

# 43<sup>rd</sup> Annual J.P. Morgan Healthcare Conference

Molly He, PhD
CEO & Co-Founder



## 2024: A Year of Breakthroughs Powered by Innovations



>50 >160

Products\*

Publications\*

>500

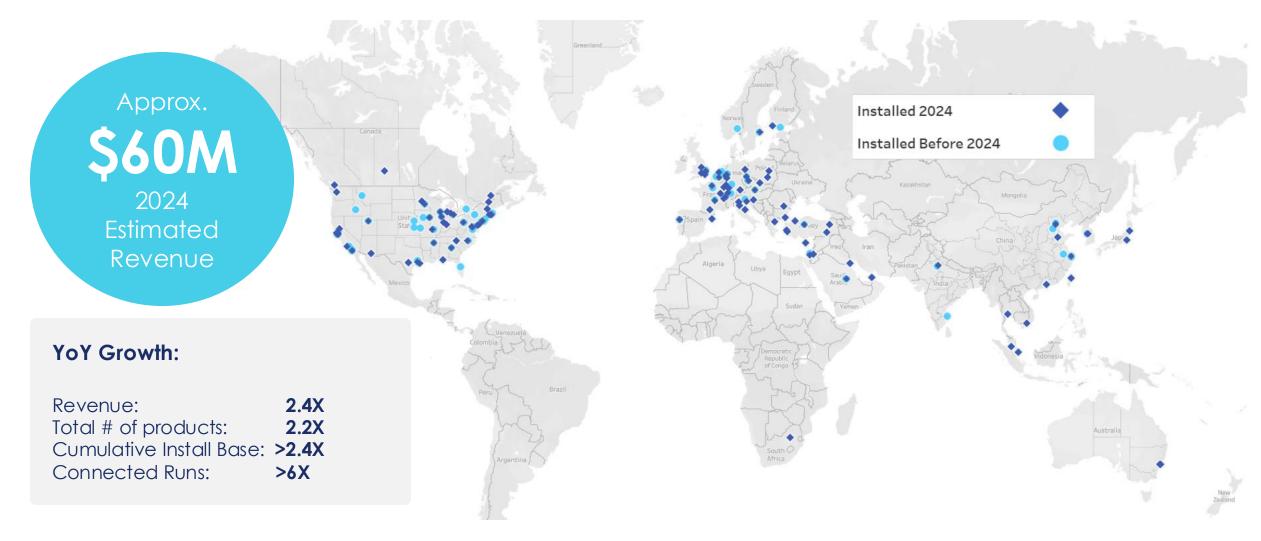
Patents and patent applications\*



\* cumulative



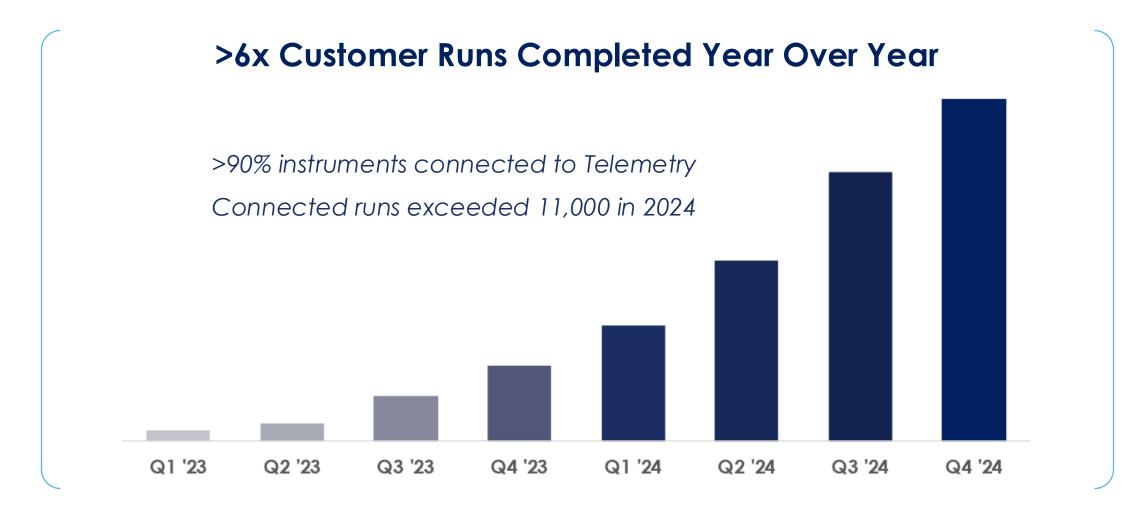
## Promised, Delivered: 2024 More Than Doubled 2023





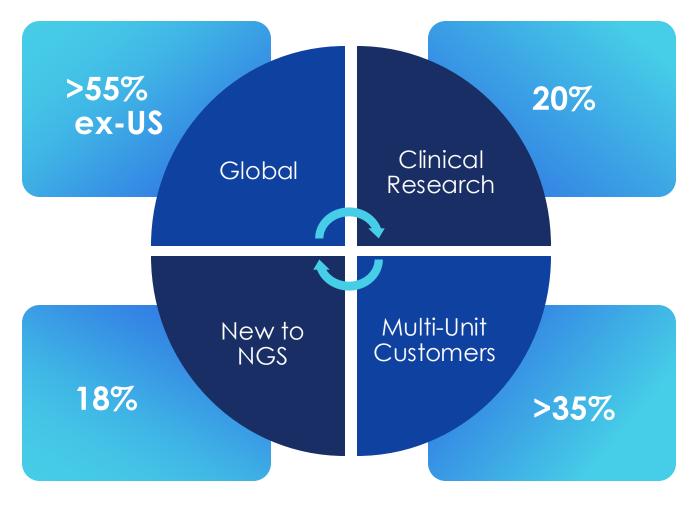
## **Strong Consumable Growth**

Outpacing the growth rate of instruments





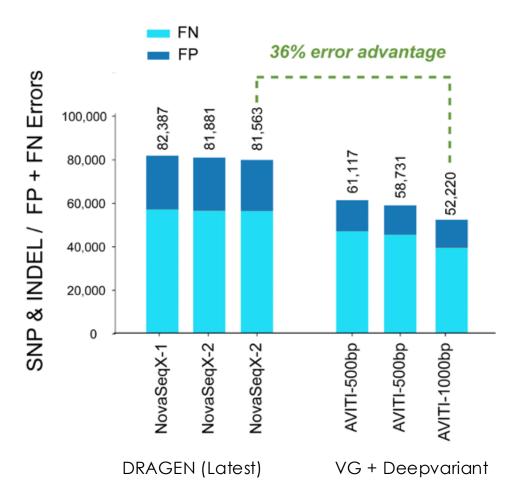
## **Where Does Element Win?**



Numbers reflects bookings for 2024



## AVITI Outperforms NovaSeqX + Dragen 4.3 on Latest NIST Q100 Truth Set



\*Novaseq data were released publicly

#### **Enablers**

Human telomere-to-telemore genome Q100 project
Pangenome-aware DeepVariant

Variation graph data structures, interchange formats, alignment, genotyping, and variant calling methods





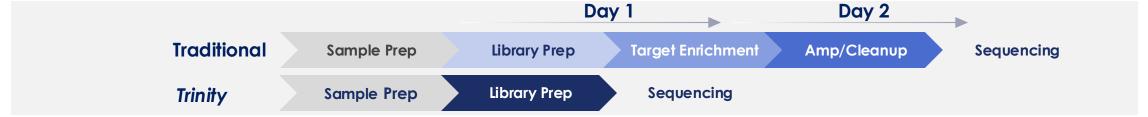
**GPU-Accelerated with Parabricks** 

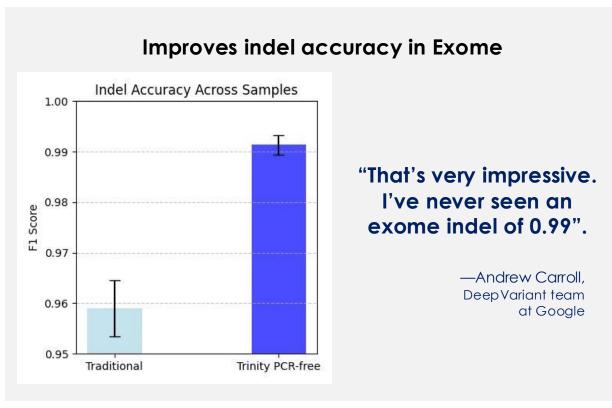
New Q100 truth set has been released as a "draft" version with final release planned early Q1

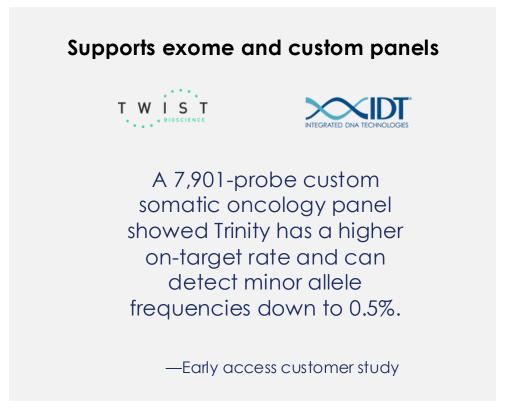


## Trinity is Well-Positioned for Clinical and Translational Research Applications

Integrated targeted sequencing significantly simplifies workflow and improves performance









## **AVITI Going Dx**

Collaboration with Revvity on Newborn Screening (NBS)









- NBS market: ~\$1bn in 2023
- 6-8% CAGR over next 10 years
- Revvity is a global leader in NBS

AVITI Dx to enable additional application markets



## **Element Advancing Proteomics Through Collaboration with Alamar**

Enabling High Throughput Precision Proteomics with Complementary Solutions







Commercial teams working together offer a fully validated bundled solution designed to lower barriers to entry.

Leveraging each others' sales channels to broaden accessibility.





The first and only integrated single cell multi-omic platform solution

First customer ship: December 2024

**15** 

Installed

New to Element

~60% 10X higher

% in **top pharma** vs. AVITI

**AVITI24 unlocks new markets and** new growth trajectory

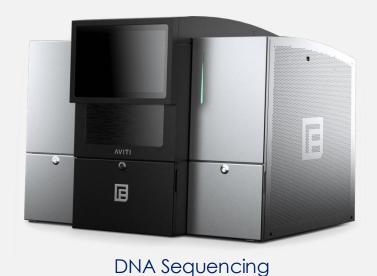




## What is AVITI24?

AVITI: don't replace, EVOLVE

#### **AVITI**



Software and Hardware Upgrades



Integrated AI with greater processing power

#### **AVITI24**



DNA Sequencing with up to 50% higher output



Integrated, **library prep-free** single-cell multi-omic



## AVITI24: The First and Only Integrated Single Cell Multi-omic System

The Quantum Change

## >5X larger

imageable area per run vs industry average

## 3X more

morphology markers

## >2 days prep savings

hands-on prep time

## 1 – 13+ days run savings

imaging & primary analysis time\*

\* 5 – 65+ days savings if normalized for output

Element
Biosciences

Uniquely co-detects within the same biological samples
- offering both temporal and spatial information in a
rapid, scalable, and affordable manner

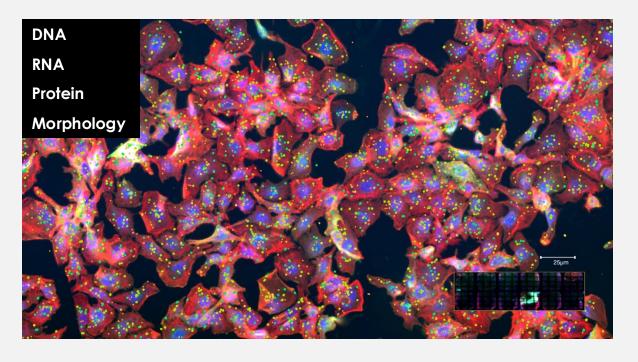


Image courtesy of Kenny Beckman, Ph.D.

Director, University of Minnesota Genomics Center (UMGC)

## **How Our Early Customers are Using AVITI24**

From basic research to drug development

#### Basic Research

**Tumorigenesis** 

Anti-Tumor Immunity

Tumor Microenvironment

Immuno-phenotyping

**CAR-T Development** 

Immunogenicity

### **Drug Development**

## 90% of clinical drug development efforts fail\*

Discovery

Pre-clinical

Translational

Genetic Screens

Compound Screens

Target Validation

Mechanism of Action

Dosing / Toxicity Studies

Biomarker Discovery

Monitoring / Residual Disease

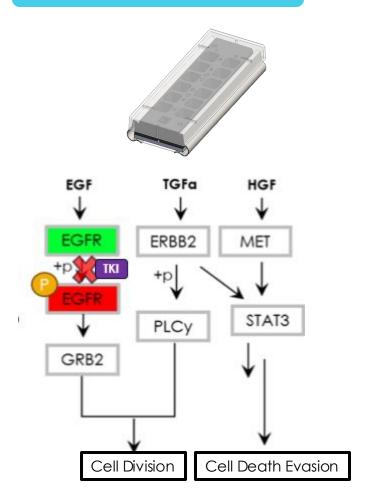
AVITI24 = large scale, multi-dimensional data - faster, better, cheaper



## Multi-Drug, Multi-Timepoint Study in a Single 24-Hour Run

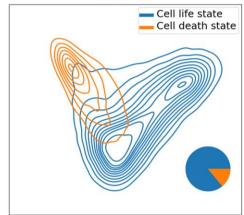
Non-small cell lung cancer drug study shows new insights

#### **Experimental Setup**

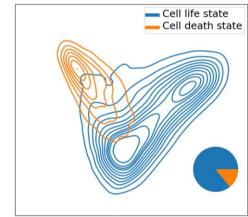


#### **Cell Classifications**

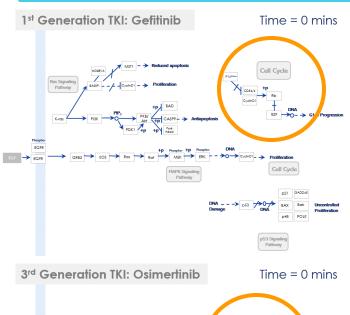
## 1st Generation TKI : Gefitinib 0 minutes

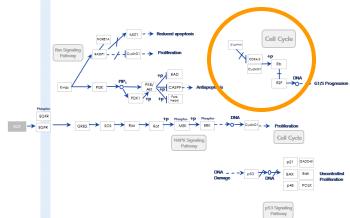


#### 3<sup>rd</sup> Generation TKI : Osimertinib 0 minutes



#### **Mechanism of Action Over Time**







#### Element is Now a Commercial Partner of Human Cell Atlas Consortium



- Global initiative to categorize the <u>37 trillion</u> cells in the human body
- More than 3,800 members, from over 2,000 institutes and 104 countries around the world
- As of 2024, project has mapped approximately 100 million human cells into 18 biological networks

We are excited to play an important role in accelerating the pace and scale of cell biology research through AVITI24's everexpanding innovations and product menu



## Just Getting Started: What's Coming on AVITI24 in 2025

A few examples of a rich portfolio, all on the same system

#### **Proteins:**

- High Plex
- FULLY CUSTOMIZABLE
- With cell paint

#### RNAs:

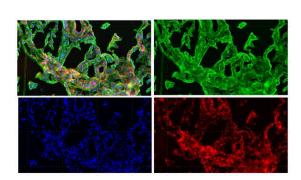
- Library-free whole transcriptome at subcellular resolution directly from the biological samples
- With cell paint and proteins

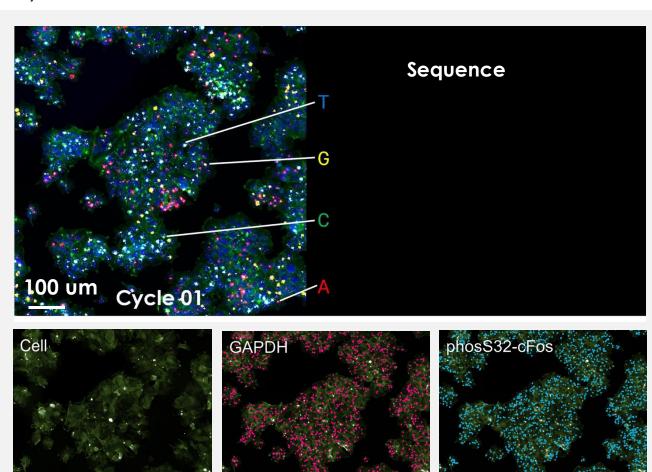
#### Sample Types:

Expand beyond cell lines and cell cultures

Sample from: Nicholas Banovich, Ph.D. Associate Professor and Director Bioinnovation and Genome Sciences Division









**Cell Paint** 

Protein/

Phopho-Protein



AVITI24 INNOVATION PROADMAP

## High Dimensional Biology Unlocked

/WEBINAR /FEB 20, 2025 /9:00AM PST



## Looking Forward to a Rapidly Growing Year of 2025

**Commercial Acceleration** 

Achieve \$100M in topline revenue

**Product Excellence** 

Launch 10 new products, expand platform offerings

**New Market Creation** 

Positioned to enter Dx and therapeutics markets with differentiated products



