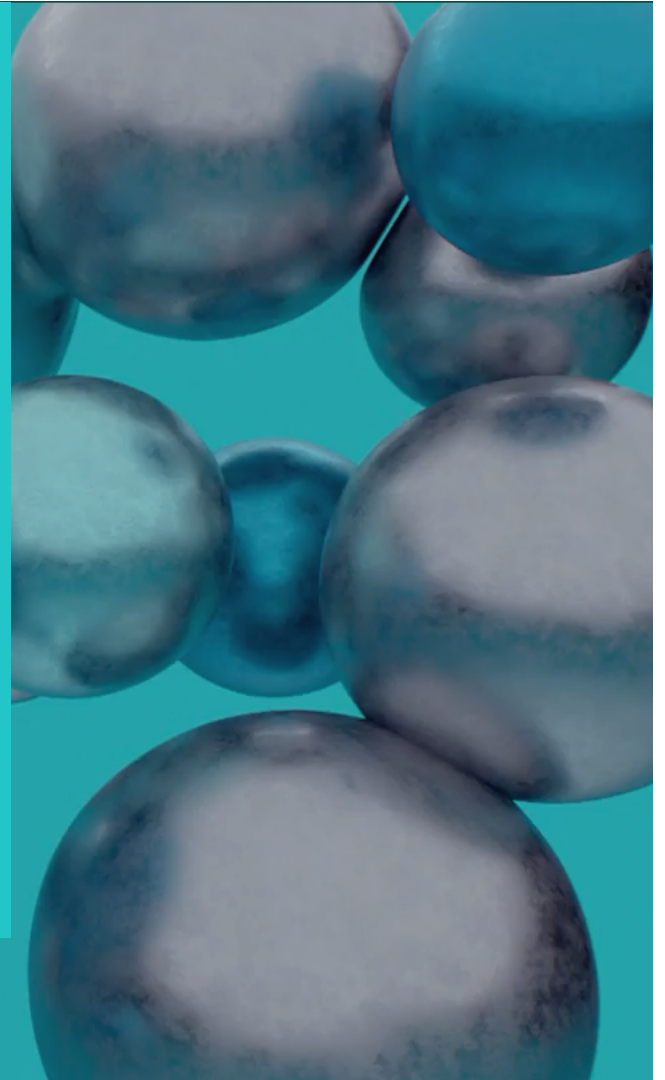


seer

JP Morgan Healthcare Conference 2021

Omid Farokhzad, CEO
January 11, 2021



Safe Harbor Disclosures

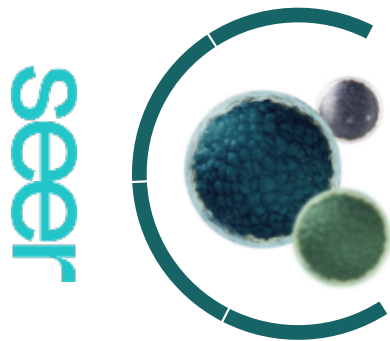
Certain statements in this presentation and the accompanying oral commentary are forward-looking statements within the meaning of the federal securities laws. These statements relate to future events or Seer, Inc. (the “**Company**”)’s future results and involve known and unknown risks, uncertainties and other factors that may cause the actual results, levels of activity, performance or achievements of the Company or its industry to be materially different from those expressed or implied by any forward-looking statements. In some cases, forward-looking statements can be identified by terminology such as “may,” “will,” “could,” “would,” “should,” “to,” “target,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “predict,” “potential” or other comparable terminology.

All statements other than statements of historical fact could be deemed forward-looking. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including, among other things: any expectations regarding the Company's projections of market opportunities; statements regarding the Company's business strategy, operations, results of operations, financial needs, and financial condition; statements regarding the Company's long-term expectations; statements that may suggest trends for the Company's business or industry, including expectations that may affect the unmet need and the size of the proteomics market and adjacent markets; statements about the Company's ability to successfully execute the development and commercialization of its Proteograph™ Product Suite, the demand for the Company's Proteograph Product Suite from its target customers and in general; the launch of any new or additional products, and any expectations regarding new customer acquisition in domestic or global markets, including but not limited to Asia; statements regarding customer adoption of new technologies domestically and globally; any statements regarding expectations for future regulatory approvals; the Company's ability to expand life sciences markets through the use of its technology; the scope of protection the Company is able to successfully establish and maintain for intellectual property rights, including its Proteograph Product Suite; projections, assumptions, and estimates of the Company's future performance and the future performance of the markets in which it operates; the Company's expectations regarding its gross margins, and operating income and expenses; any statements of the plans, strategies, and objectives of management for future operations; any statements of expectation or belief regarding future events, opportunities to drive future growth, and potential markets or market size, or technology developments.

While the Company believes these expectations, assumptions, estimates and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond the Company's control. These and other important factors may cause actual results, performance, or achievements to differ materially from those expressed or implied by these forward-looking statements. The forward-looking statements in this presentation are made only as of the date hereof. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of the Company in general, are described more fully in the Company's filings with the Securities and Exchange Commission (“**SEC**”) and other documents that the Company subsequently files with the SEC from time to time. The Company specifically disclaims any intention to update any forward-looking statements included in this presentation. If one or more of these statements is updated or corrected, investors and others should not conclude that additional updates or corrections will be made.

In light of the foregoing, investors are urged not to rely on any forward-looking statement in reaching any conclusion or making any investment decision about any securities of the Company.

Empowering Scientists Through Transformative Products for Proteomics



Enabling unbiased, deep and rapid proteomics at scale



Broadly accessible and durably differentiated technology

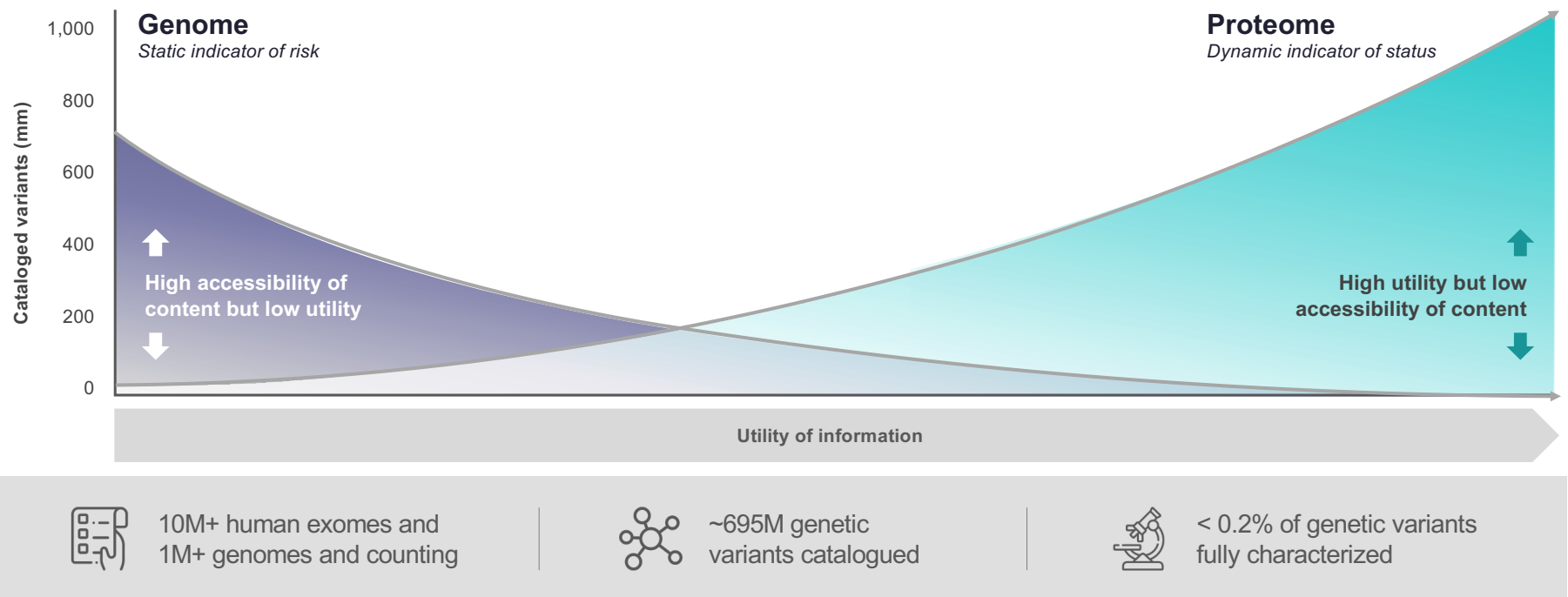


Large potential market opportunity across proteomics and complementary markets



Management team uniquely positioned to capitalize on proteomics

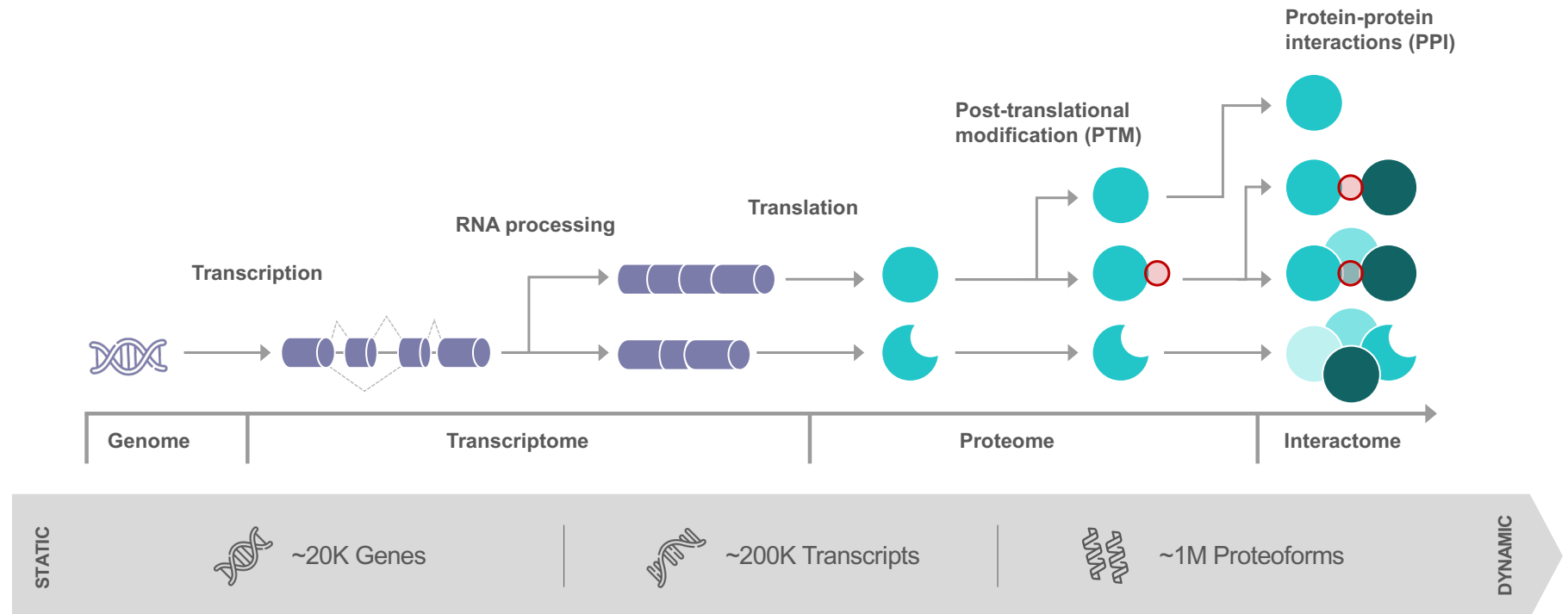
Full Characterization of the Proteome is Essential to Filling in the Missing Pieces of Biology



Source: UniProt, PNAS, PLOS

Proteomes Are Dynamic and Far More Diverse Than Genomes

Unbiased deep proteomics at scale has the potential to reveal biological insight



Source: Isabell Bludau et al. Proteomic and interactomic insights into the molecular basis of cell functional diversity. Nature Reviews Molecular Cell Biology (2020).

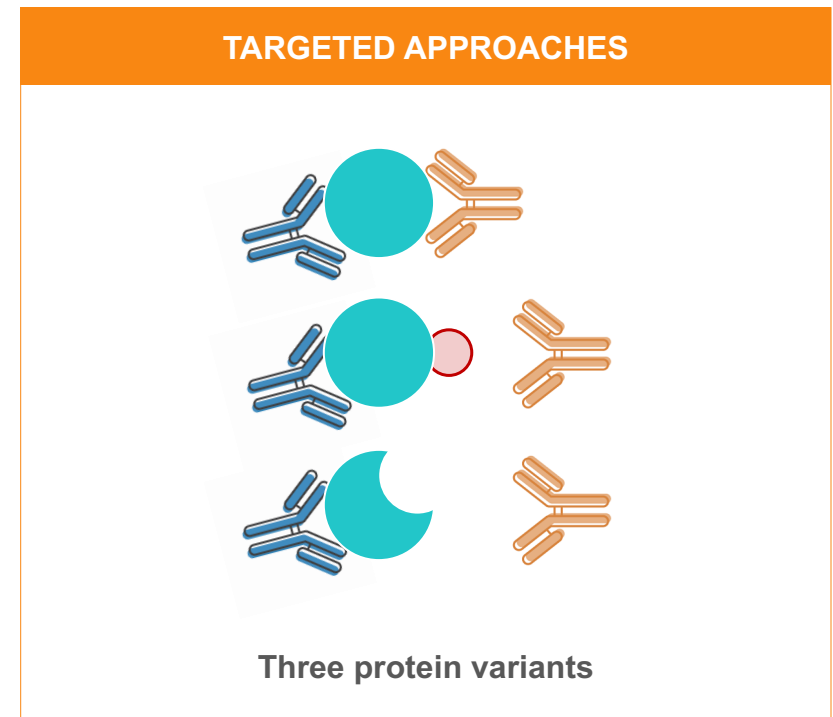
Existing Targeted Technologies Provide Limited Access to the Proteome

Targeted approaches are not able to distinguish important variants

Average length of a human protein is 472 amino acids,
average length of a binding epitope is 5-8 amino acids

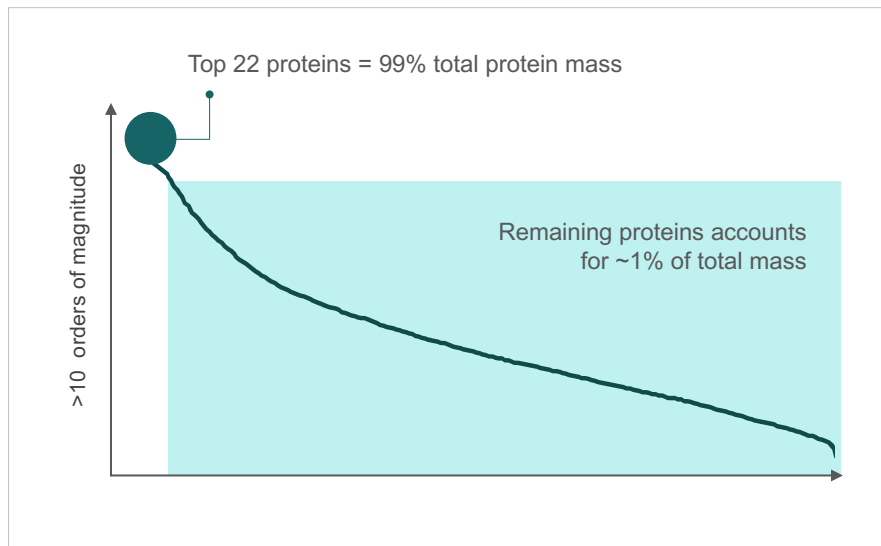
Targeted approaches can miss the presence of
protein variants

Targeted approaches may not distinguish
protein variants



Existing Unbiased Approaches Do Not Scale

Complex sample-handling and lengthy processes limit sample throughput



>10x dynamic range in protein expression
requires lengthy and complex
fractionation and depletion steps



Drives complex and lengthy
process with high infrastructure
requirement



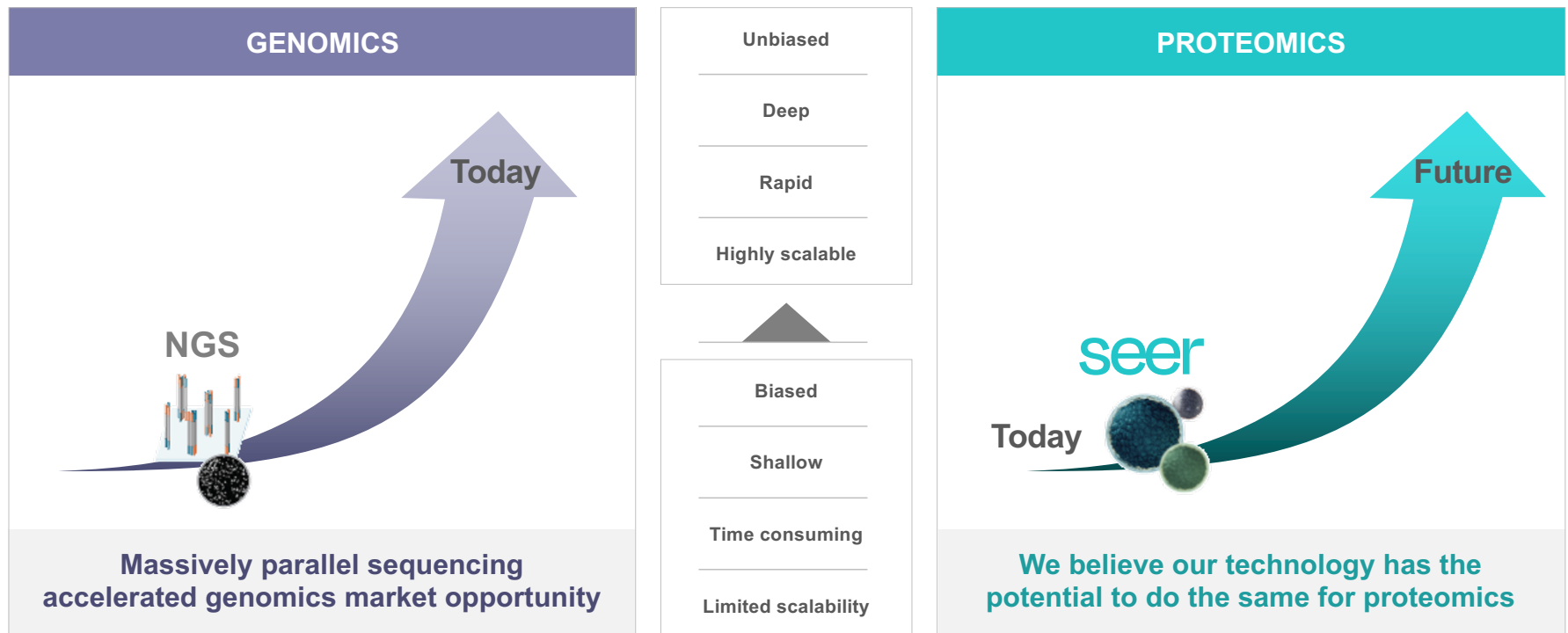
Combination typically limits scalability
of current untargeted, deep methods
to only 10s of samples*

Source: Isabell Bludau et al. Proteomic and interactomic insights into the molecular basis of cell functional diversity. Nature Reviews Molecular Cell Biology (2020).

* Applies to studies in plasma of >600 proteins

Overcoming the Limitations in Accessing the Proteome

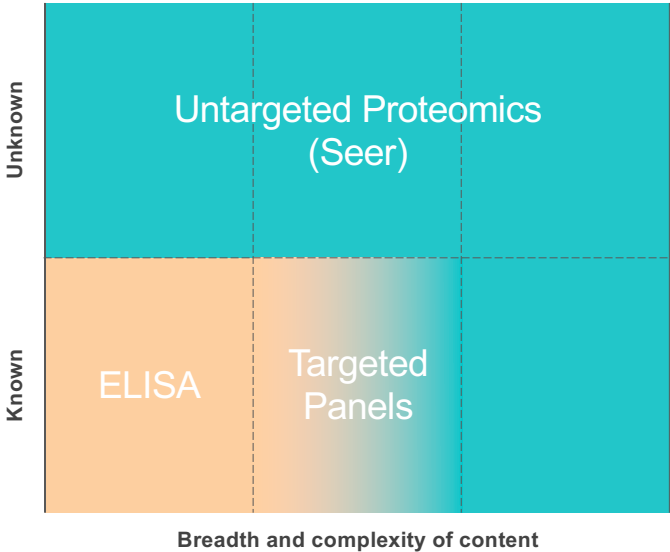
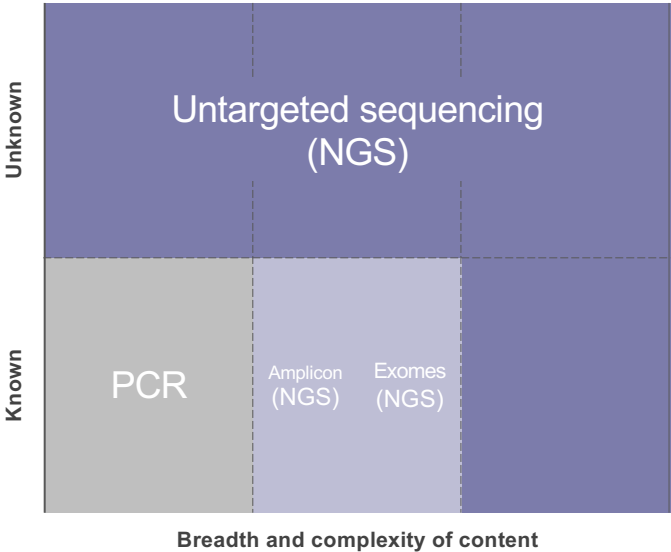
The proteome has the potential to significantly expand our understanding of biology as genomics has done



Source: Allied Market Research. "Global Proteomics Market - Opportunity Analysis and Industry Forecast, 2018-2025" (March 2019); Technavio. "Genomics Market by Solution and Geography - Forecast and Analysis 2020-2024".

Insights from Genomics

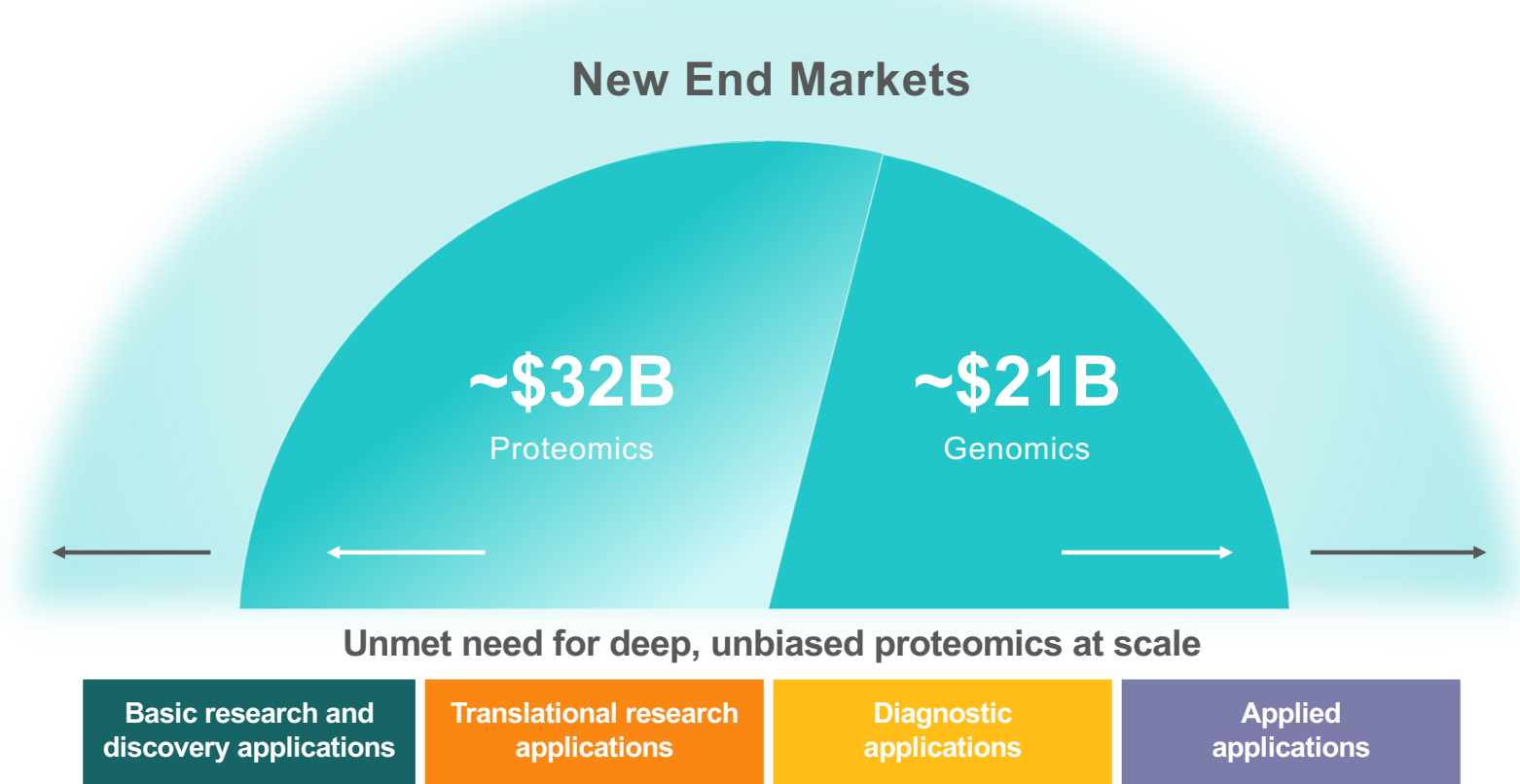
What researchers did with untargeted sequencing technology that expanded their discovery capabilities



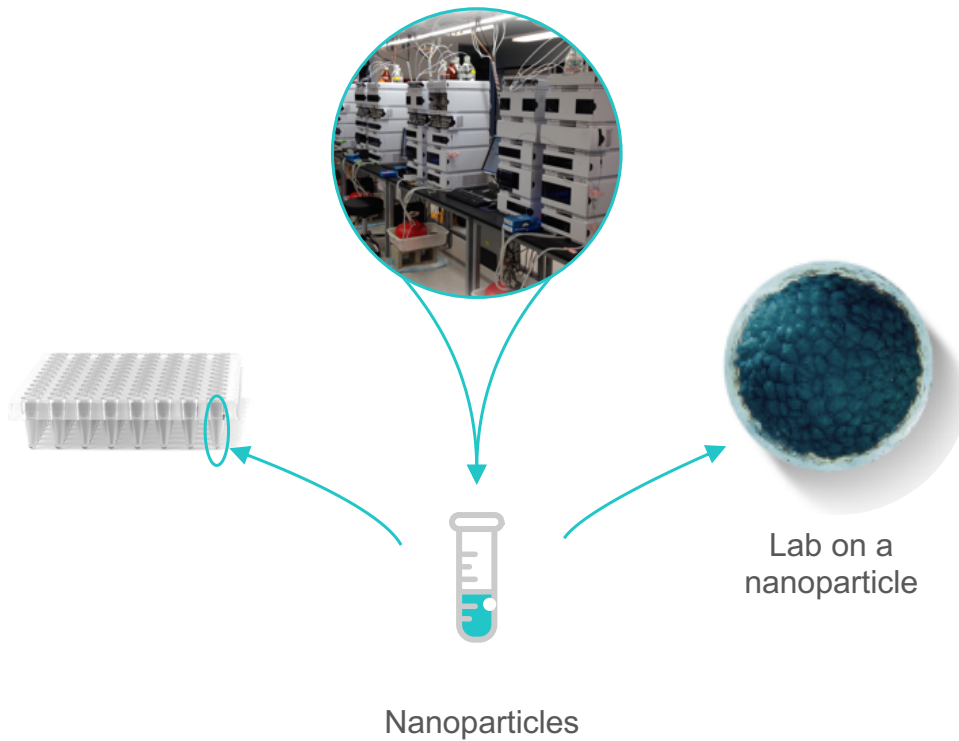
Targeted methods are suitable when you know what is important	Unbiased methods are required (an absolute necessity) to expand biological insight	Expansion in discovery leads to expansion of all markets and more insights being generated
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Opening a New Frontier

Expanding proteomics and genomics markets via unbiased, deep, and rapid proteomics at scale

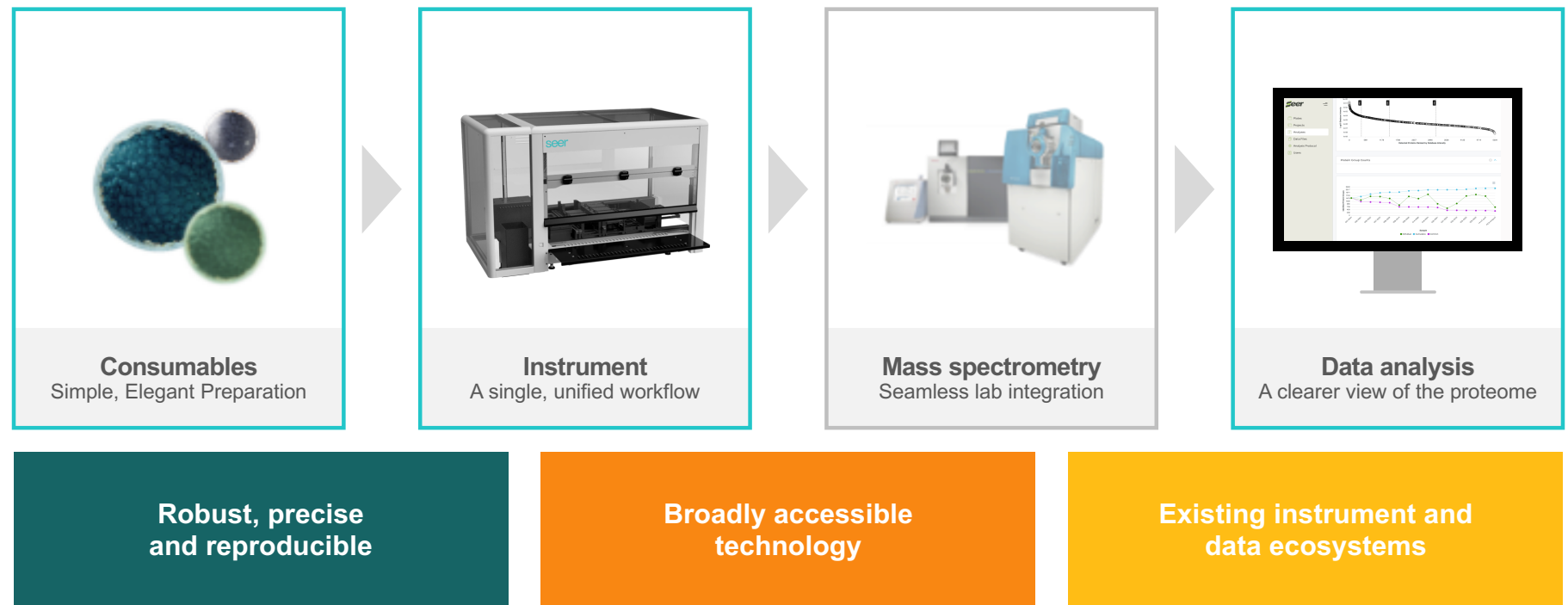


Seer Enables Unbiased, Deep and Rapid Proteomic Analysis At Scale



Seer's Proteograph™ Product Suite

Designed to enable researchers globally to access the proteome in a new way

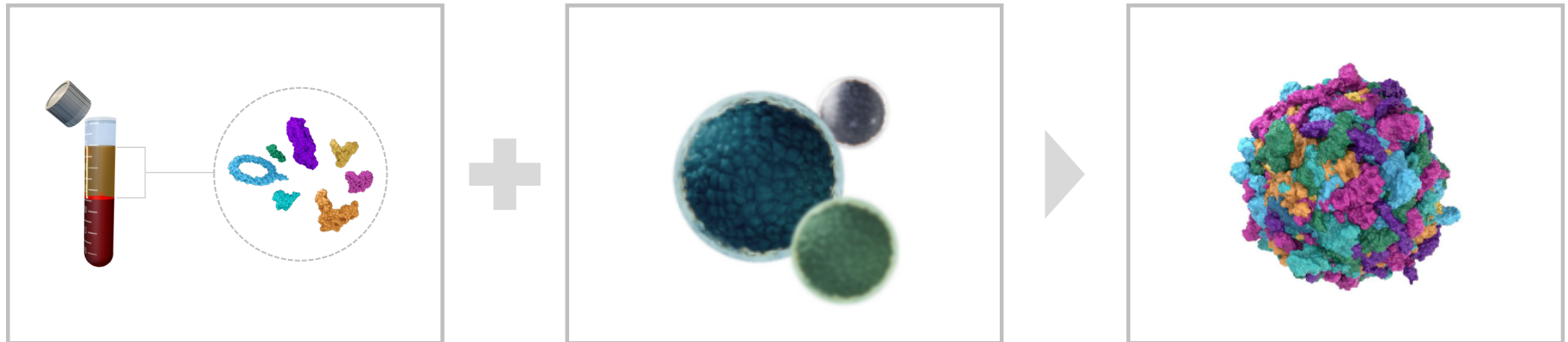


 Indicates product offered by Seer

Leveraging the Innate Biology of Proteins to Transform Proteomics

Proprietary nanoparticle technology takes advantage of physicochemical interactions of proteins

Seer Nanoparticle Technology
Engineered Physicochemical Properties

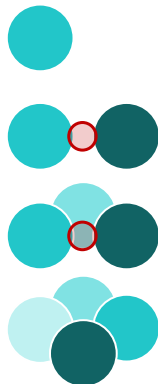


5 issued and over 25 pending patents

Seer's Nanoparticles Improve on Nature's Evolutionary Approach

Machine-learning-based models of NP-protein interaction facilitate design of nanoparticles

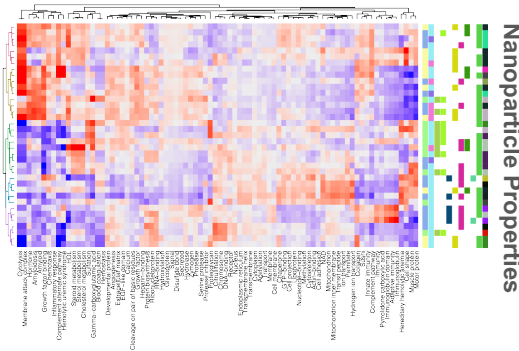
Physicochemical properties are the basis of protein-protein interaction



Interactome

Specific Interactions
Evolution - millions of years

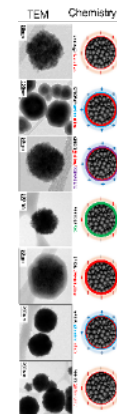
Physicochemical properties are the basis of nanoparticle-protein interaction



Protein Structures and Functions

Designed Interactions
Developed by machine learning - months

Almost an infinite possibility of nanoparticle physicochemical properties

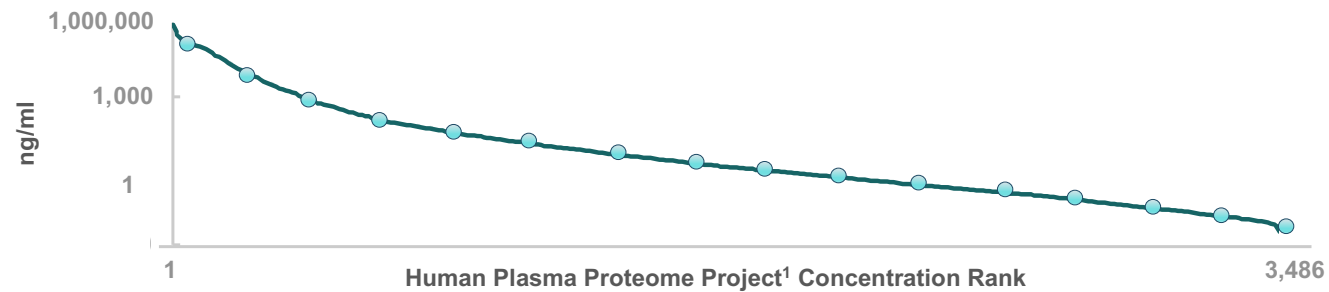
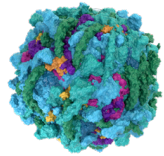


Library of 275+ Nanoparticles

Designed Interactions
Deployed on different nanoparticles

Engineered Physicochemical Properties of the NPs, Influence the Identity of the Proteins Attracted

With the ability to increase fidelity by adding diverse nanoparticles

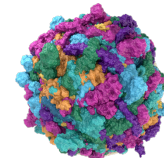
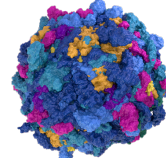
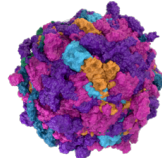
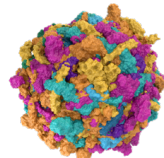
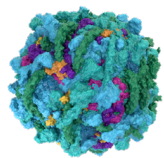


¹ Schwenk, et al. (2017). *Journal of Proteome Research*, 16(12), 4299–4310.

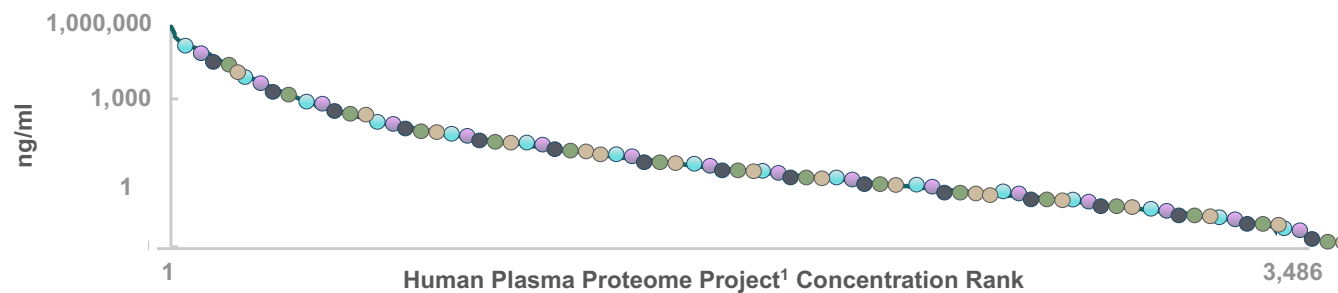
Engineered Physicochemical Properties of the NPs, Influence the Identity of the Proteins Attracted

With the ability to increase fidelity by adding different nanoparticles

Diverse NP's Physicochemical Properties



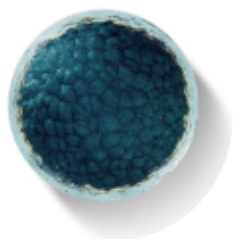
Interrogate the dynamic range by affinity



$f_x(\text{protein concentration})$
 $f_x(\text{protein-nanoparticle affinity})$
 $f_x(\text{protein-protein affinity})$

¹ Schwenk, et al. (2017). *Journal of Proteome Research*, 16(12), 4299–4310.

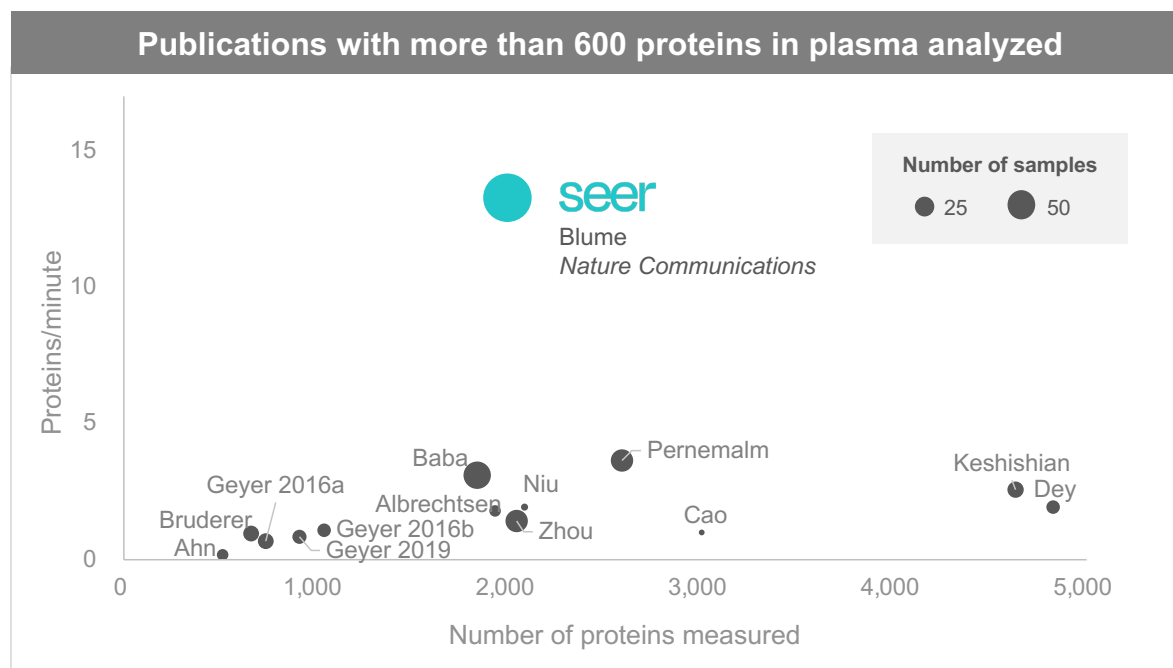
Proteograph Is Designed to Improve Speed and Scale



Lab on a nanoparticle



Conventional proteomics lab



Current unbiased, deep plasma studies are small

Most studies are limited to 2 proteins per minute

Majority of these studies are in the 1000-2000 protein range

Deep, Unbiased, Scalable Proteomics Has the Potential to Lead to Powerful Clinical Insights

Nature Communications publication demonstrates potential of Seer technology for oncology



ARTICLE

<https://doi.org/10.1038/s41467-020-17033-7> OPEN

Rapid, deep and precise profiling of the plasma proteome with multi-nanoparticle protein corona

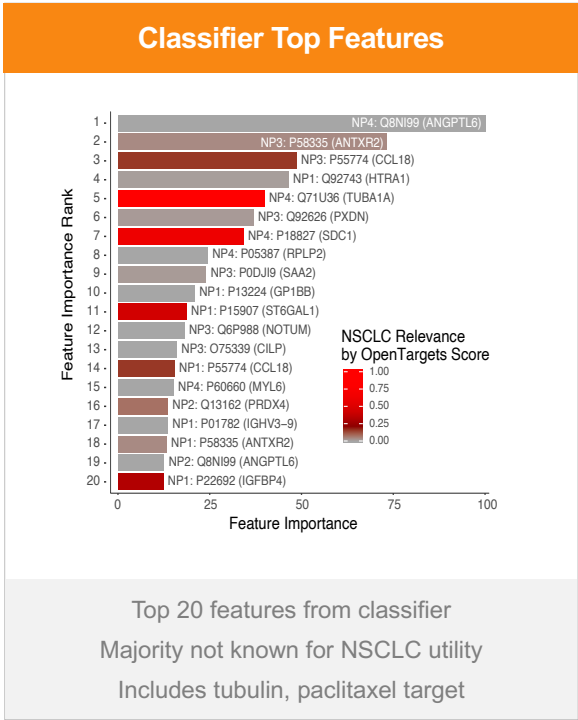
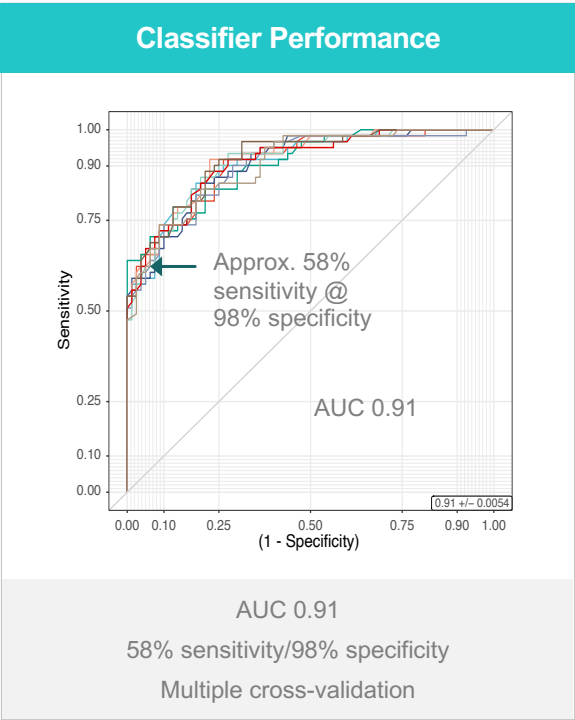
John E. Blum^{1,4,5}, William C. Manning^{1,5}, Gregory Triano^{1,5}, Daniel Hornburg^{1,5}, Michael Figa¹, Lyndal Hesterberg¹, Theodore L. Platt¹, Xiaoyan Zhao², Rea A. Cuernesa², Patrick A. Everley¹, Marwin Ko¹, Hope Lind¹, Max Mahoney¹, David Farkas^{1,3}, Dabhai M. Elgera¹, Craig Stancovski¹, Richard Tangyap¹, Hongwei Xia¹, Ryan Benz¹, Asim Siddiqui¹, Steven A. Carr¹, Philip Ma¹, Robert Langer^{1,3}, Vivek Farias^{1,5,6} & Omid C. Farokhzad^{1,5,6}

Larger-scale, unbiased proteomics studies are constrained by the complexity of the plasma proteome. Here we report a highly parallel protein quantification platform integrating nanoparticle (NP) protein corona with liquid chromatography-mass spectrometry for efficient proteomic profiling. A protein corona is a protein layer adsorbed onto NPs upon contact with biofluids. Varying the physicochemical properties of engineered NPs translates to distinct protein corona patterns enabling differential and reproducible interrogation of biological samples including deep sampling of the plasma proteome. Spike experiments confirm a linear signal response. The median coefficient of variation was 22%. We screened 43 NPs and selected a panel of 5, which detect more than 2,000 proteins from 141 plasma samples using a fully automated workflow in a pilot non-small cell lung cancer classification study. Our streamlined workflow combines depth of coverage and throughput with precise quantification based on unique interactions between proteins and NPs engineered for deep and scalable quantitative proteomics studies.

1. Harvard Medical School, Boston, MA 02115, USA. 2. Dana-Farber Cancer Institute, Boston, MA 02115, USA. 3. Center for Nanomedicine and Department of Anesthesiology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA 02115, USA. 4. These authors contributed equally: John E. Blum, William C. Manning, Gregory Triano, Daniel Hornburg. *email: blum@rics.bwh.harvard.edu (J.E.B.); farokhzad@rics.bwh.harvard.edu (O.C.F.)

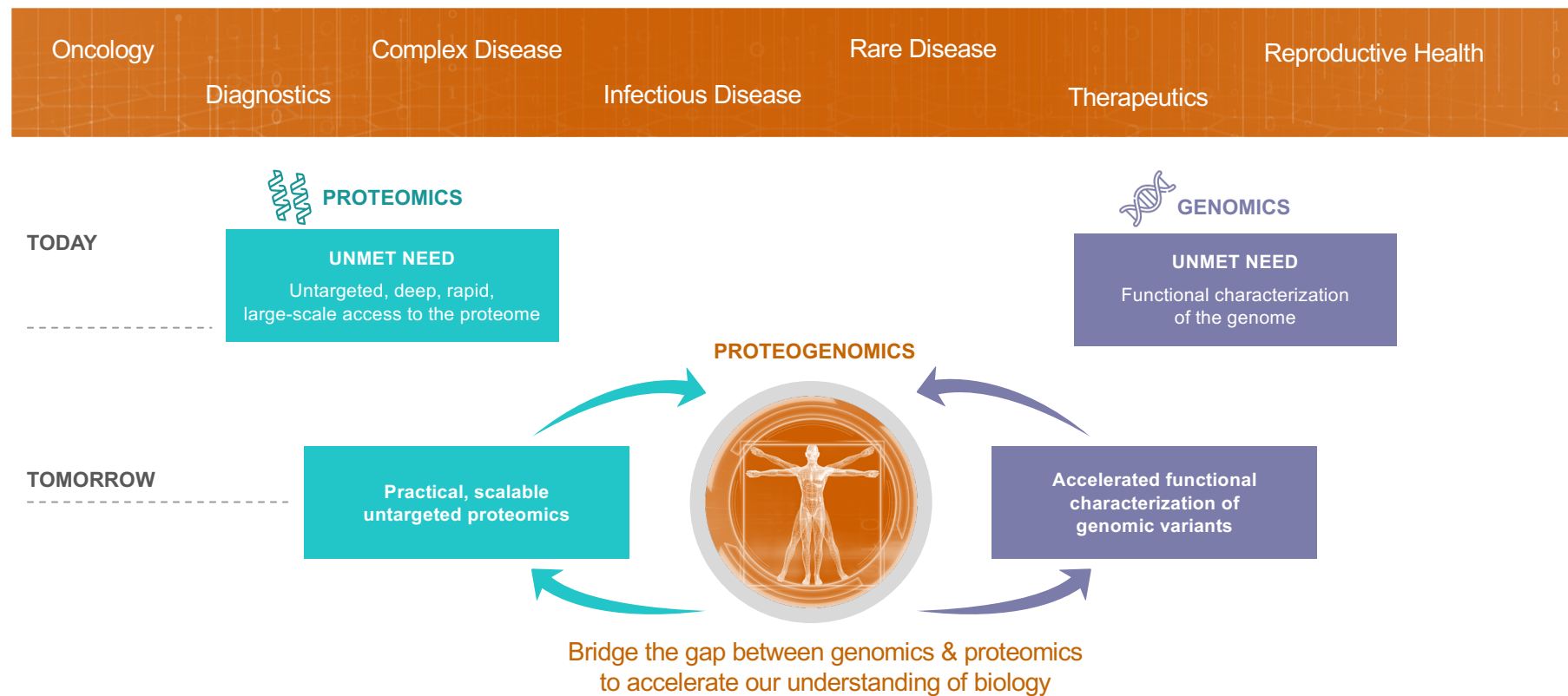
NATURE COMMUNICATIONS | www.nature.com/naturecommunications

Published July 22, 2020



Proteograph Addresses Key Unmet Needs Across Multiple Markets

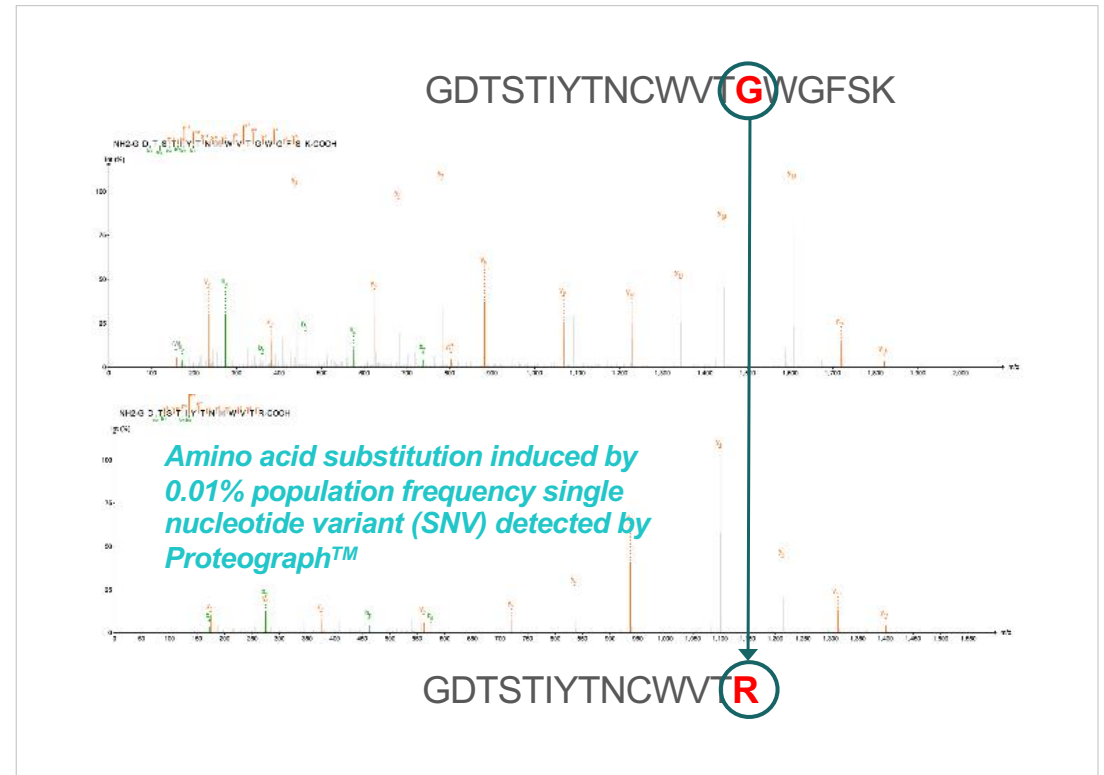
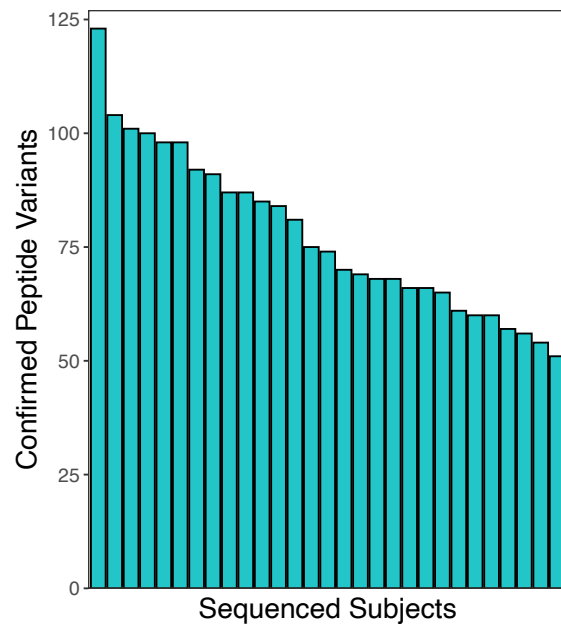
Unmet needs across markets represents substantial opportunity



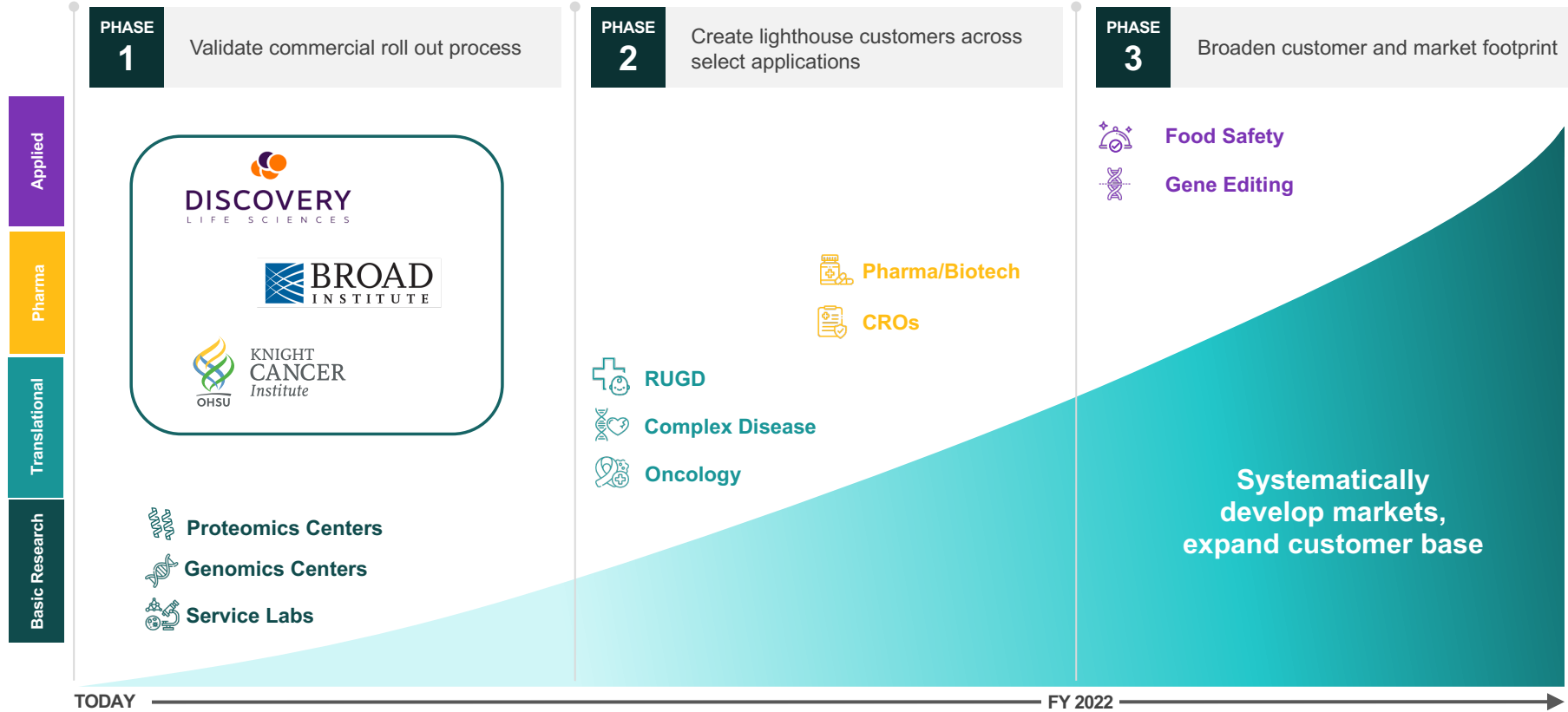
Power of Proteogenomics to Reveal Novel Biological Insights

Matching proteomics and genomic information will unlock biology

Peptide Variants from 29 Subjects

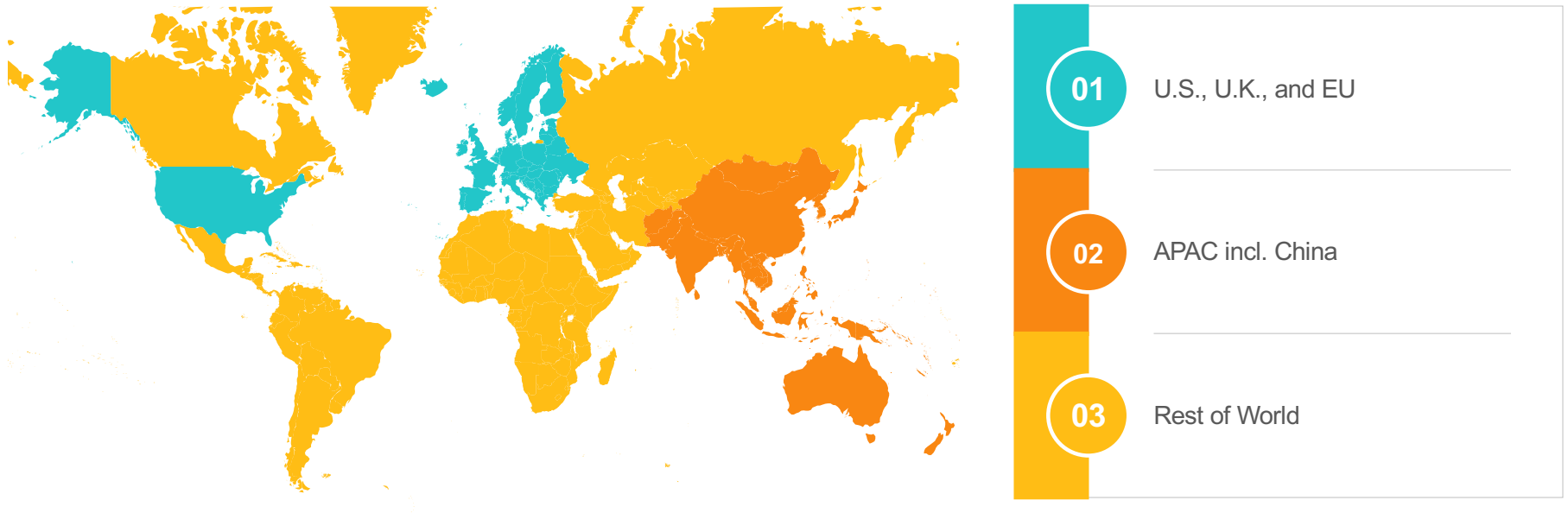


Phased Commercialization Process Underway



Focused, Measured Commercial Expansion Strategy

Provide value-add, customer-centric interaction model with high focus on customer experience



Create strong reference sites



Garner richer customer insight to drive optimal portfolio



Designed to enhance competitive advantage



Deepen customer loyalty

Partnerships to Expand Markets and Accelerate Proteogenomics

Commercial partnerships provide a complete end-to-end workflow to lower barriers to customer adoption

ThermoFisher
S C I E N T I F I C



Key strategic agreements



Enables Seer to provide complete end to end solution to its customers



Will accelerate and simplify adoption especially among genomics customers



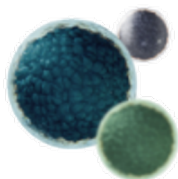
Deepens collaboration with MS companies to deliver better, more integrated future workflows

Driving Market Development Strategies to Expand Opportunity

Building an ecosystem around unbiased, deep proteomics

01

Establish Seer as premier provider in proteomics



02

Enable customers to build on our technology



03

Catalyze novel applications and business models



04

Form strategic relationships to deliver end to end solutions



Technologies that enable rapid, deep and unbiased analysis of the proteome, while retaining the ability to detect and quantify modifications like phosphorylation, are essential now and in the future of biology and clinical medicine.” — Steve Carr, Senior Director of Proteomics, Broad Institute

Robust Commercial Model

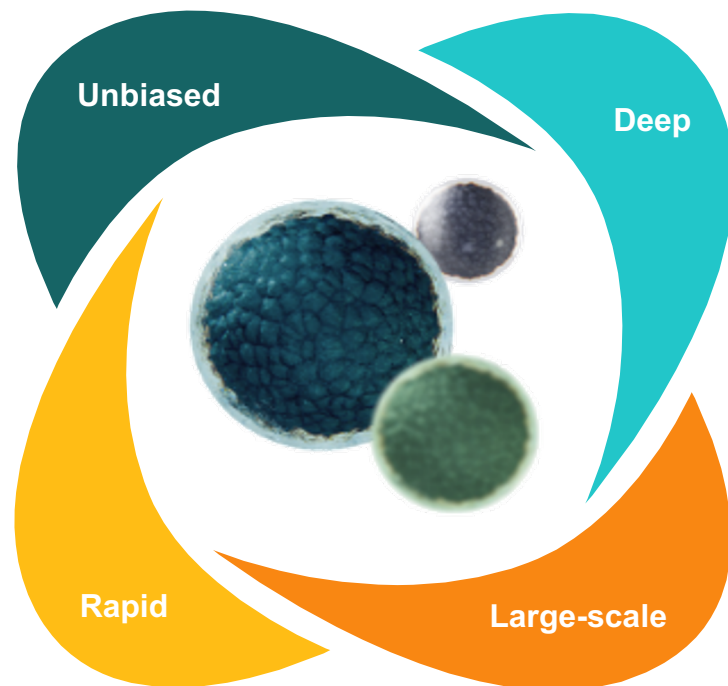


Key targeted attributes

- ✓ Scalable business model
- ✓ Recurring, predictable revenue
- ✓ Ability to drive growth
- ✓ Significant operating leverage
- ✓ Robust margins
- ✓ Capital efficient with high ROIC over long-term

Seer: A New Gateway to the Proteome

Making strong progress since the IPO



Strong commercial progress

- Shipped to a second Phase 1 site
- Added third Phase 1 site



Positioned for market expansion

- Partnered with Thermo and Bruker



Extended technology & team

- Strengthened the management team
- Further evidenced key applications



seer