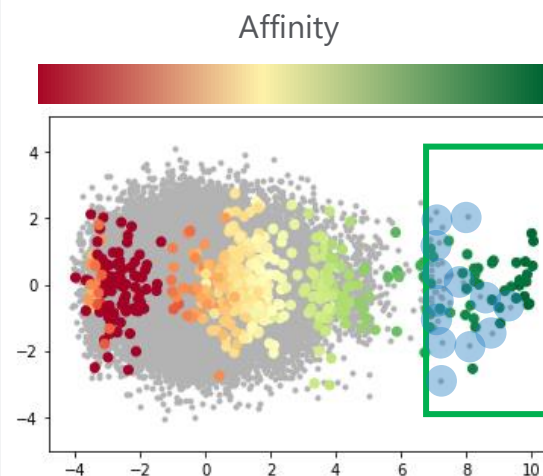
## Deep Learning Model



Variational Autoencoder (VAE) :

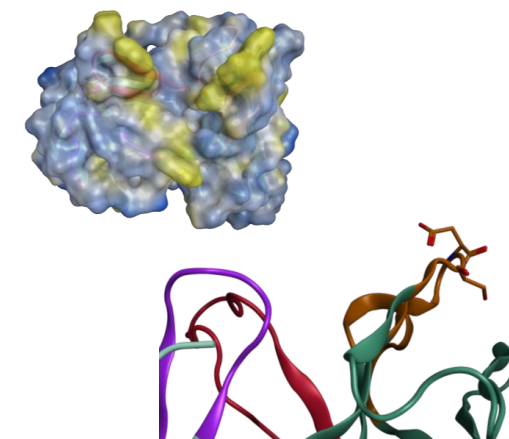
- Extends insights from confirmed hits to infer function of untested clones

## New Suggested Hits



Suggested antibodies highlighted in light blue

## *in Silico* Developability Filter

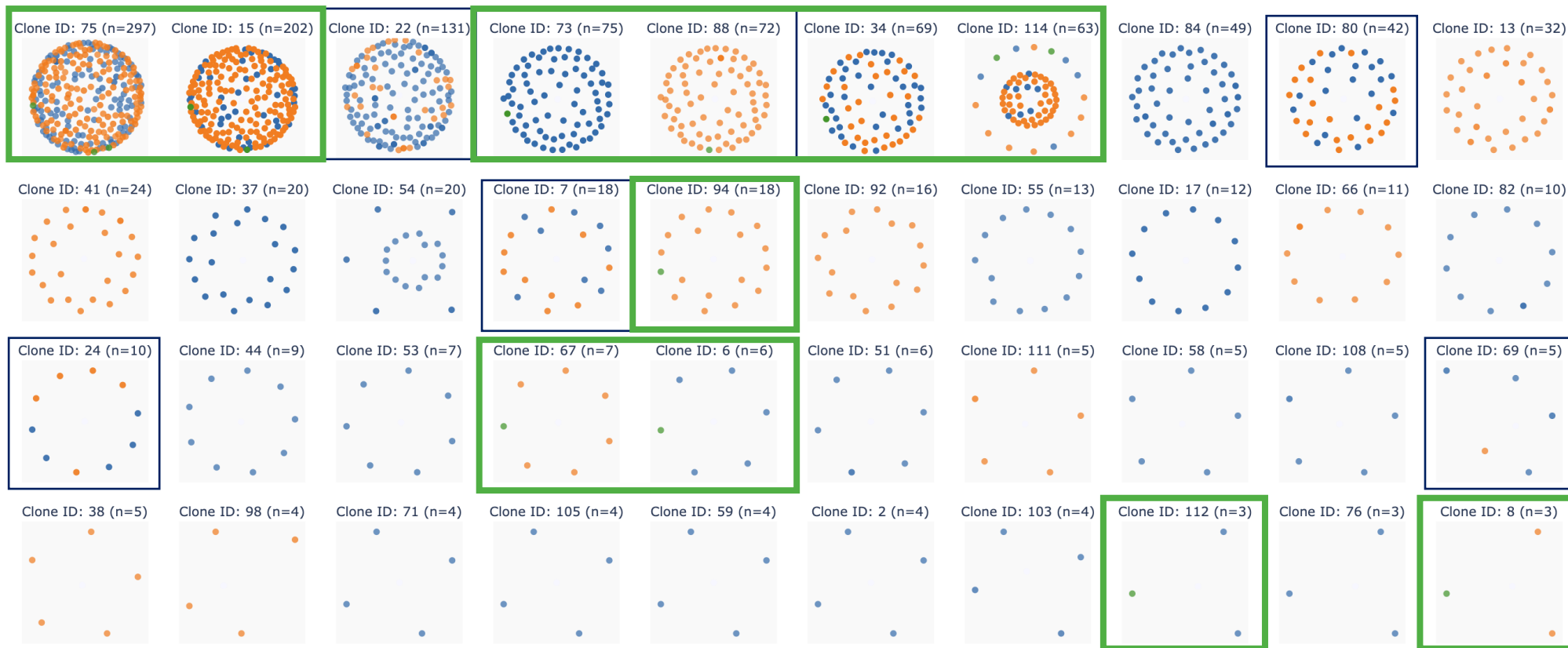


Structure-based method:

- Provides cost and time efficient filtering for the most promising clones based on predicted properties

AI suggests additional high affinity and developable antibody sequences

# OmniDeep™ Provides New Insights for Partners



- Protein
- Cell
- AI Selected

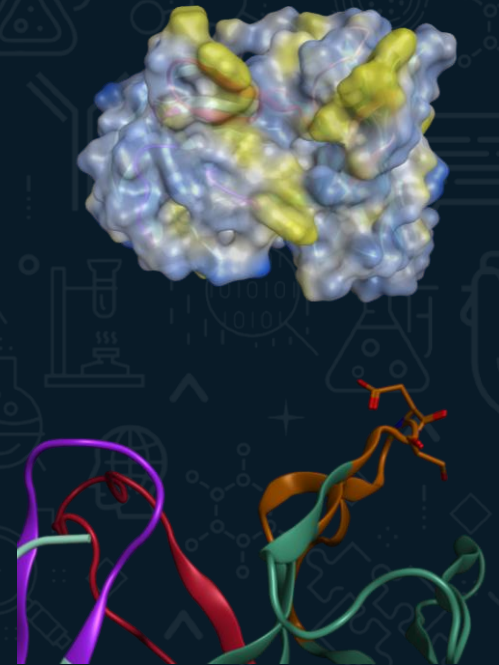
- Deep learning can provide a systematic way to select functional antibodies, including rare variants
- Provides partners additional non-obvious insights on immune repertoires

# OmniDeep™

Studies and embeds *Biological Intelligence*™ into AI and machine learning to assist discovery and optimization

Offers partners new large-scale discovery workflows and optimization tools for existing discovery campaigns

Provides the best of our *in vivo* and *in silico* capabilities



OmniAb<sup>®</sup>

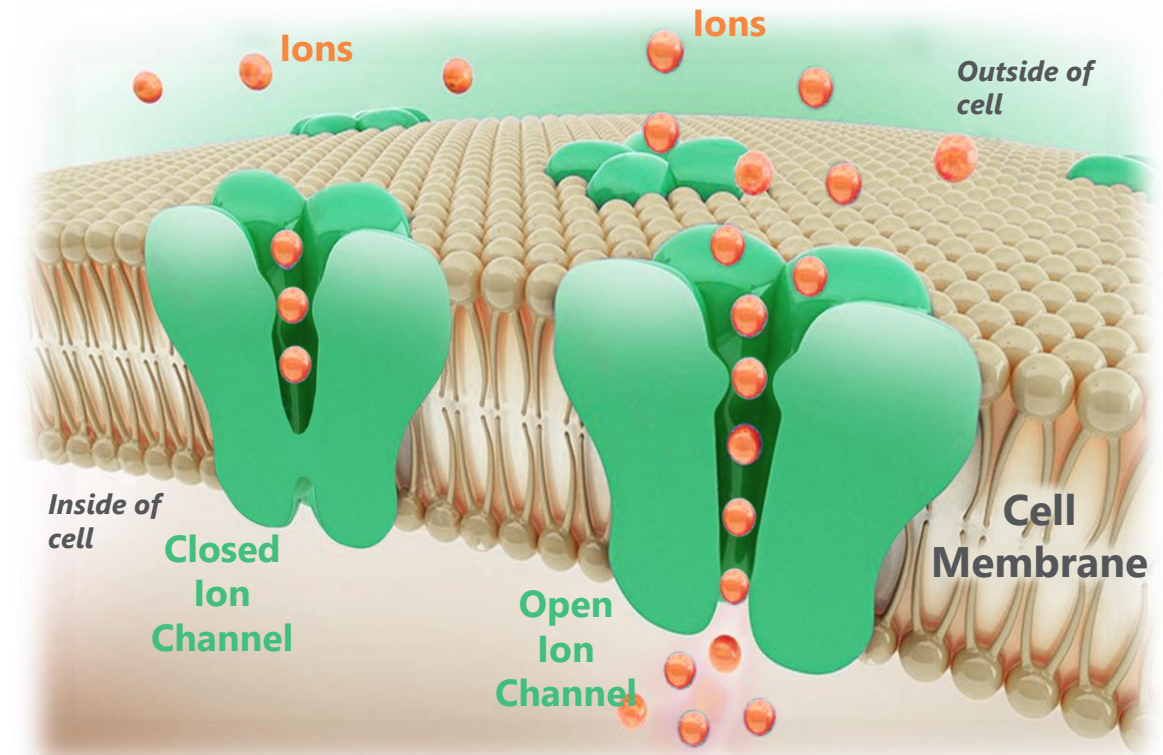



# The Ion Channel Opportunity


Doug Krafte, Ph.D.


# What is an Ion Channel?

- Ions are charged atoms/molecules ( $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Ca}^{++}$ , etc.) required in every cell for normal homeostasis and health
- Ion channels are proteins that allow ions to flow into and out of cells across cell membranes
- The ion flow results in very small electrical currents
- With sophisticated technologies, we can record these electrical currents in the lab



closed 

1 open 

2 open 

# The Role of Ion Channels in Health and Disease

## ION CHANNEL AND TRANSPORTER TARGETS

Ion channels play an important role in regulating a number of critical biological processes

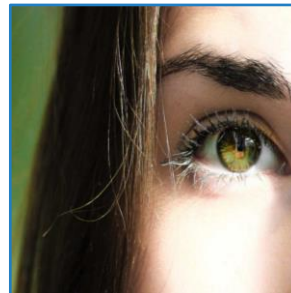
### Heartbeat



### Movement



### Vision



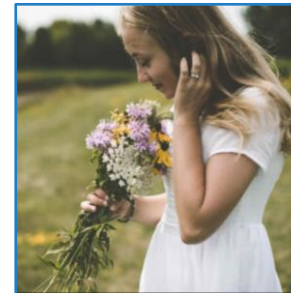
### Hearing



### Touch



### Smell



***“I think that ion channels are the most important single class of proteins that exist in the human body, or any body for that matter.”***

**Clay Armstrong, M.D.**  
Albert Lasker Award Interview

Ion channels represent one of the largest drug target classes with many new opportunities for novel therapeutics

# Ion Channels and Transporters

## DIFFERENTIATED DISCOVERY PLATFORM AT OMNIAB

- One of industry's most experienced teams of ion channel drug discovery experts - with decades of experience in small molecules, now being leveraged to advance antibody targeting of ion channels
  - Rich heritage of scientific *"firsts"* in the ion channel space, especially in neuro and pain therapy areas<sup>(1)</sup>
- Continuous expansion and development of cutting-edge technologies including custom cell lines, high-throughput electrophysiology, proprietary X-ray fluorescence, structure-based optimization leveraging cryo-EM and molecular dynamics, deep learning models, etc.



Discovery-Stage Collaborations for High-Value Targets with Global Big Pharma Partners

**GSK**

**Neurological  
Diseases**

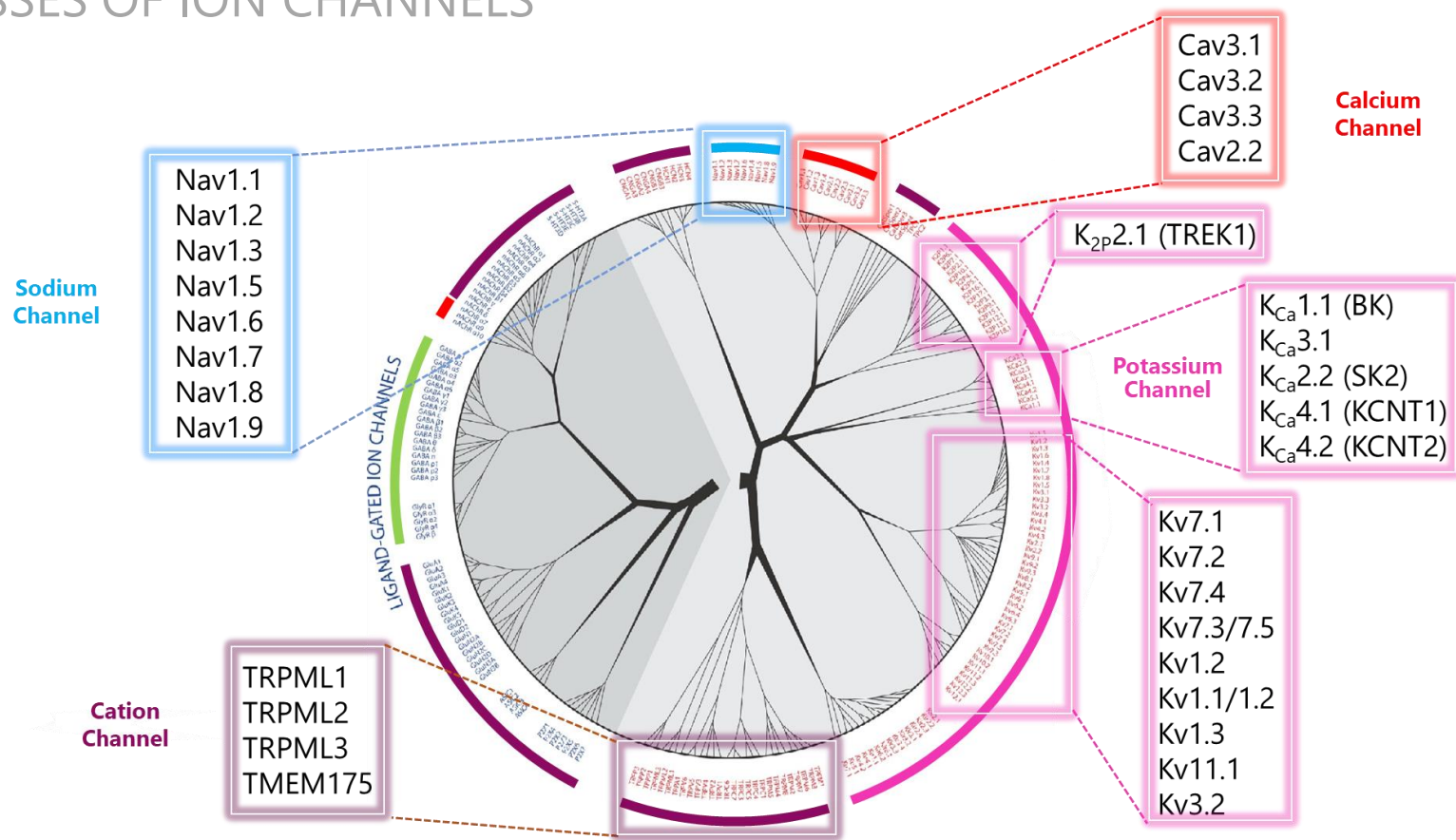


**Neurodevelopmental  
&  
Neurodegenerative  
Diseases**

(1) References: Jarvis, et al, PNAS vol. 104, no. 20, 2007 "A-803467, a potent and selective Na<sub>v</sub>1.8 sodium channel blocker, attenuates neuropathic and inflammatory pain in rat"; and Lin, et al, PLOS One, 1371, 2016 "Biophysical and pharmacological characterization of Na<sub>v</sub>1.9 voltage dependent sodium channels stably expressed in HEK-293 cells"

# Validated Targets Across the Ion Channel Genome

MULTIPLE CLASSES OF ION CHANNELS

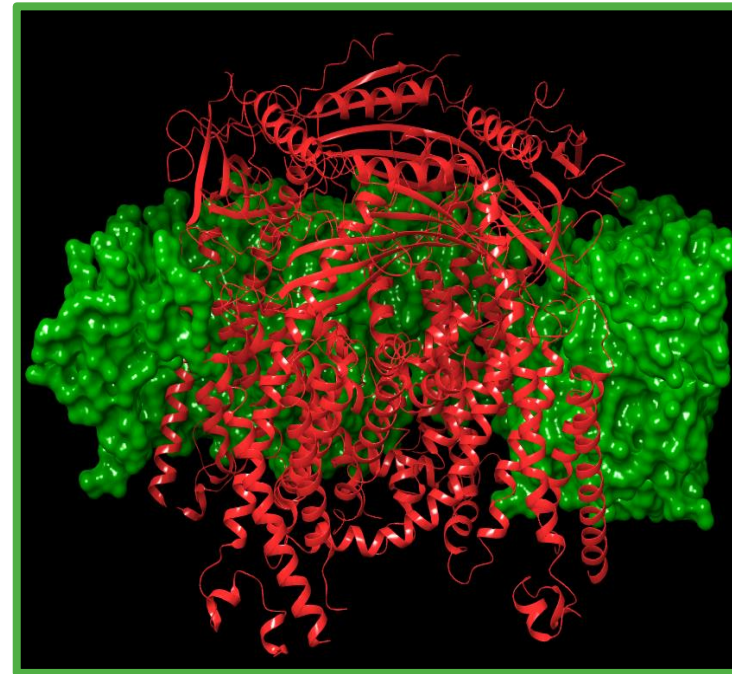
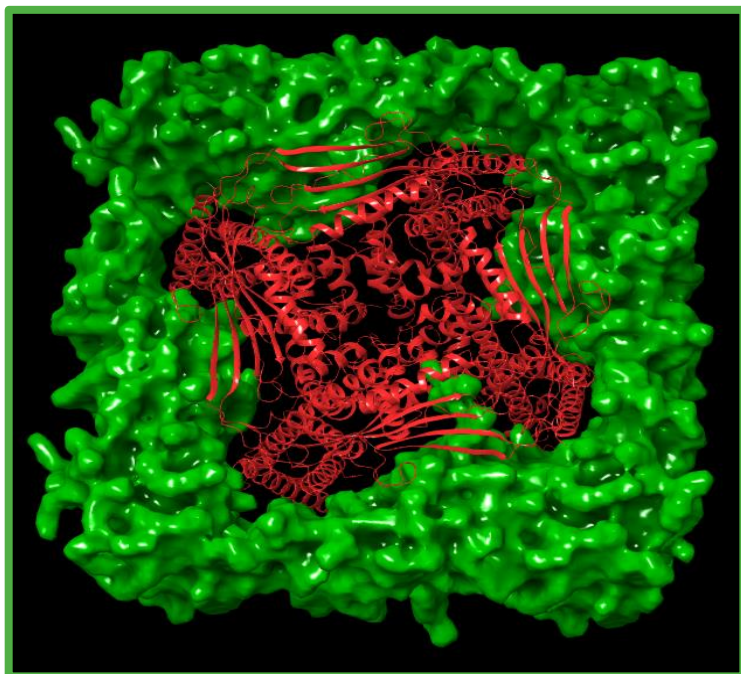


While ion channels remain an important therapeutic class, industry had struggled to obtain small molecules with appropriate drug-like properties for many targets. Antibodies could solve this problem.

# OmnidAb™ and OmniTaur™

## POTENTIAL SOLUTIONS FOR ANTIBODY THERAPEUTICS TARGETING ION CHANNELS

**Red** = ion channel  
**Green** = membrane



- Antibodies typically bind to “flat” surfaces
- Key areas for ion channels are buried in the membrane and can be very challenging to reach
- The smaller sizes of *OmnidAb* sdAbs and *OmniTaur* picobodies™ compared to conventional antibodies provide new approaches to ion channel therapeutics

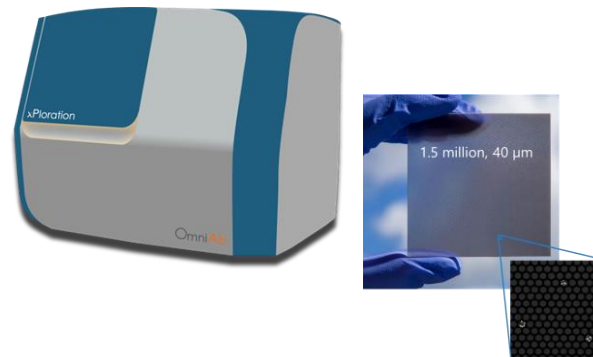
# Positioned for Success

## ION CHANNEL AND TRANSPORTER TARGETS

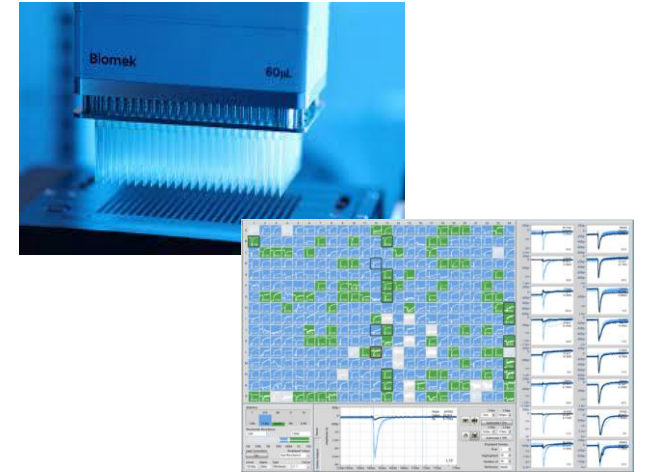
4-species platform including formats that can access deep binding pockets



Proprietary high-throughput screening technologies to identify unique antibodies



Sophisticated high-throughput technology and expert personnel for ion channel drug discovery



We believe the combination of technology breadth and staff expertise at OmniAb, Inc. increases our probability of success for ion channel antibody drug discovery programs

# Increasing Awareness in the Discovery Community

ION CHANNEL AND TRANSPORTER TARGETS

OmniAb<sup>®</sup>

WEBINAR SERIES

Strategies and Approaches to Identify Novel Ion  
Channel Modulators

Wednesday, November 29<sup>th</sup> 9am PST / 12pm EST

**REGISTER**

OmniAb<sup>®</sup>



# Financial Updates

Kurt Gustafson

# Third Quarter Financial Results

<i>(Millions, except per share data)</i>	Q3 2023	Q3 2022	Variance
License and milestone revenue	\$ 2.0	\$ 1.4	\$ 0.6
Service revenue	3.0	4.9	(1.9)
Royalty revenue	0.5	0.6	(0.1)
<b>Total revenues</b>	<b>5.5</b>	<b>6.9</b>	<b>(1.4)</b>
Research & development	13.9	13.2	0.7
General & administrative	8.5	5.6	2.9
Amortization of intangibles	3.4	3.3	0.1
Other operating (income) expense, net	0.0	(0.2)	0.2
<b>Total operating expenses</b>	<b>25.8</b>	<b>21.8</b>	<b>4.0</b>
<b>Loss from operations</b>	<b>(20.3)</b>	<b>(14.9)</b>	<b>(5.4)</b>
Other income (expense)	1.3	0.0	1.3
Loss before income taxes	(19.0)	(14.9)	(4.1)
Income tax (expense) benefit	3.3	2.3	1.0
<b>Net loss</b>	<b>(\$ 15.7)</b>	<b>(\$ 12.6)</b>	<b>(\$ 3.1)</b>
<b>Net loss per share, basic and diluted</b>	\$ (0.16)	\$ (0.15)	
Shares used in diluted per share calculation	99.9	82.6	

Table includes rounded figures.

# YTD 9/30/23 Financial Results

<i>(Millions, except per share data)</i>	YTD 9/30/2023	YTD 9/30/2022	Variance
License and milestone revenue	\$ 19.0	\$ 7.8	\$ 11.2
Service revenue	9.4	14.9	(5.5)
Royalty revenue	0.9	1.0	(0.1)
<b>Total revenues</b>	<b>29.3</b>	<b>23.7</b>	<b>5.6</b>
Research & development	41.8	35.4	6.3
General & administrative	25.4	14.7	10.7
Amortization of intangibles	10.1	9.8	0.4
Other operating (income) expense, net	0.2	(0.5)	0.7
<b>Total operating expenses</b>	<b>77.6</b>	<b>59.4</b>	<b>18.1</b>
<b>Loss from operations</b>	<b>(48.2)</b>	<b>(35.7)</b>	<b>(12.5)</b>
Other income (expense)	3.9	0.0	3.9
Loss before income taxes	(44.3)	(35.7)	(8.6)
Income tax (expense) benefit	7.8	6.5	1.2
<b>Net loss</b>	<b>(\$ 36.6)</b>	<b>(\$ 29.2)</b>	<b>(\$ 7.4)</b>
<b>Net loss per share, basic and diluted</b>	\$ (0.37)	\$ (0.35)	
Shares used in diluted per share calculation	99.5	82.6	

Table includes rounded figures.

# Operating Expense Includes Significant Non-cash Items

	YTD 9/30/2023	
<i>(Millions, except per share data)</i>		
License and milestone revenue	\$ 19.0	
Service revenue	9.4	
Royalty revenue	0.9	
<b>Total revenues</b>	<b>29.3</b>	
Research & development	41.8	}
General & administrative	25.4	
Amortization of intangibles	10.1	
Other operating (income) expense, net	0.2	
<b>Total operating expenses</b>	<b>77.6</b>	
<b>Loss from operations</b>	<b>(48.2)</b>	
Other income (expense)	3.9	
Loss before income taxes	(44.3)	
Income tax (expense) benefit	7.8	
<b>Net loss</b>	<b>(\$ 36.6)</b>	
<b>Net loss per share, basic and diluted</b>	<b>\$ (0.37)</b>	
Shares used in diluted per share calculation	99.5	

<b>YTD Non-Cash Opex Items</b>	
Stock Based Compensation	\$18.9
Depreciation	\$ 4.5
Amortization	\$10.1
<b>Total Operating Expense Excluding Non-Cash Items</b>	<b>\$44.0</b>

Table includes rounded figures.

# Balance Sheet

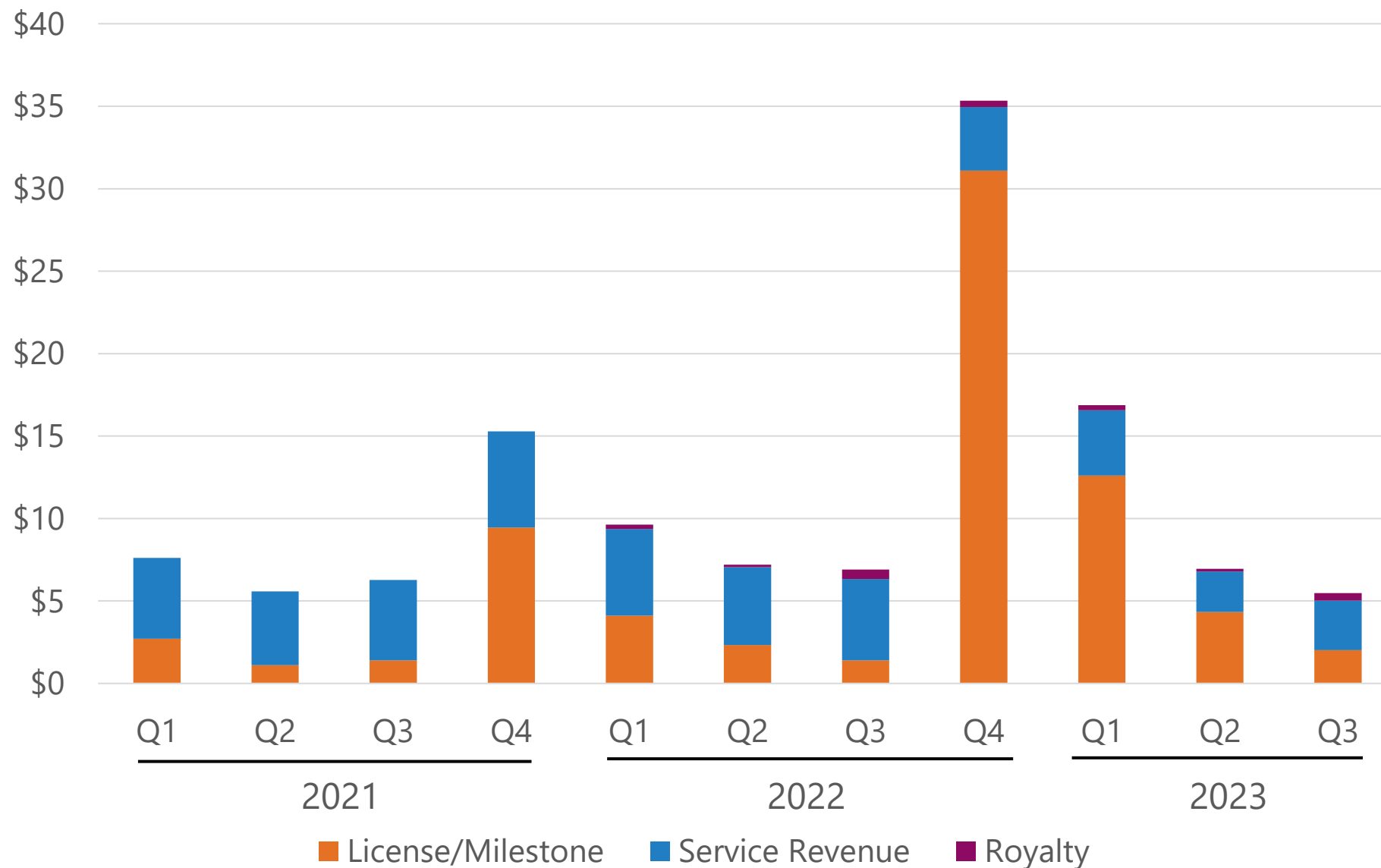
in Millions	September 30, 2023	December 31, 2022
<b>ASSETS</b>		
Current assets:		
Cash & investments	\$ 96.6	\$ 88.3
Accounts receivable, net	6.1	30.3
Other current assets	4.1	6.4
Goodwill & intangible assets	242.8	251.2
PPE & leases	38.9	41.5
Other assets	3.2	3.5
<b>Total assets</b>	<b>\$ 391.7</b>	<b>\$ 421.2</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
A/P & accrued exp	\$ 12.4	\$ 12.1
Contingent liabilities	5.3	8.1
Deferred revenue	9.3	12.5
Operating lease liabilities	26.2	25.8
Deferred income taxes, net	13.9	21.3
Stockholders' equity:	324.6	341.4
<b>Total liabilities and stockholders' equity</b>	<b>\$ 391.7</b>	<b>\$ 421.2</b>

Table includes rounded figures.

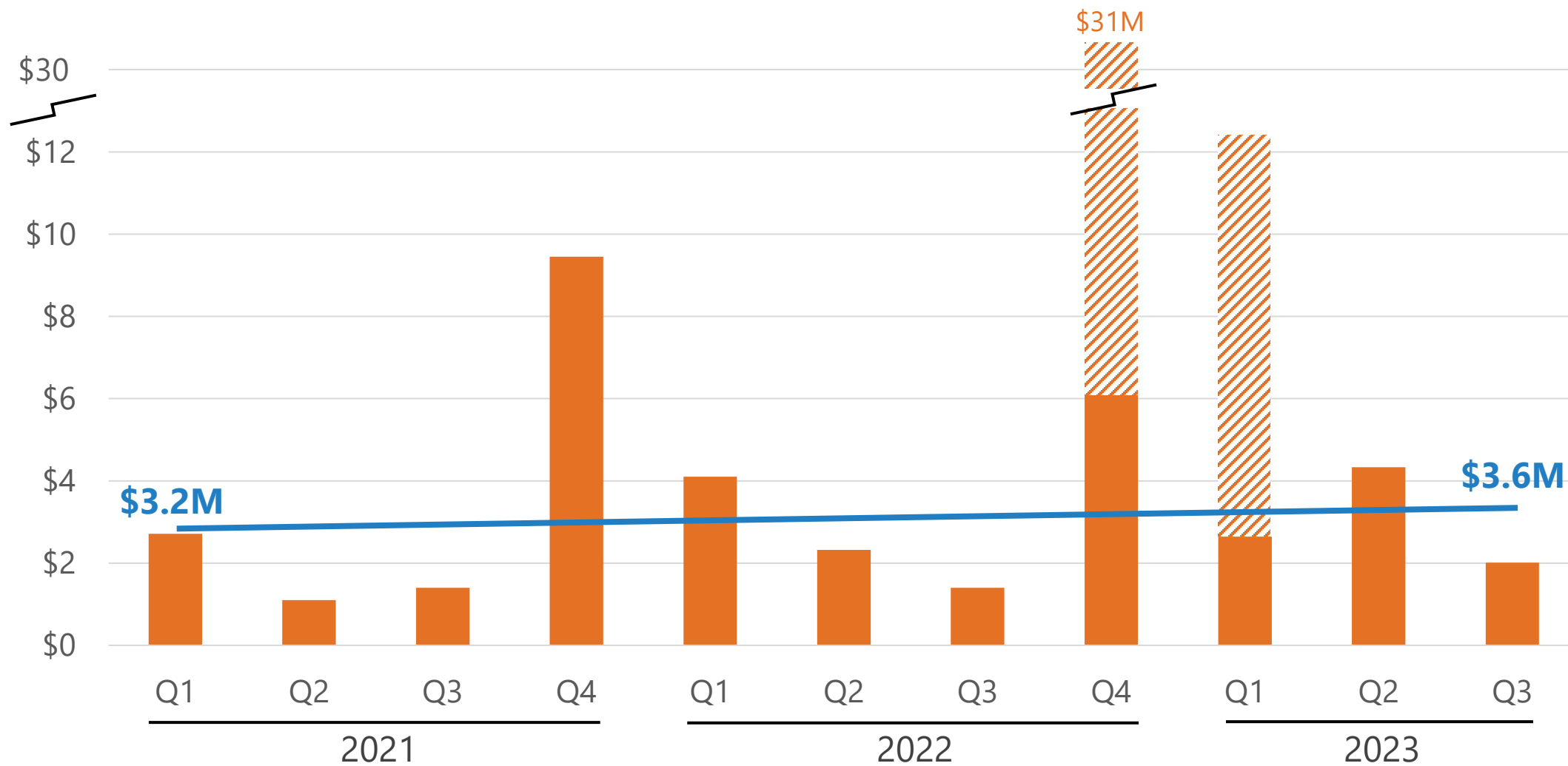
Expect to end 2023 with slightly less cash than 12/31/22 balance

Current cash balance and cash from operations expected to provide sufficient capital to fund operations for foreseeable future

# Historical Total Revenue Has Been Lumpy



# Historical License and Milestone Revenue<sup>(1)</sup>

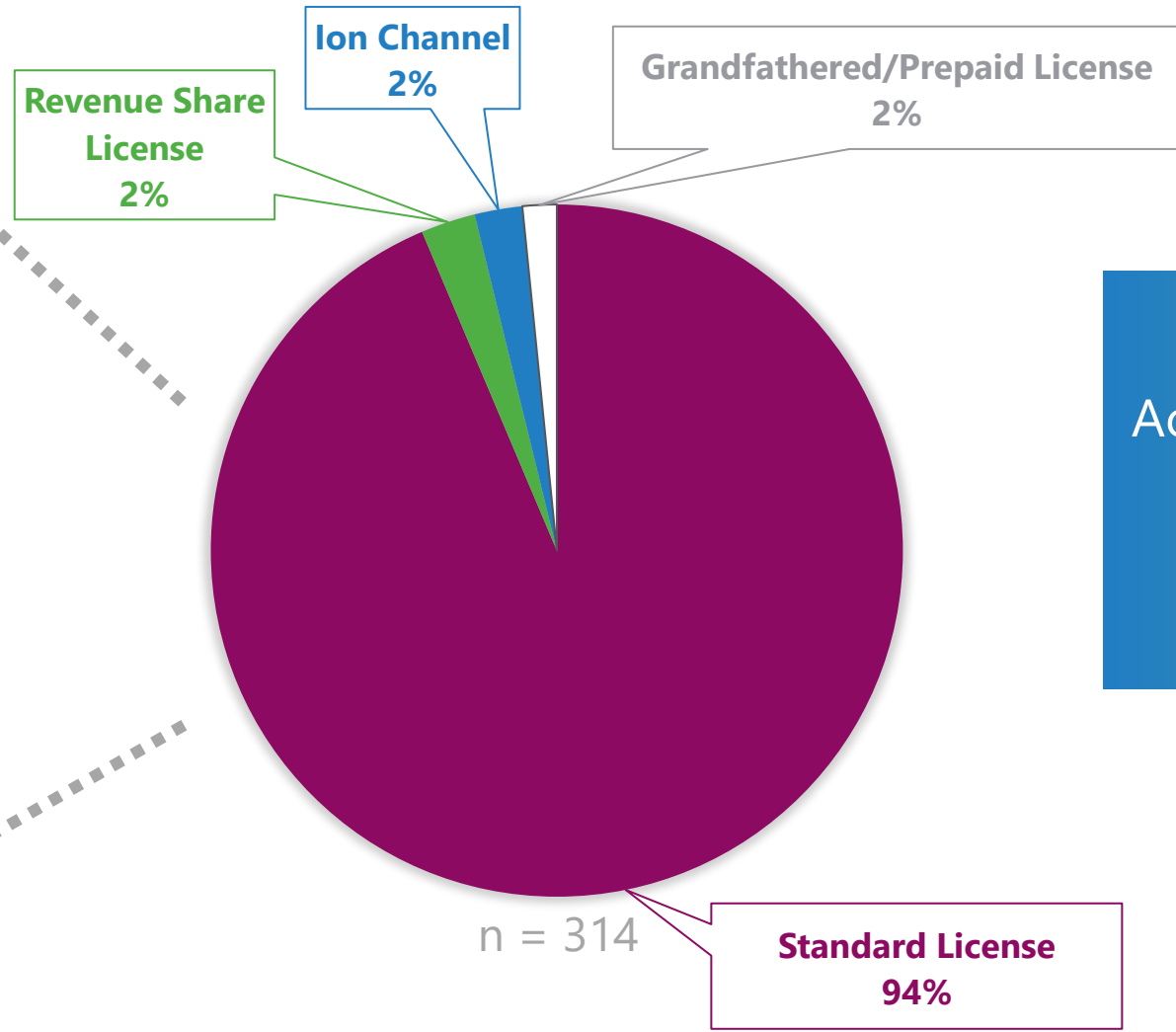
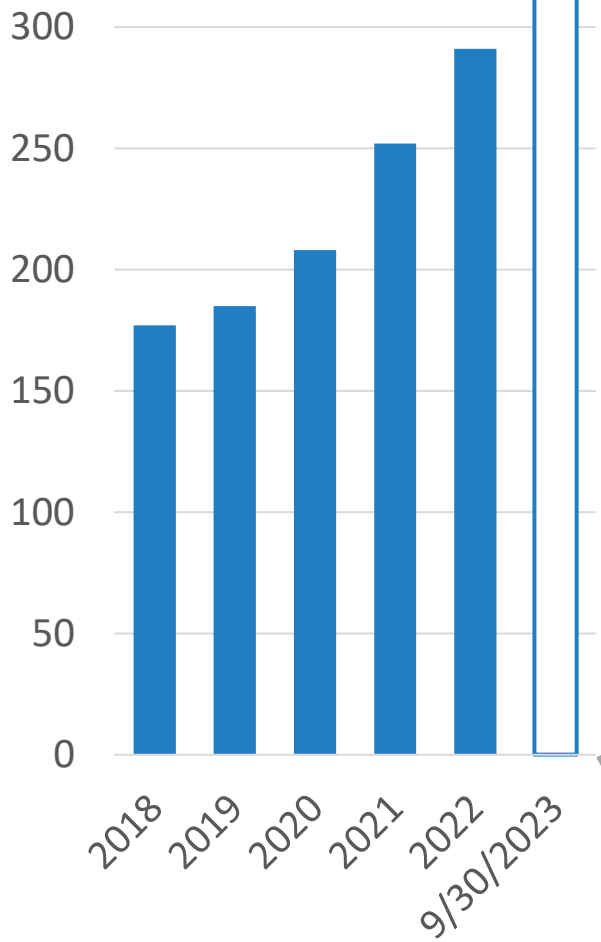


 **TECVAYLI™**  
(teclistamab)  
Launch Milestones

(1) Calculated historical regression/trend line excludes teclistamab revenue in Q4 2022 and Q1 2023 (shown in hashed bar portions)

# Breakdown of Active Programs by License Type

Number of Active Programs as of 9/30/2023



98% of our Active Programs have downstream economics

Reported numbers above are net of attrition

# Licenses for Active Antibody Programs Have Significant Future Economic Potential

Remaining Milestones for  
Current Active Programs<sup>1</sup>

> \$3 billion

Average Royalty Rate for  
Current Active Programs<sup>1</sup>

3.2%

(1) Excludes prepaid licenses and grandfathered licenses, all Ion Channel programs, and programs from Academic Partner/Revenue Share licenses where the economics to OmniAb, Inc. will be linked to the future transaction with the developmental/commercial entity. For programs with tiered royalties, the royalty rate is calculated as a blended royalty assuming \$1.7B sales level.

# Future Potential Economics for Ion Channel Programs are Even Greater on a Per Program Basis

**GSK**

*Neurological Diseases*

**Roche**

*Neurodevelopmental & Neurodegenerative Diseases*

Remaining Milestones of

~\$1 billion

Royalties

Higher tiered royalties than  
standard antibody platform  
licenses



OmniAb<sup>®</sup>

The logo for OmniAb is centered on a blue background. It features the word "OmniAb" in a sans-serif font. "Omni" is white, and "Ab" is orange. A registered trademark symbol (®) is located to the upper right of the "b". Below the text is a horizontal line that is white under "Omni" and orange under "Ab".