



The Superhuman Cell Company

March 2022



Disclaimer and Forward-Looking Statements

IsoPlexis Corporation (“IsoPlexis,” “we,” “us,” or the “Company”) has filed a prospectus on Form S-1 (File No. 333-258046) with the SEC for the offering to which this presentation relates. The registration statement has not yet become effective. Before you invest, you should read the preliminary prospectus in that registration statement and other documents we have filed with the SEC for more complete information about us and this offering. You may get these documents for free by visiting the SEC website at <http://www.sec.gov>. Alternatively, copies of the prospectus may be obtained from Morgan Stanley & Co. LLC, Attention: Prospectus Department, 180 Varick Street, 2nd Floor, New York, New York 10014, by telephone at 866-718-1649 or by email at prospectus@morganstanley.com; Cowen and Company, LLC, c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717, Attention: Prospectus Department, or by telephone at (833) 297-2926, or by email at PostSaleManualRequests@broadridge.com; Evercore Group, L.L.C., Attention: Equity Capital Markets, 55 East 52nd Street, 36th Floor, New York, New York 10055, via telephone at 1-888-474-0200, or via email at ecm.prospectus@evercore.com; or SVB Leerink LLC, Attention: Syndicate Department, One Federal Street, 37th Floor, Boston, MA 02110, by telephone at (800) 808-7525, ext. 6132, or by email at syndicate@svbleerink.com. This presentation shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of these securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

Confidential information

This presentation is being provided solely for your confidential use with the express understanding that you will not release any portion of this document, discuss the information contained herein, or make reproductions of or use this presentation for any other purpose without the prior express written permission of the Company. By reviewing this information, you are acknowledging the confidential nature of this information and are agreeing to abide by the terms of this legend.

Forward-looking statements and other information

This presentation contains forward-looking statements about the Company. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies and other future conditions. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “predict,” “project,” “target,” “potential,” “seek,” “will,” “would,” “could,” “should,” “continue,” “contemplate,” “plan” and other words and terms of similar meaning. Forward-looking statements are subject to known and unknown risks and uncertainties, many of which may be beyond our control. We caution you that forward-looking statements are not guarantees of future performance or outcomes and that actual performance and outcomes may differ materially from those made in or suggested by the forward-looking statements contained in this presentation, as disclosed in the “Risk Factors” and “Special Note Regarding Forward-Looking Statements” sections of our prospectus and quarterly report on Form 10-Q filed with the SEC. Given these uncertainties, you should not place undue reliance on these forward-looking statements. In addition, even if our results of operations, financial condition and cash flows, and the development of the markets in which we operate, are consistent with the forward-looking statements contained in this presentation, those results or developments may not be indicative of results or developments in subsequent periods. New factors emerge from time to time that may cause our business not to develop as we expect, and it is not possible for us to predict all of them.

All information contained herein speaks only as of the date of this presentation, except where information is stated to be presented as of a specific date. The Company undertakes no duty to update or revise the information contained herein, publicly or otherwise, including any forward-looking statements.

Market, Industry and Other Data

This presentation includes estimates regarding market and industry data. Unless otherwise indicated, information concerning our industry and the markets in which we operate, including our general expectations, market position, market opportunity and market size, are based on our management’s knowledge and experience in the markets in which we operate, together with currently available information obtained from various sources, including publicly available information, industry reports and publications, surveys, our customers, trade and business organizations and other contacts in the markets in which we operate. Certain information is based on management estimates, which have been derived from third-party sources, as well as data from our internal research. In presenting this information, we have made certain assumptions that we believe to be reasonable based on such data and other similar sources and on our knowledge of, and our experience to date in, the markets in which we operate. Market and industry data, which is derived in part from management’s estimates and beliefs, are subject to change and may be limited by the availability of raw data, the voluntary nature of the data gathering process and other limitations inherent in any statistical survey of such data. In addition, projections, assumptions and estimates of the future performance of the markets in which we operate and our future performance are necessarily subject to uncertainty and risk due to a variety of factors, including those described in “Risk Factors” and “Special Note Regarding Forward-Looking Statements” of the registration statement. These and other factors could cause results to differ materially from those expressed in the estimates made by third parties and by us.

Trademarks

Each trademark, trade name or service mark of any other company appearing or incorporated by reference in this presentation belongs to its holder. We do not intend our use or display of other companies’ trademarks, trade names or service marks to imply a relationship with, or endorsement or sponsorship of us by, such other companies.

Non-GAAP Financial Measures This presentation includes certain non-GAAP financial measures, including EBITDA. Such non-GAAP financial measures are in addition to, not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP. A reconciliation of these measures to the most directly comparable GAAP measure is included in the Appendix to these slides.



**WE LEVERAGE THE
SUPERHUMAN CELLS IN ALL OF
US TO CHANGE THE COURSE
OF HUMAN HEALTH**



Large and unique translational opportunity leveraging **Superhuman Cell Biology**, ie: proteomic product suite

3 sequential TAMs totaling \$34B²

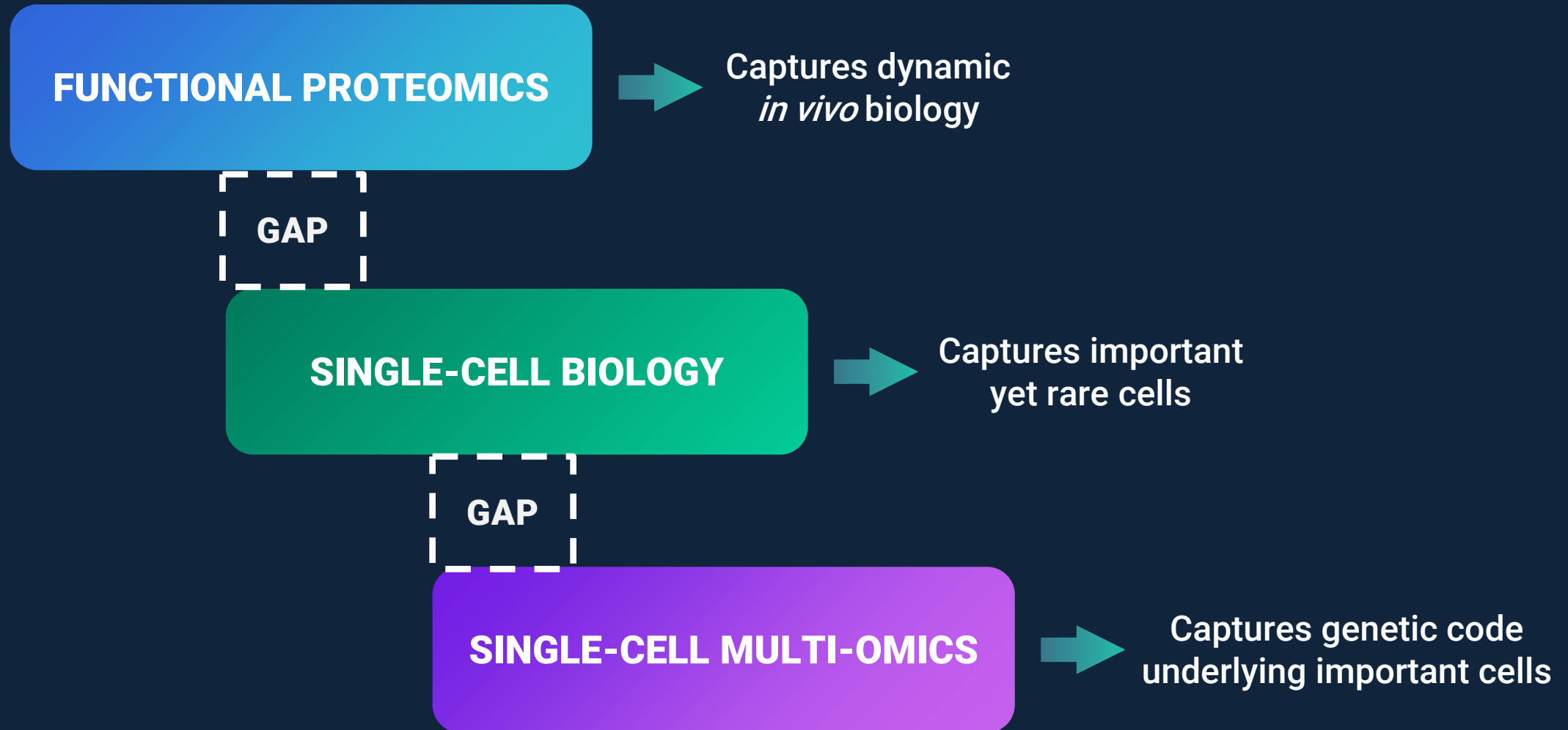
209 instruments in the field¹
100 Publications leveraging superhuman cells to fight complex diseases

Instruments placed in **two-thirds of Comprehensive Cancer Centers in the US**³ and **All of the Top 15 Pharma**⁴

¹ As of 12/31/2021. ² Based on management estimates.

³ Based on the National Cancer Institute's list of Comprehensive Cancer Centers ⁴ By 2020 revenue.

Disconnected Paradigms Today Are Largely Discovery Focused



IsoPlexis' Superhero Cells Create Clinically Relevant Applications

FUNCTIONAL PROTEOMICS

+



SINGLE-CELL BIOLOGY

+



DUOMIC™ PLATFORM

Proteomically active single cells are the superhero cells that orchestrate the fight against disease



4 Product Suite: Unique And Comprehensive Single Cell And Targeted Proteomics

Superhero Cell Suite: Single Cell

The Environment: Serum Proteome



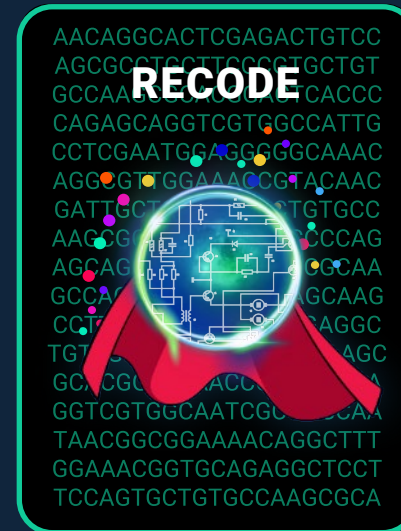
SC Secretome

Cytokines

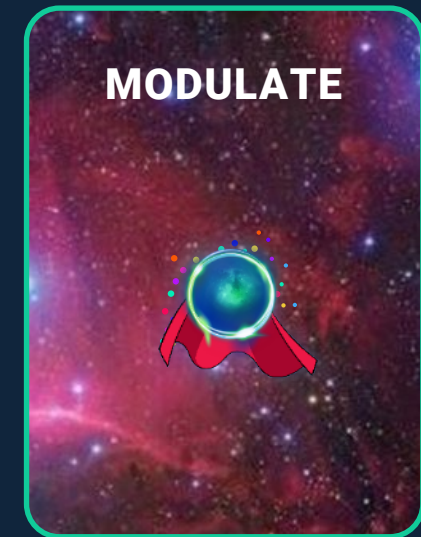


SC Signaling

Phosphoprotein



Integrated



CodePlex

Cytokines, Phosphoprotein

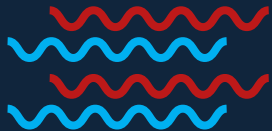
UNIQUE TO THE ISOPLEXIS SINGLE-CELL PROTEOMIC PLATFORM

MULTIPLEXED AUTOMATION, UNIQUE TO ISOPLEXIS

Why Proteome Is Critical To Clinical Activity

Single cell genomics misses key proteomic activity...
is an indirect indicator (i.e. the blueprint)

Clinical activity in human health dictated by direct proteome activity



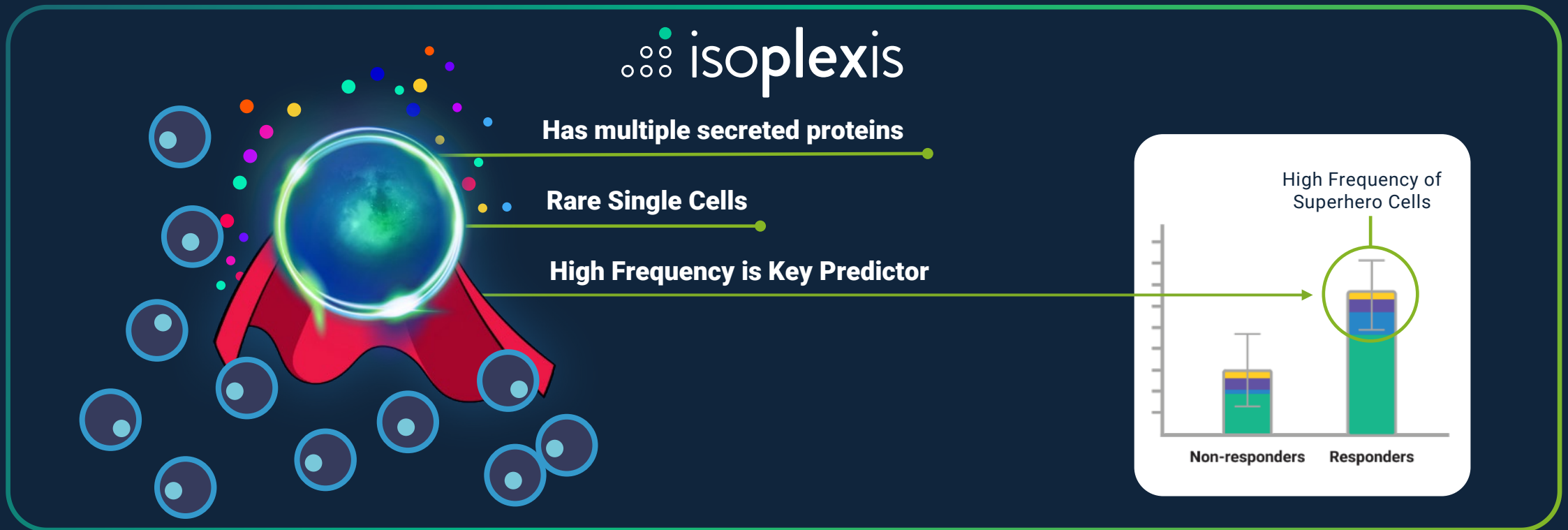
TRANSCRIPTOME

Low correlation (0.4)* between
transcription/RNA and proteomic cell function



PROTEOME

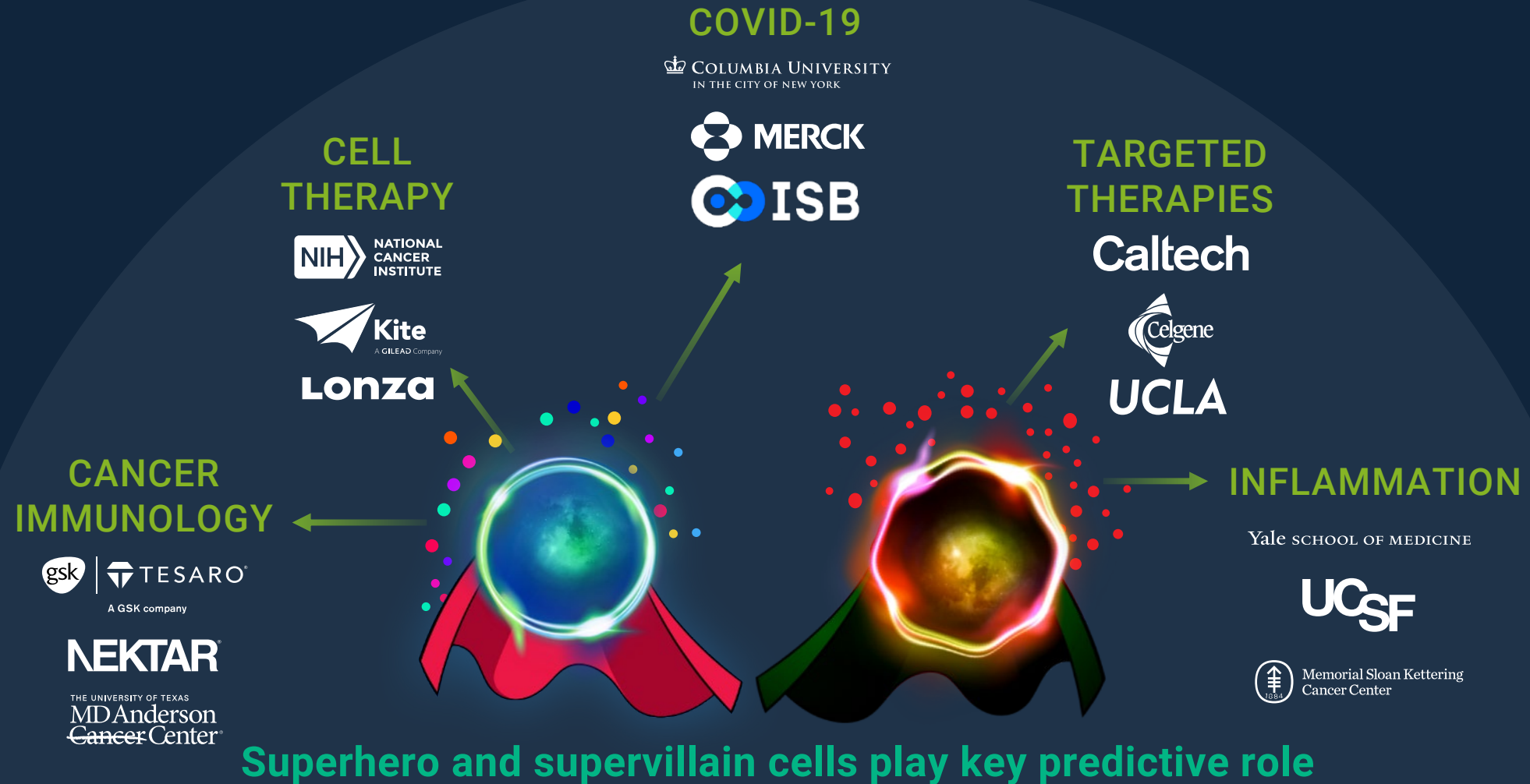
Isoplexis' Unique Superhero Cells Have Proven Key In Cancer Clinical Trials*



**IsoPlexis reveals highly proteomically
“multi-functional” superhero immune cells**

**Presence of these cells are key predictors
of early and persistent response to cancer¹**

Proteomically Driven Cells Are Key To The Largest Translational Markets



Isoplexis' Superhero Cells Are Unique In The Proteomic Landscape

Cell type (Flow cytometry and single cell genomics) vs IsoPlexis' superhero cell function



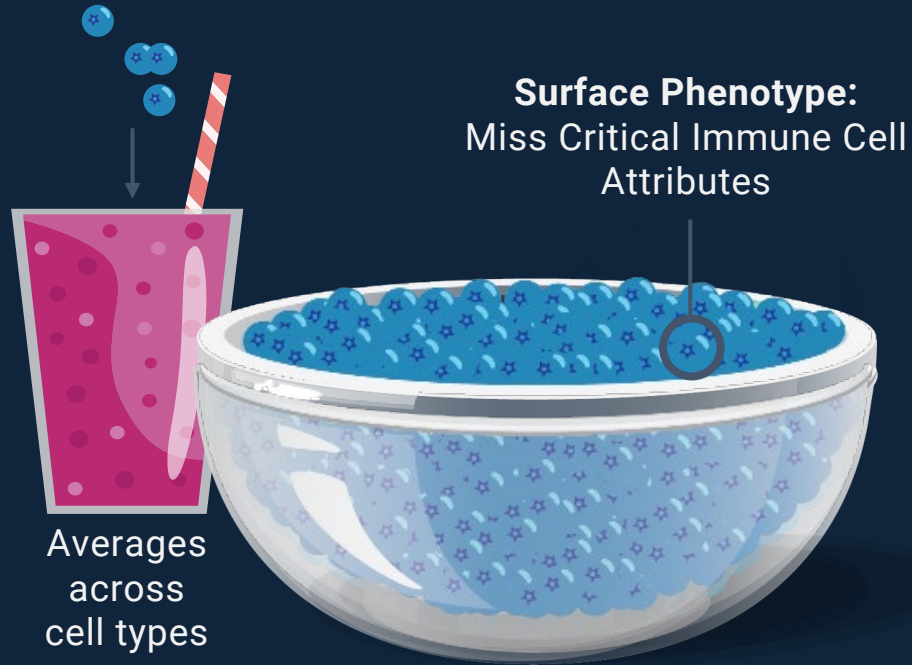
Surface markers (flow cytometry and single cell genomics) hides true identity



Multiplexed cytokines reveal the unique power of the individual super cell ie: Secret identity

Our Platform Uniquely Reveals Superhero Cells

BULK ELISA:
MISSES CRITICAL CELL ATTRIBUTES



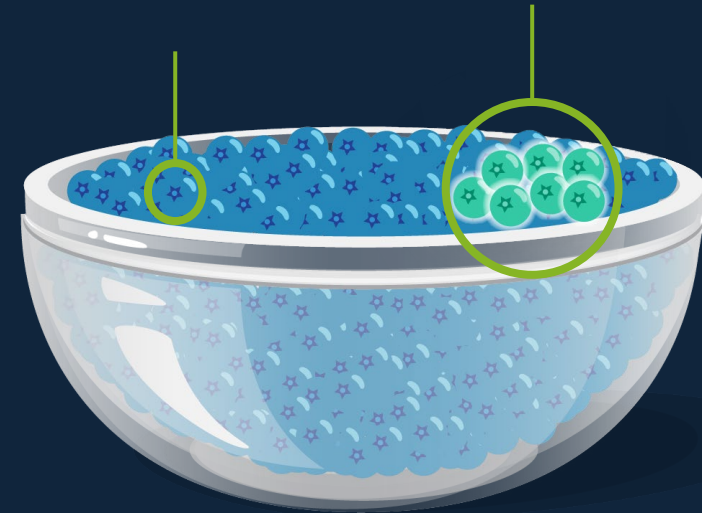
Surface Phenotype:
Miss Critical Immune Cell
Attributes

BULK ELISA & FLOW CYTOMETRY MISS*

**ISOPLEXIS FUNCTIONAL
DIFFERENCE**

Functional Phenotype:
Captures Cytokine
Signature of Each cell

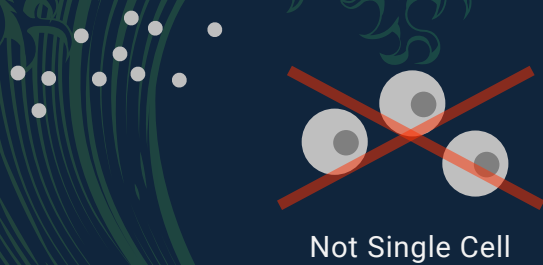
**Successfully Captures
the Superhero Cells
Predicting Response**



* This includes Genomics (and CITE Seq)

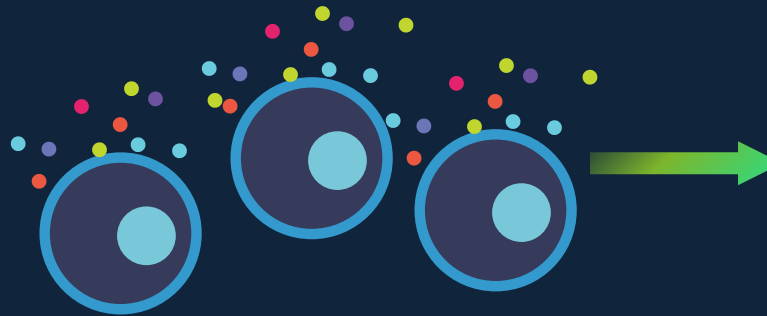
Wave Of Bulk Proteomics Also Drives Need For Single Cell Proteomics

BULK PROTEOMICS



Discover important
protein analytes driving
disease and patient
response

SINGLE CELL PROTEOMICS



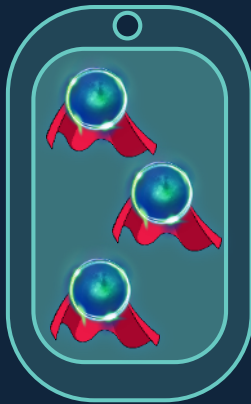
Reveal the cells producing
proteomic reactions, the
earliest signals orchestrating
patient response

REVEALS SUPER CELLS



High Need Translational Use Cases Supported In Many High Impact Journals

Cell and Gene Therapy



Superhero cells make the best products for clinical response

Cancer immunology



Superhero cells show which patients respond durably to cancer therapies

Inflammatory / Infectious Disease



Supervillain cells show which patients go to ICU with autoimmune response

100 PUBLICATIONS

Single Cell Proteomics Rapidly Establishing Advanced Medicine Leadership

100%

OF TOP 15
PHARMA¹

67%

OF
COMPREHENSIVE
CANCER CENTERS²

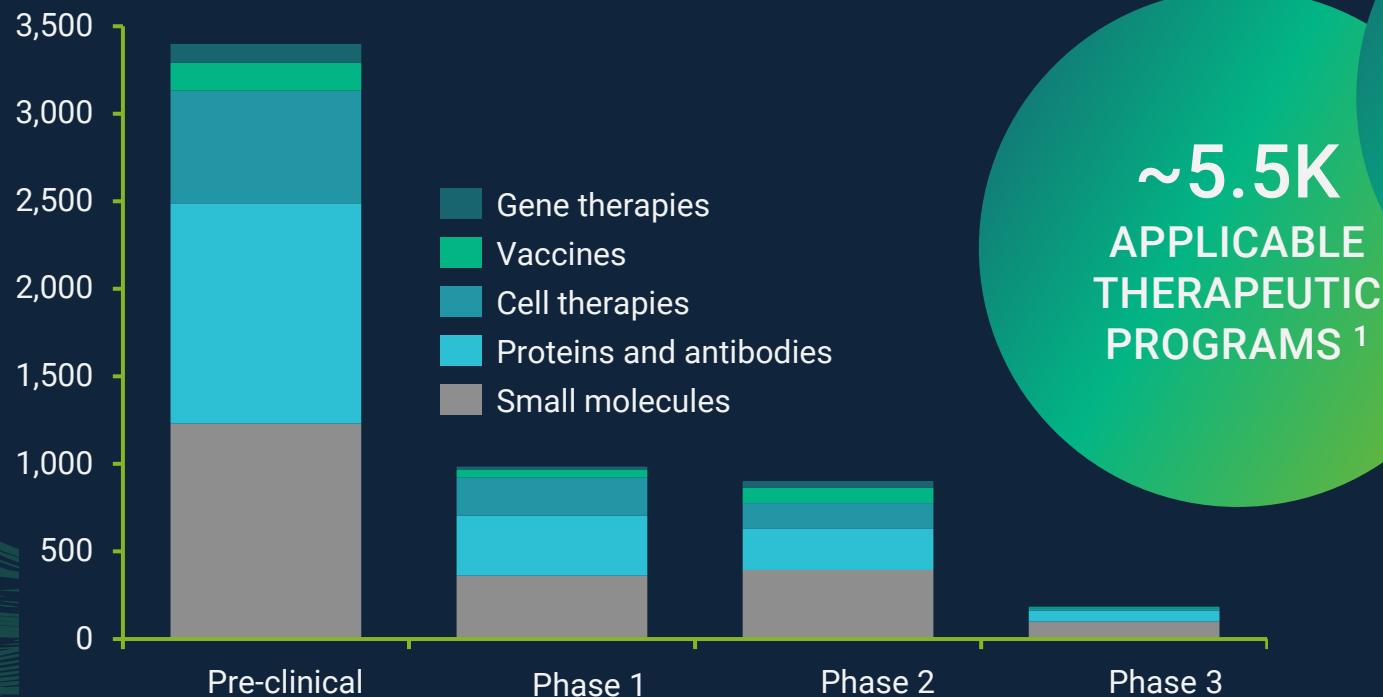
100

PUBLICATIONS

¹ By 2020 revenue. ² Based on the National Cancer Institute's list of Comprehensive Cancer Centers.

Isoplexis Has Unique And Large Translational Medicine Opportunity

Discovery based proteomics also drives IsoPlexis' proven impact in translational medicine



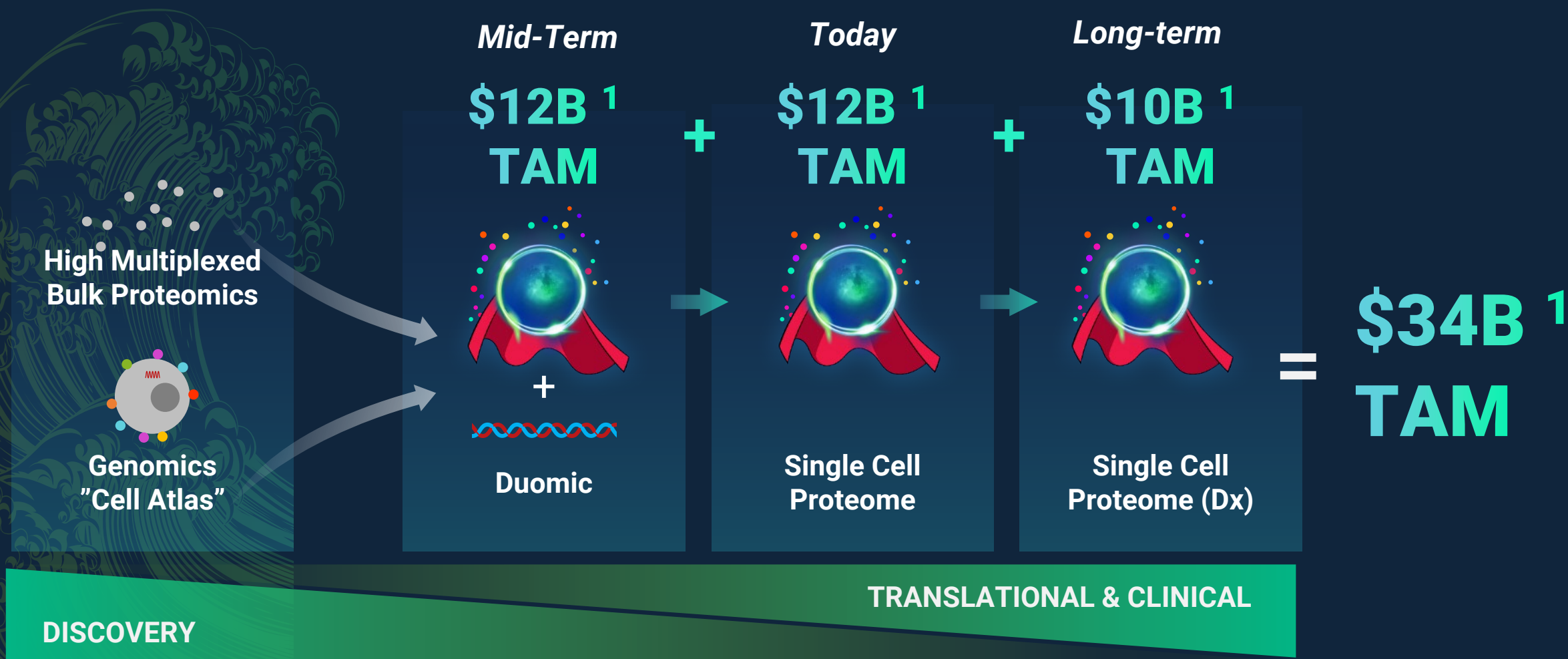
~5.5K
APPLICABLE
THERAPEUTIC
PROGRAMS ¹

20K
INSTRUMENT
OPPORTUNITY ¹

\$12B ²
TAM

¹ Consulting research. ² Based on management estimates

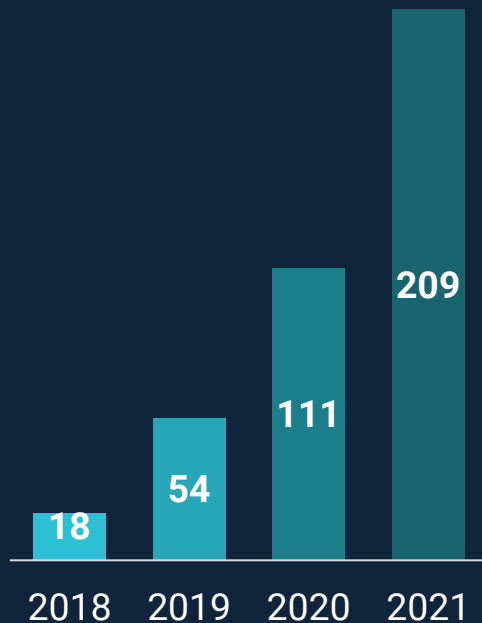
Isoplexis Is Focused On Leveraging Its Large Translational Opportunity



¹ Based on management estimates.

Accessible, Automatic Workflow Is Key To Translational Adoption

CUMULATIVE
INSTRUMENTS IN THE
FIELD¹



SAMPLES:
MANY CELL TYPES
AND PROTOCOLS



Cryopreserved Samples

INSTRUMENT:
AUTOMATED
FUNCTIONAL
PROTEOMICS HUB

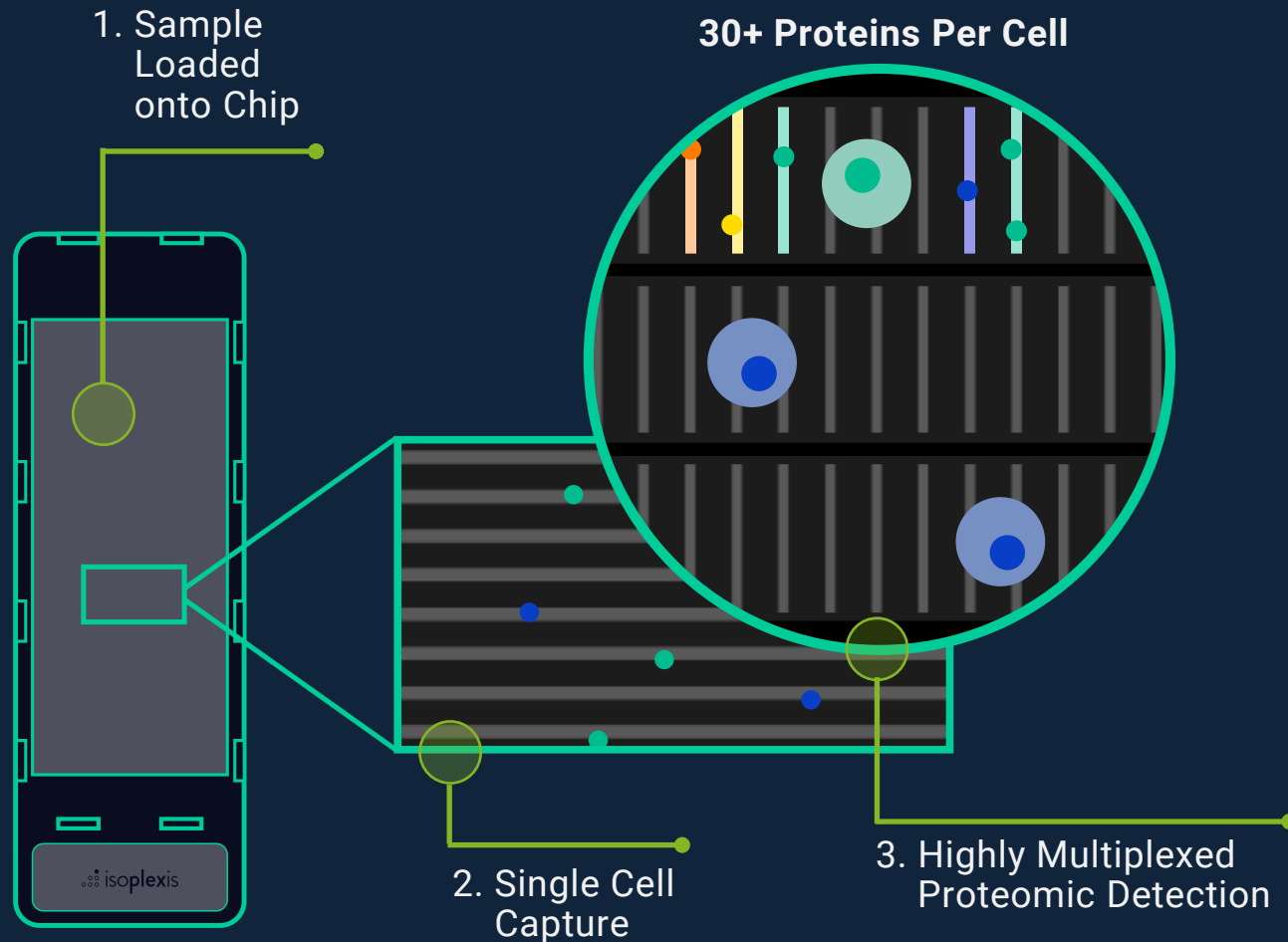


AUTOMATED
ANALYTIC
SOFTWARE:
ACCESSIBLE
INSIGHTS



¹ Through Q4 2021.

Proprietary Single-Cell Proteomic Barcoding Platform: Powerful Biology



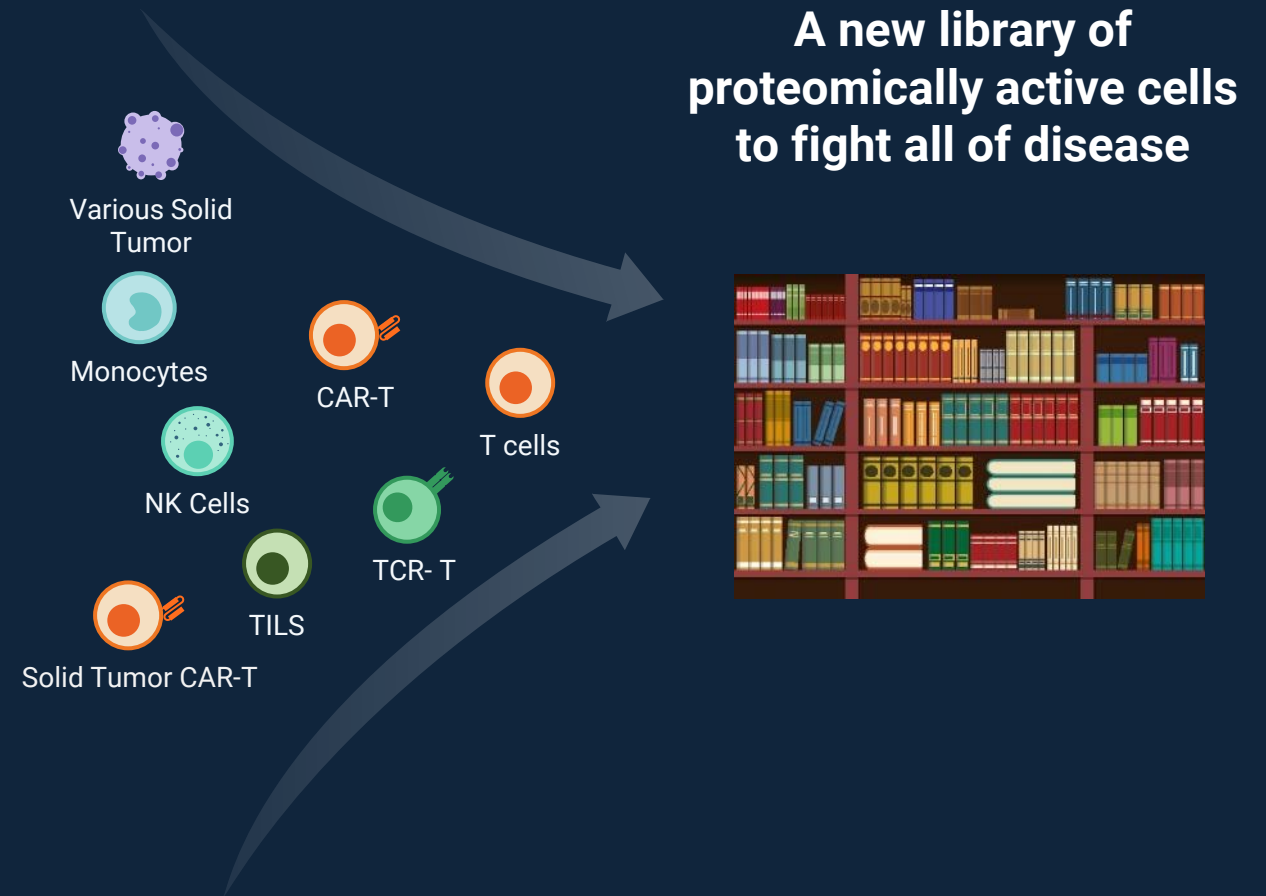
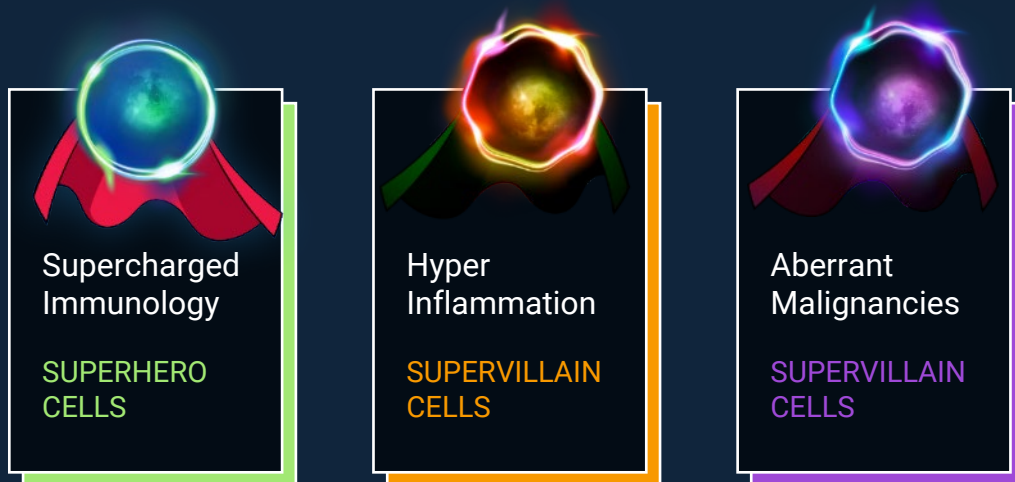
Single Cell Proteomics

Larger "Superhuman Cell Library" + Panels =
Comprehensiveness

Leveraging Duomic for first
Connected Functional
Multi-Omic Biology

The Superhuman Cell Library Will Span All Human And Mouse Cells: Isoplexis Will Capitalize On The Proteomic Complement To The Genomic Cell Atlas

Key categories that dictate response to the most important translational targets



Predictive Durability Of SC Proteomics Is Accelerating Cancer Immunology



PREDICTS LONG TERM THERAPY RESPONSE

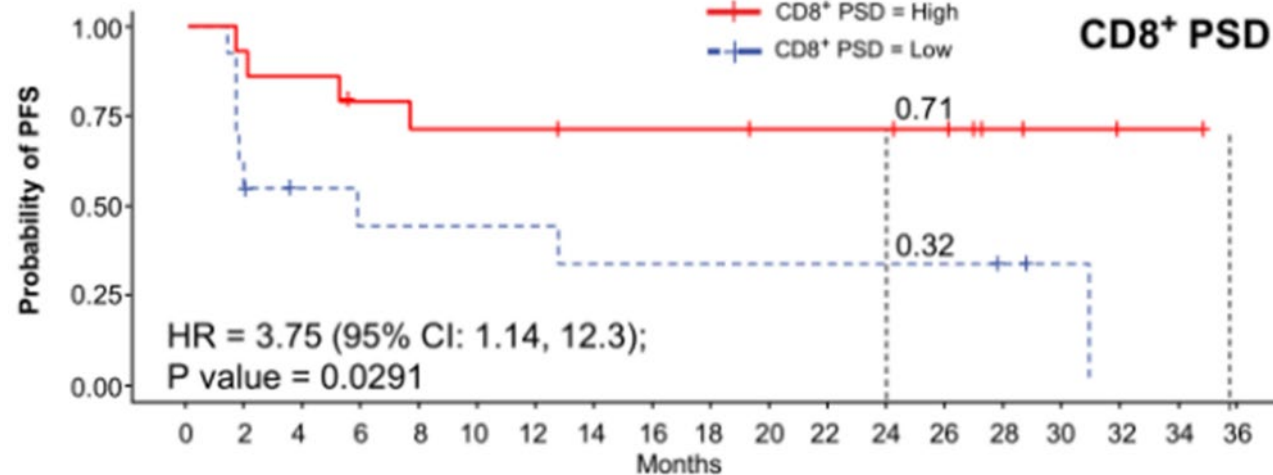
Predicting Survival in Cancer Immunology:

In a 38 patient metastatic melanoma study sponsored by Bristol Myers Squibb and Nektar Therapeutics, where the patients underwent checkpoint inhibitor and IL-2 agonist therapy. Our platform identified that a blood-based biomarker correlated with patient response and progression-free survival.

Reflection on Earlier Information Provided:

IsoPlexis has shown unique correlations with its single-cell cytokine biomarker with survival in multiple solid tumor studies with trials/therapies.

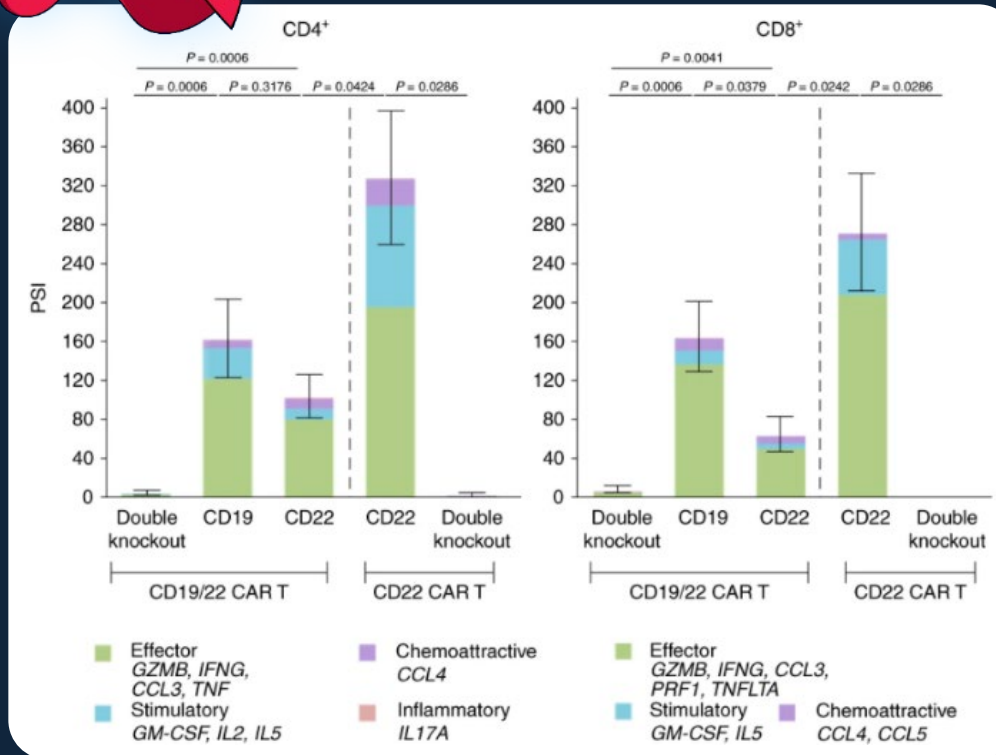
Journal of Clinical Oncology®
An American Society of Clinical Oncology Journal



CAR-T Engineering Unlocked With Single Cell Proteomics



PREDICTS RESPONSE AND RELAPSE



Development Question from Leaders at Stanford:

What are we missing by ignoring the pre-infusion cytokine signatures of critical cell products?

Predictive Answer:

In a CD19 and CD22 bispecific CAR study, researchers using our platform showed that certain cytokine production was associated with early signs of response to CAR-T therapies or signs of relapse.

Reflection:

“Results suggest that engineering iterations should be guided by careful studies of single-cell CAR polyfunctionality incorporating cytokine production as a critical quality attribute.”¹

nature
medicine

Second Product Family: The Single Cell Phosphoproteome

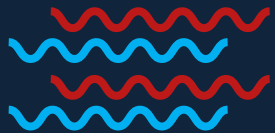
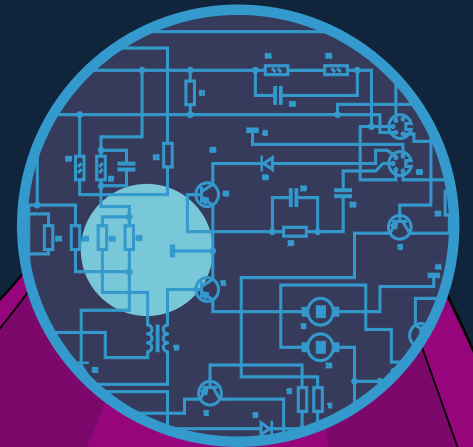
Cancer Cell
Previews

Reference to publication on
IsoPlexis' technology ¹

**Kicking Genomic Profiling to the Curb:
How Re-wiring the Phosphoproteome
Can Explain Treatment Resistance in Glioma**

Single cell genomics misses key proteomic activity...
is an indirect indicator (i.e. the blueprint)

Unique to IsoPlexis:
15+ phosphoproteins
that are redefining
pathway definition



TRANSCRIPTOME

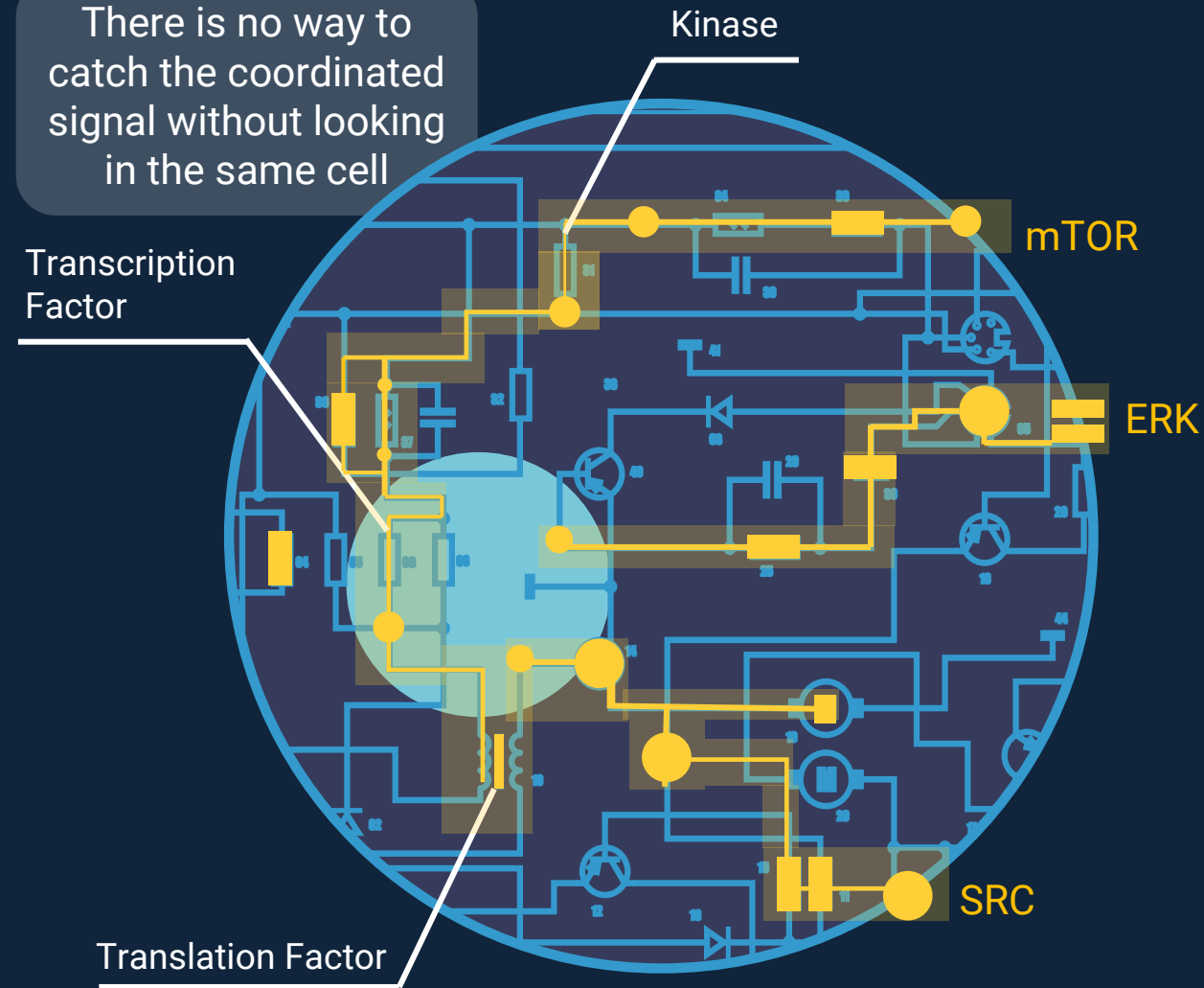


**INTRACELLULAR
PROTEOME**

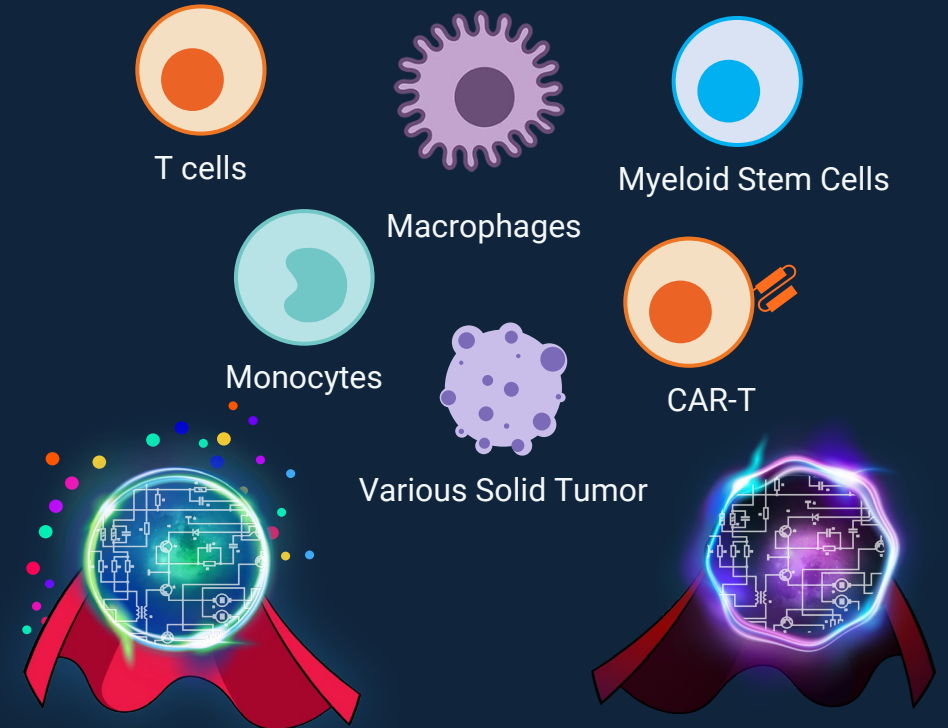
¹Wei, W, et al. Single-Cell Phosphoproteomics Resolves Adaptive Signaling Dynamics and Informs Targeted Combination Therapy in Glioblastoma Article Single-Cell (2016)

Unique Product Unlocks Highly Complementary Platform to SC Genomics

There is no way to catch the coordinated signal without looking in the same cell



ACROSS IMMUNE CELL TYPES



Duomic: Answering The Customer Request For A New Multi-omic Solution



DUOMIC



+



=

Unique and
New Clinical
Omic
Applications

First technology to get the following functional analyte classes critical to the clinical arena (cytokines, chemokines, growth factors & phosphoproteins) + sequencing of each cell

Isoplexis Is Making Single Cell Multiomics More Clinically Relevant

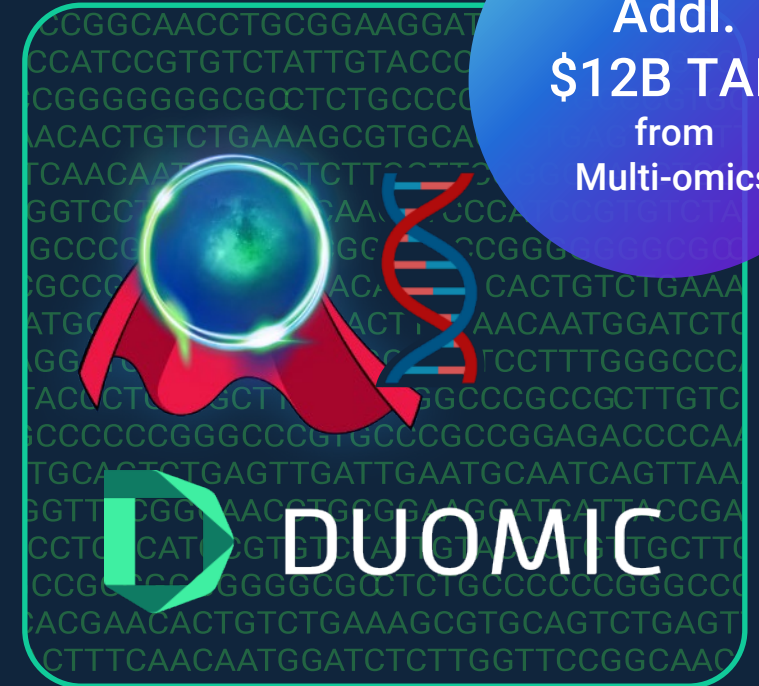
Addl.
\$12B TAM
from
Multi-omics



Nature Method of the Year:
Single-Cell Gene expression



Nature Method of the Year:
Single-Cell Multimodal omics



Duomic will be available for
early access* to enable next
generation therapeutic insights

For The First Time, Reveal Genetic Drivers Of Critical Clinically Relevant Proteins

Superhero CAR-T Cells

Biotech



Reveal the genetic drivers of CAR-T cells to create more potent and durable next generation therapeutics

T-Cell Receptors

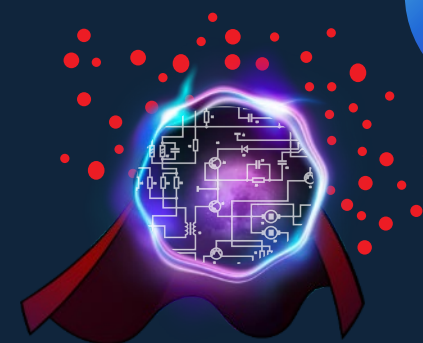
Pharma



Profile TCR repertoire, accelerating your understanding of the immune system and ability to develop new therapeutics

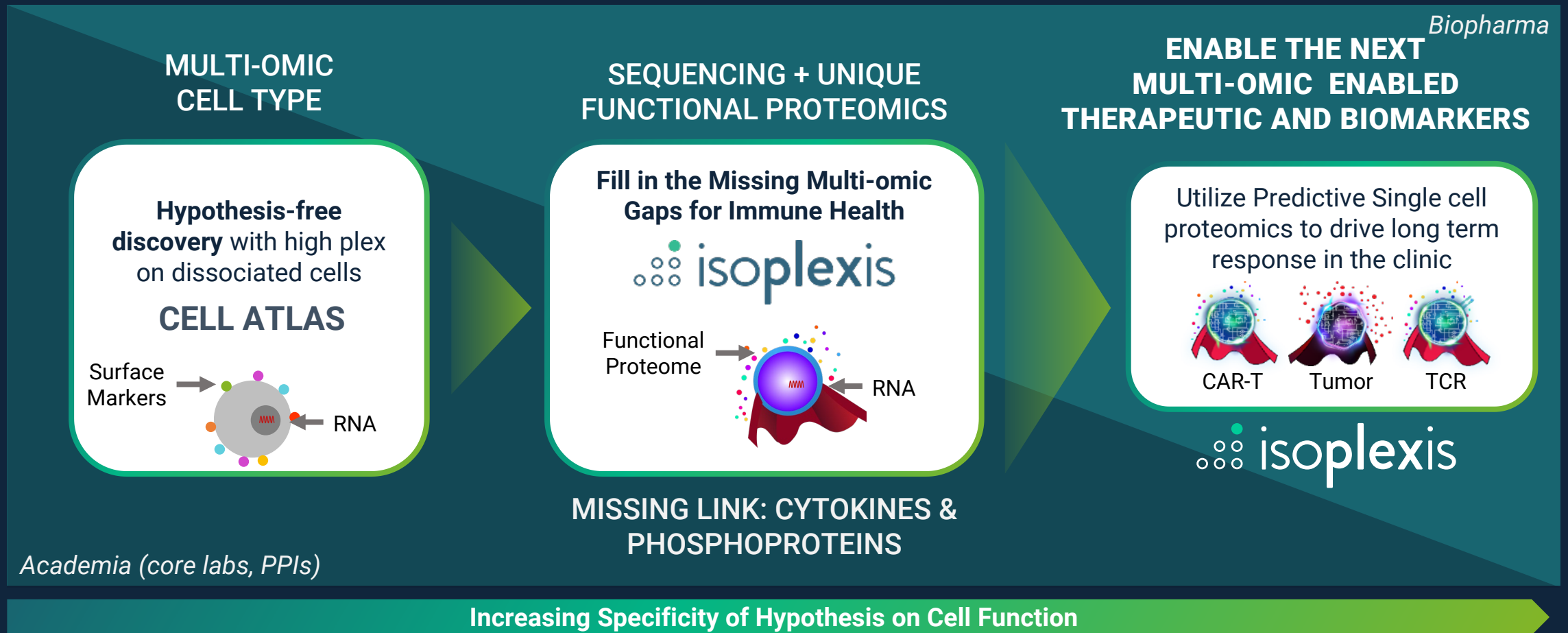
Supervillain Tumor Cells

Academic



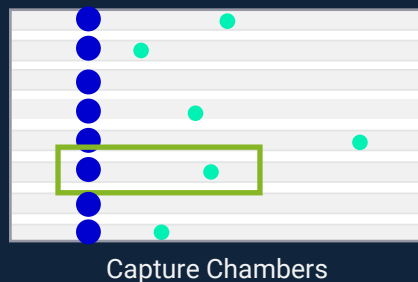
Recode gene and gene pathways driving therapeutic resistance and tumor progression

Duomic: A Unique Multi-omic Bridge To Translational Medicine

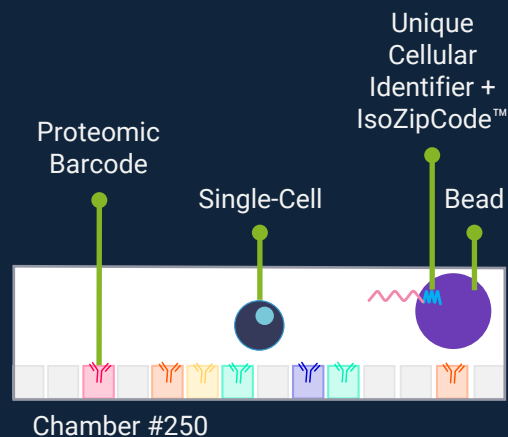


A New, Unique Multi-Omics Solution: Connected Single-Cell Biology

LEVERAGE CORE SINGLE-CELL PLATFORM



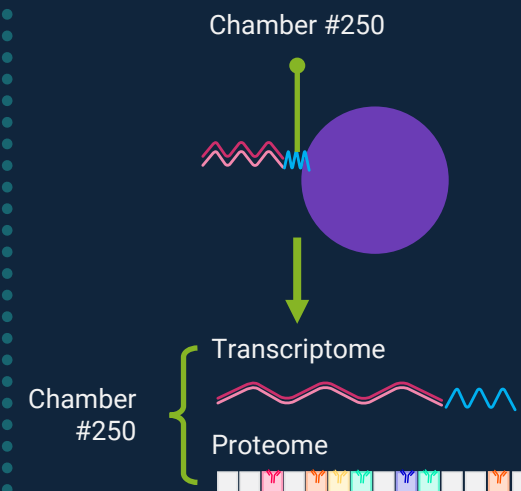
PROTEOME DETECTED AND TRANSCRIPTOME CAPTURED



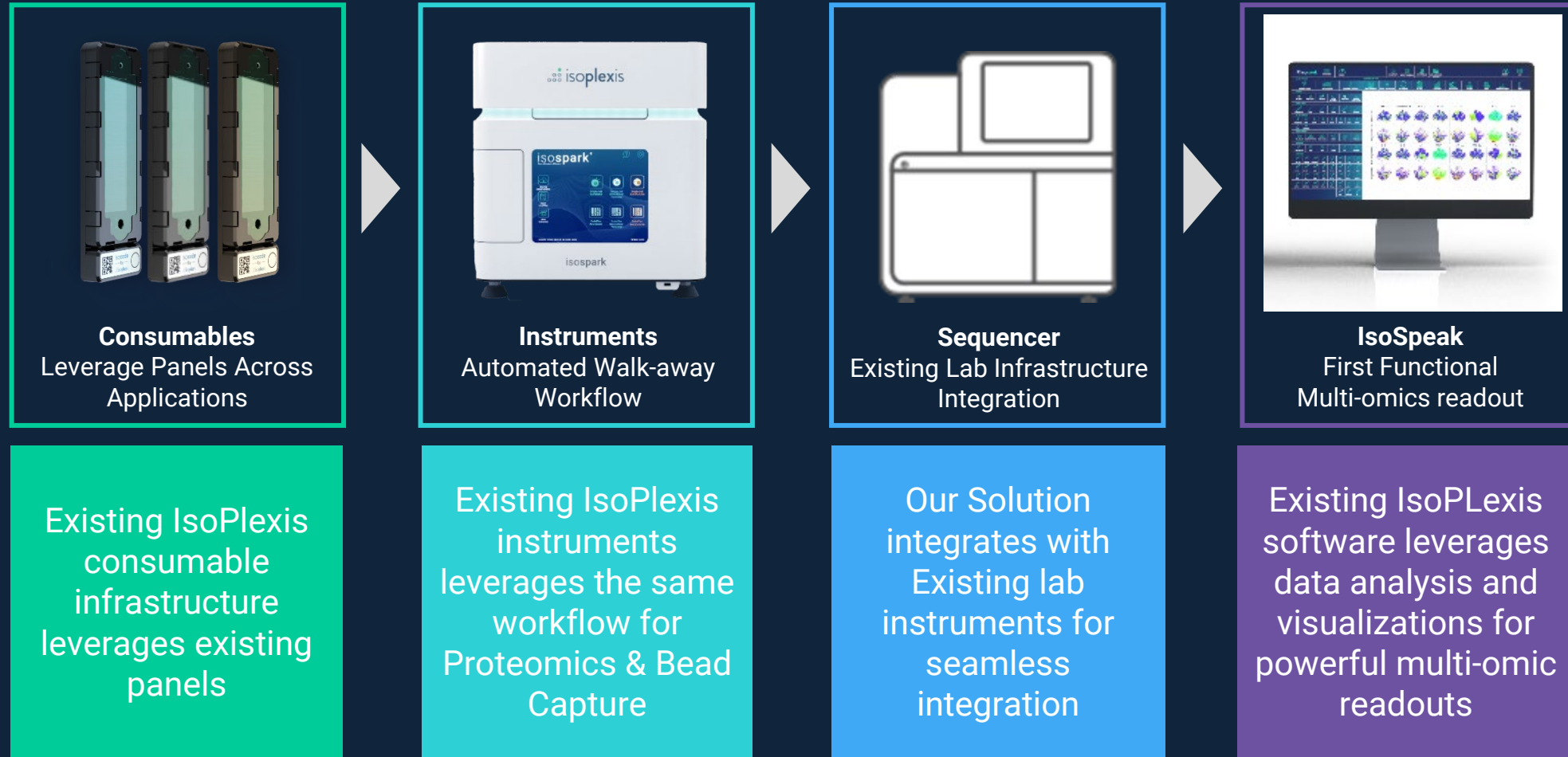
SEQUENCE DETECTED



PROTEIN + SEQUENCING LINKED, PER CELL



Duomic Platform Workflow: Early Access



Codeplex: Uniquely Automated Targeted Proteomic Product Family

Status Quo Multiplexed Bulk ELISA:
Tedious and laborious hands-on workflow



Today: 15,000 Manual High-multiplex proteomic systems,
many steps for gold standard ELISA readouts

UNIQUE HIGH-PLEX AUTOMATED WORKFLOW

isoplexis



**Automated
Workflow**

**Easily accessible yet
comprehensive bulk
proteome**

**20-50
Proteins***

Transition sites to high performance sensitivity and
specificity with first of its kind fluidic automation for
multiplexing

167 Foundational Patents Issued And Filed Underpins Continued Expansion

KEY PROTEOMIC PLATFORMS, TECHNOLOGIES, AND APPLICATION AREAS



IsoLight



IsoSpark



IsoSpeak

- Automated Instrumentation and Software
- Single-Cell and High Multiplex Proteomics
- End to End Multi-omics Analysis
- Advanced Analytics

167
PROTEOMICS,
SEQUENCING,
AND SYSTEM
PATENTS



Single-Cell
Sequencing
& Protein



Single-Cell
Secretome



Single-Cell
Intracellular
Proteome



Single-Cell
Metabolome

- Proteomic Barcoding
- DNA/RNA Sequencing
- High Throughput Single-Cell Sequencing + Proteomics
- Cellular Capture
- Chip Design and Fabrication
- Immune Profiling and Signatures
- Single-Cell Secretomic Capture
- Single-Cell Intracellular Proteome Capture
- Single-Cell Metabolomic Capture
- Tumor Profiling and Signatures



CodePlex
Secretome



CodePlex
Intracellular
Proteome

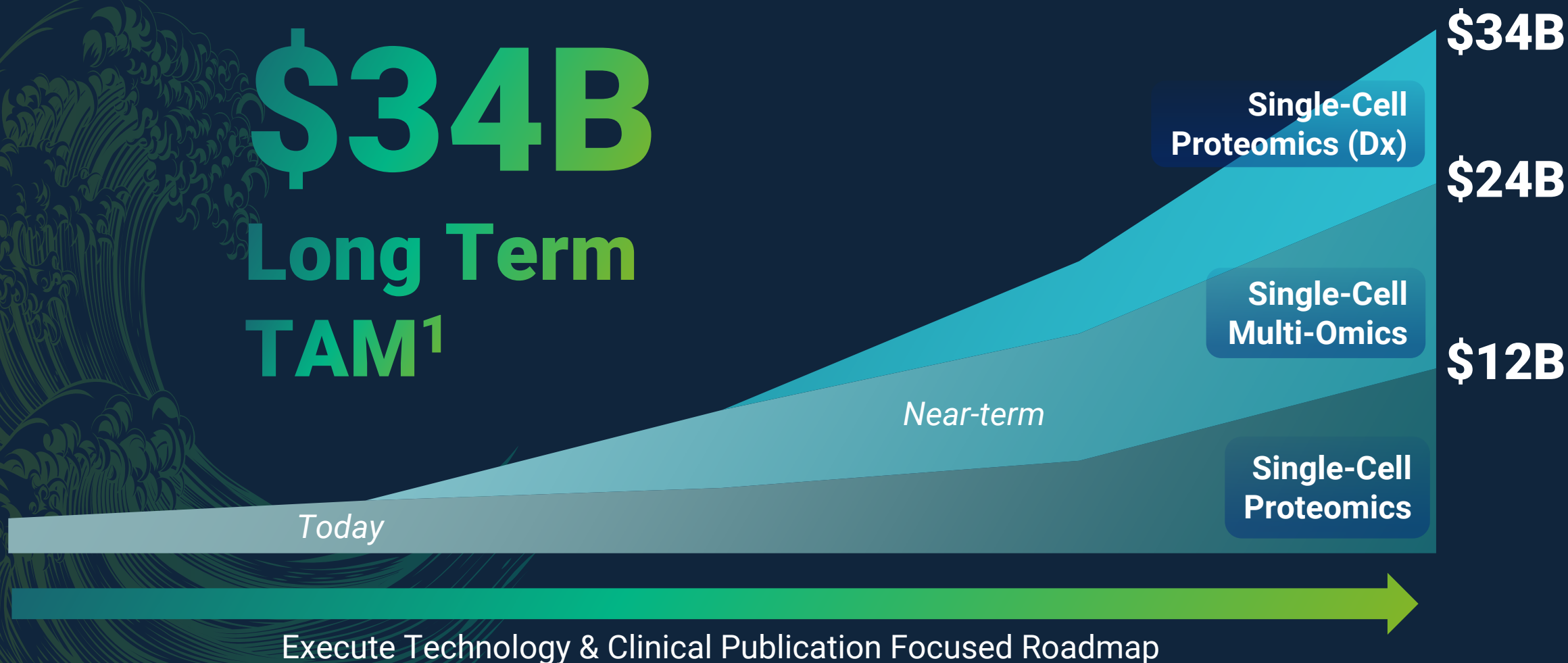


CodePlex
Metabolome

- Bulk Proteomic Barcoding
- Small Volume Serum Analysis
- Secretomic Capture
- Intracellular Proteome Capture
- Metabolomic Capture

An Integrated Proteomic Roadmap & Large Translational Opportunity

\$34B
Long Term
TAM¹



¹ Based on management estimates.

Seasoned Management Built To Scale



Sean Mackay
CEO and Co-founder
LAZARD



John Strahley
CFO
IRONWOOD



Jing Zhou, MD, PhD
CSO
Yale



Peter Siesel
CCO
TECAN



Richard Rew
SVP General Counsel
Luminex



Verna Siu
SVP Sales Operations
SURGIQUEST



Carrie Carter
SVP People Ops
SARAH CANNON
Fighting Cancer Together



Patrick Paczkowski, PhD
SVP Software
Yale



Raj Khakhar
VP Finance
ThermoFisher
SCIENTIFIC



Anthony Catalano
SVP Operations
PerkinElmer



Michelle Reid, Ph.D.
VP Services & Support
QIAGEN



Rui Zheng, PhD
SVP Innovation
iontorrent



Cynthia Turcotte, PhD
VP Applications
454
SEQUENCING



Jon Chen
VP Marketing
Yale



John H Leamon, PhD
SVP R&D Integration
QIAGEN

LEADERSHIP BUILT TO SCALE:

Continued additions to global leadership team from leading Life Science Tools companies – built to scale growth

COMMERCIAL GROWTH:

Team built around senior leadership with track record in genomic, proteomic, and other med tech applications

GLOBAL FOCUS:

Directors in major global regions, with leading distribution partners in EMEA and APAC

LEADING R&D:

Track record of award winning application development and engineering, with continued velocity of launches for new applications

SCALABLE OPERATIONS:

Sustained growth of operational excellence, with experienced med tech leadership

isoplexis

isolight[®]

Each cell makes a difference



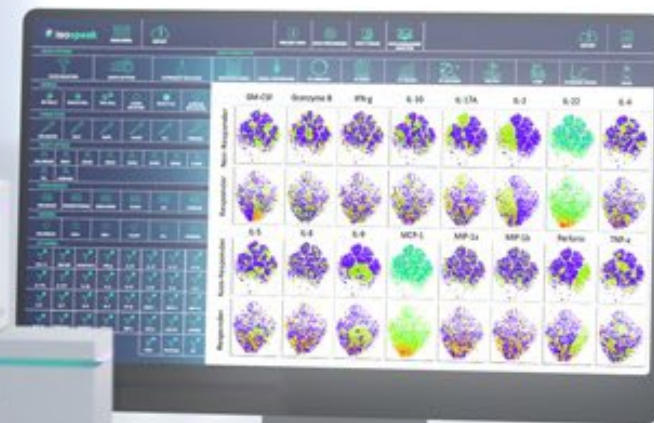
isolight

isoplexis

isospark[®]



isospark



isoplexis

© 2022 ISOPLEXIS | ALL RIGHTS RESERVED

For Research Use Only. Not for Use in Diagnostic Procedures.