



PacBio – Revolutionizing Genomic Sequencing

Bernstein's 39th Annual Strategic Decisions Conference (SDC)

Christian Henry, President and CEO

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MISSION

Enabling the promise
of genomics to better
human health



PacBio at a glance



1,000+

Sequencers sold to date
in 40 countries



~9,000

Publications to date



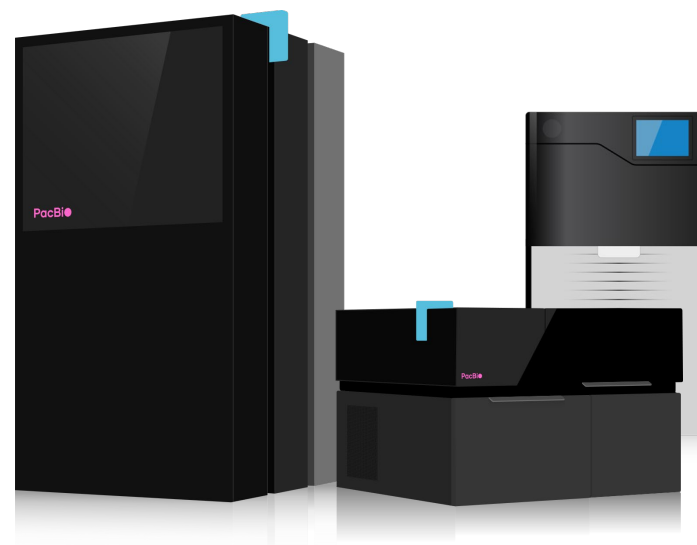
**~230 customer-facing
employees¹**

~415 research + ops



Nine offices

Enabling global collaboration



Instruments



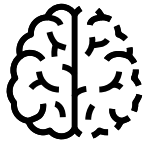
Consumables



Software/informatics

Why is our understanding of DNA and genomics important?

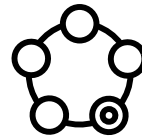
Determining the sequence of DNA helps explain differences between diseased vs normal, pathogenic vs benign to help researchers better diagnose illnesses, treat disease, develop drugs, fight infection, or grow better crops



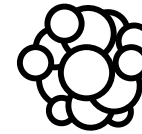
NEURODEGENERATIVE
DISEASE



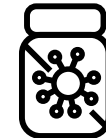
INFECTIOUS
DISEASE



RARE
DISEASE



CANCER



ANTIMICROBIAL
RESISTANCE



CONSERVATION



VACCINE + DRUG
DEVELOPMENT

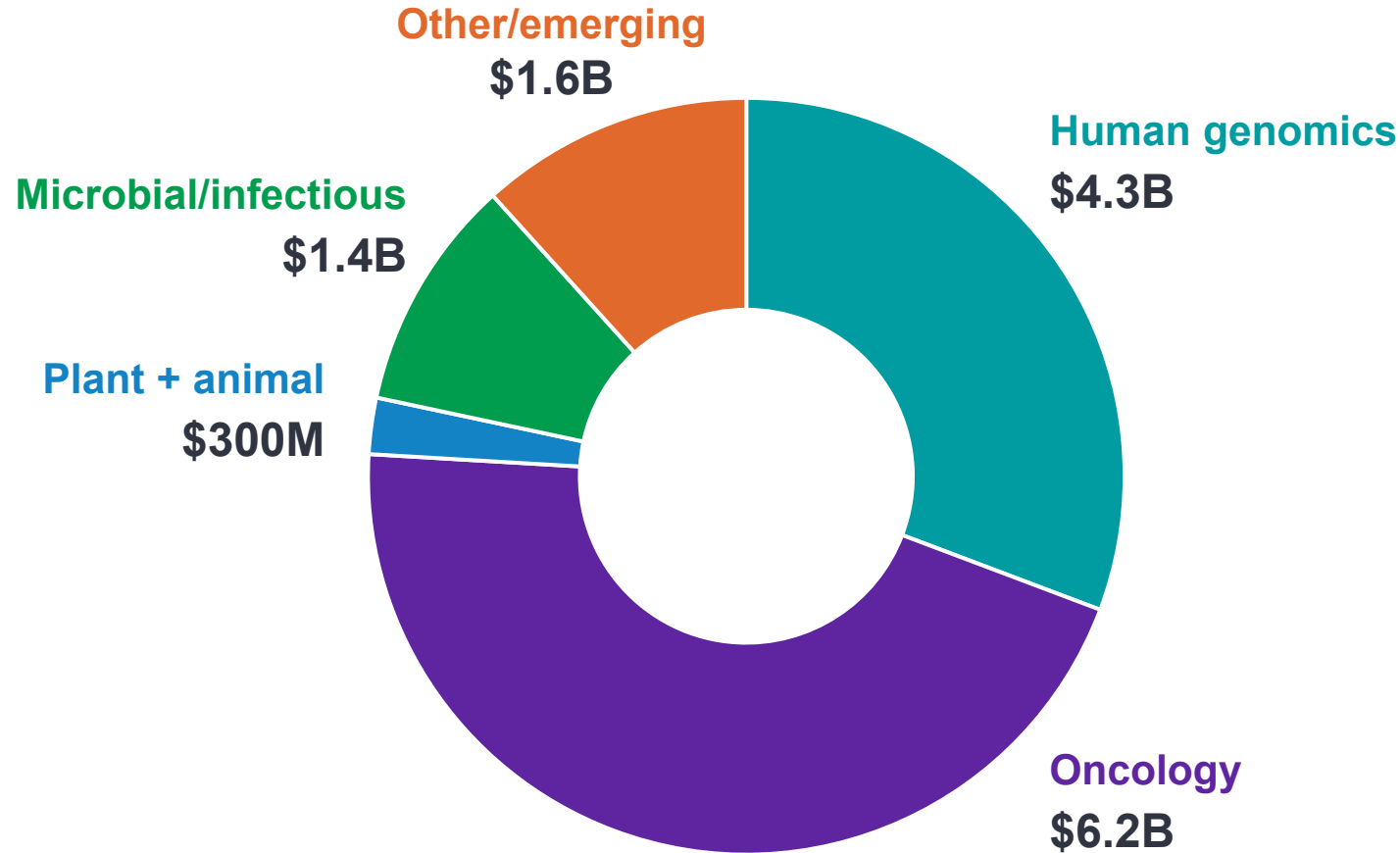


FOOD SUPPLY
+ SAFETY



CLIMATE
CHANGE

We serve a large and growing market estimated to be ~\$14B by 2026¹



Growth predicted across all segments, with highest growth in human germline + oncology

Increased investment in translational studies, including population-scale programs + expansion of sequencing into routine clinical testing

Revio, our flagship sequencer, is designed to deliver HiFi sequencing at scale

1,300 human genomes per year¹



100 M

ZMW per run



360 Gb

HiFi yield per run



24 hour

Sequencing time



15–18 kb

Read length



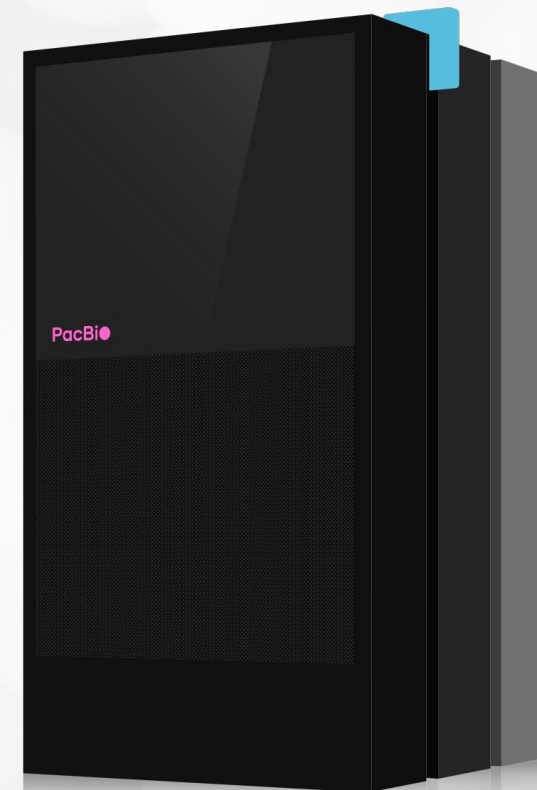
5mC

DNA methylation



90% Q30+

Base quality



PacBio HiFi delivers a new class of Whole Genome Sequencing (WGS)

Short-read genomes	HiFi whole genomes
...	Structural variation
...	Methylation
...	Segmental duplications
...	Phasing/haplotype
SNPs/small indels	SNPs/small indels
✗ Needs a reference genome	✓ Reference quality
✗ Miss 100s of millions of base pairs	✓ Complete T2T assemblies
✗ Blind to ~400 medically relevant genes in dark regions	✓ All known variant classes



Not all genome sequence data is created equal

Nearing first customer shipments for **Onso** – PacBio's first short read platform

Initial beta feedback demonstrating the value of highly accurate reads



PacBio



“We believe that **more accurate reads will be transformative for many genomic applications, including oncology.** We are excited to be evaluating the Onso platform with this in mind.”

Niall Lennon, PhD,
Senior Director of Translational Genomics, Institute Scientist, Broad Institute



“We’ve been **extremely impressed by Onso’s levels of accuracy.** This accuracy can open exciting new opportunities to transform agricultural biotechnology, specifically in areas like gene editing specificity analysis.”

Gina Zastrow-Hayes,
Biotechnology and GT-Genomics Technology Manager, Corteva Agriscience

Weill Cornell Medicine

“Impressive data rolling off the new @PacBio Onso sequencer, with **Q-values staying above 50 for the full length of the read with the SBB chemistry, and starting up at 55 in the beginning!**”

Tweet from Christopher Mason, PhD (@mason_lab)
Professor, Department of Physiology and Biophysics, Weill Cornell Medicine

A portfolio of both short- and long reads allows PacBio to offer the **best-suited technology** in each application for **optimal results**



HiFi sequencing

Delivers long reads with the highest accuracy¹
— even in hard-to-sequence regions



SBB sequencing

Promises significant accuracy improvements
over conventional NGS approaches

Complex disease research
Plant + animal sciences
Neuroscience
Immunology

Rare + inherited disease
Gene editing confirmation
Infectious disease/microbiology
Targeted clinical panels

Therapy selection
Noninvasive prenatal screening
Early-stage cancer screening
Cancer recurrence monitoring

We are off to a great start in 2023 with record quarterly revenue in Q1

\$38.9M

**Record product
and service
revenue in Q1**

38

**Systems shipped
including 32 Revio
systems**

~38%

**2023 revenue
growth at mid
point of range¹**

\$875M

**Cash, cash
equivalents,
+ investments²**

2023 is first step on path to achieve >\$500M in revenue in 2026¹

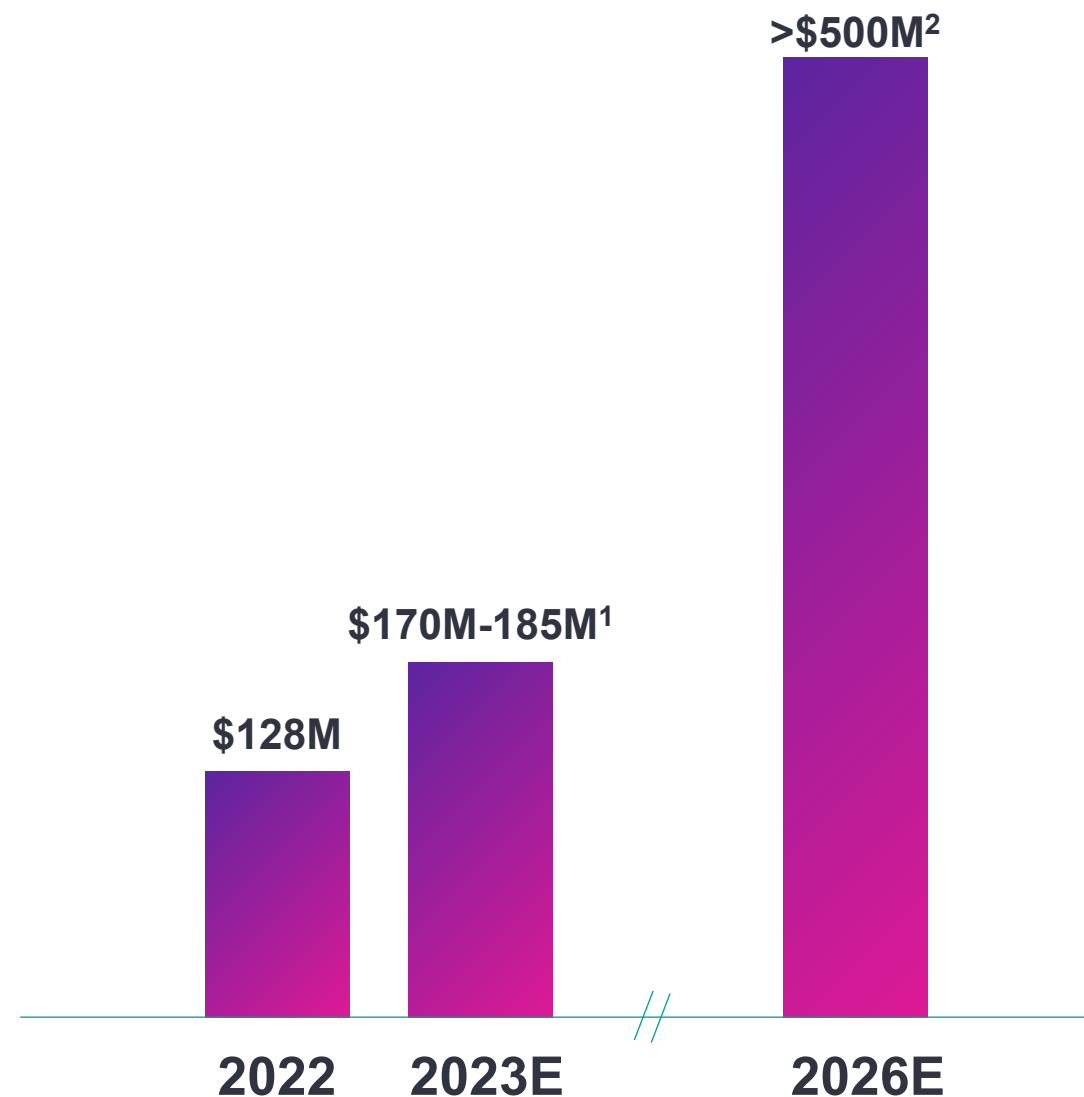
From one platform to **multiple platforms** across long and short reads

More frequent platform launches to expand product portfolio and build momentum

Expanding pull-through with faster run-time, multiple chips, and denser flow cell

End-to-end workflows and kitted solutions targeting applications

Expanding market opportunity and increased market share underpinning growth





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