

STIFEL 2021 VIRTUAL HEALTHCARE CONFERENCE

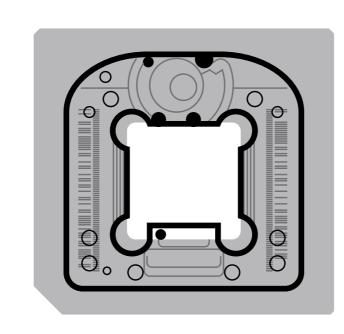
SUSAN KIM, CFO

SAFE HARBOR STATEMENT

All statements in this presentation (and any accompanying oral presentation) that are not historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements generally relate to future events or our future financial or operating performance and are based on management's current beliefs, assumptions and projections and on information available to management as of the date of this presentation. Forward-looking statements include, among other things, statements regarding estimated growth; strategic plans and expected market opportunities; expected benefits related to the Omniome transaction, its technology and a combination of the Company with Omniome, including in connection with potential competitive advantages and synergies; attributes and advantages of SMRT® technology, the Sequel®II/IIe Systems and HiFi sequencing, including expected research and diagnostic benefits; expectations regarding reduction of sequencing costs; research and development plans; commercial collaborations and partnerships, including in connection with COVID-19 surveillance; product development and commercialization expectations, including those related to the Sequel IIe System and expansion of the sales team; future applications, uses, quality, performance, or benefits of using products or technologies, product improvements, or updates; the impact of the COVID-19 pandemic, and other future events. Accordingly, you should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties, changes in circumstances and other factors that are, in some cases, beyond the Company's control and could cause actual results to differ materially from the information expressed or implied by forward-looking statements made in the presentation. Factors that could materially affect actual results can be found in our filings with the Securities and Exchange Commission, including our most recent reports on Forms 8-K, 10-K and 10-Q, and include those listed under the caption "Risk Factors." The Company undertakes no obligation to revise or update information in this presentation to reflect events or circumstances in the future, even if new information becomes available.

PACBIO OFFERS A COMPREHENSIVE LONG-READ SEQUENCING PLATFORM



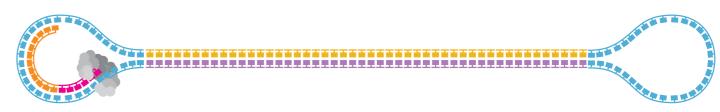


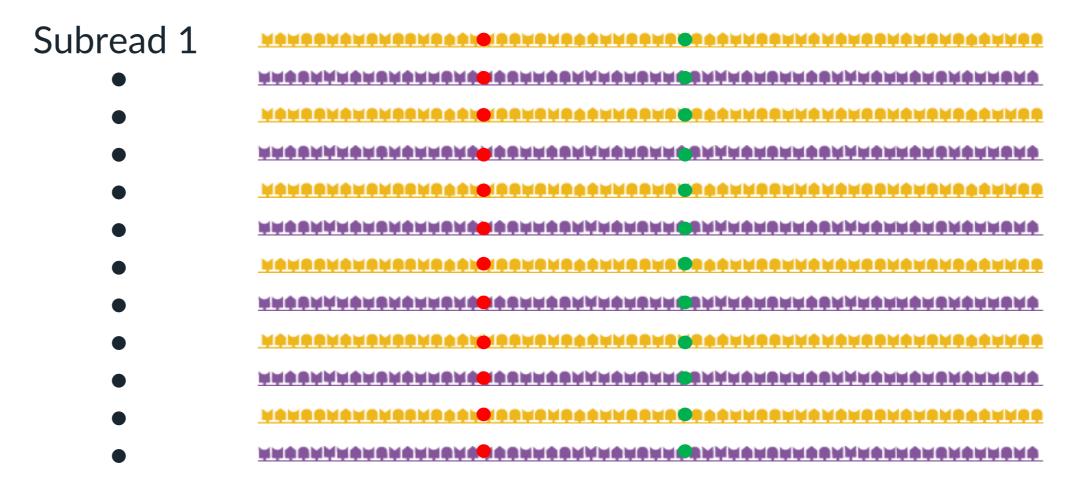
8 MILLION ZMWS SMRT CELL 8M



SMRT ANALYSIS SOFTWARE

Circular consensus sequencing (CCS)





Subread n

Generate high quality reads (>Q30) up to 20 kb

"PACBIO [HiFi] PROVIDES THE LOWEST ERROR RATE OUT OF ALL TECHNOLOGIES"

nature biotechnology

Article | Published: 09 September 2021

Performance assessment of DNA sequencing platforms in the ABRF Next-Generation Sequencing Study

Jonathan Foox , Scott W. Tighe , […] Christopher E. Mason ☐ Nature Biotechnology 39 , 1129–1140 (2021)

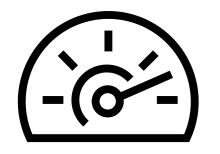
Abstract

Assessing the reproducibility, accuracy and utility of massively parallel DNA sequencing platforms remains an ongoing challenge. Here the Association of Biomolecular Resource Facilities (ABRF) Next-Generation Sequencing Study beachmarks the performance of a set of sequencing instruments (HiSeg/* aSeq/paired- in the challenge).

"PacBio [HIFI] had the highest reference-based mapping rate and lowest non-mapping rate."

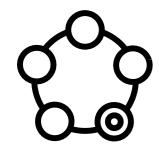
"Within both homopolymer and STR classes, PacBio [HIFI] showed the lowest mismatch rate."

"PacBio [HIFI] achieved the highest precision [in accessing variants in clinically relevant regions]."



Performance benchmark of Illumina HiSeq/NovaSeq | Ion S5/Proton | PacBio Sequel II ONT PromethION/MinION/Flongle | BGISEQ-500/MGISEQ-2000 | GenapSys GS111

OPPORTUNITIES FOR PACBIO'S IMPACT IN HUMAN GENETICS



RARE DISEASE

>50% of RID samples lack an explanation even after srWGS¹



CANCER

Complex structural variations increase risk for HBOC⁵



PHARMACOGENOMIC

35% of patients on SSRI medications see no effect²



REPRODUCTIVE

NGS is blind to 10% of carrier screening genes⁶



NEURO

40+ neurological disorders are caused by tandem repeats^{3,4}



TRANSPLANTS

Ultra-high-resolution HLA typing could increase 5-year survival rate by 25%⁷

^{1.} https://www.annualreviews.org/doi/full/10.1146/annurev-genom-083118-015345

^{2.} https://www.mdpi.com/2073-4425/11/11/1333/htm

^{3.} https://www.nature.com/articles/nrg.2017.115

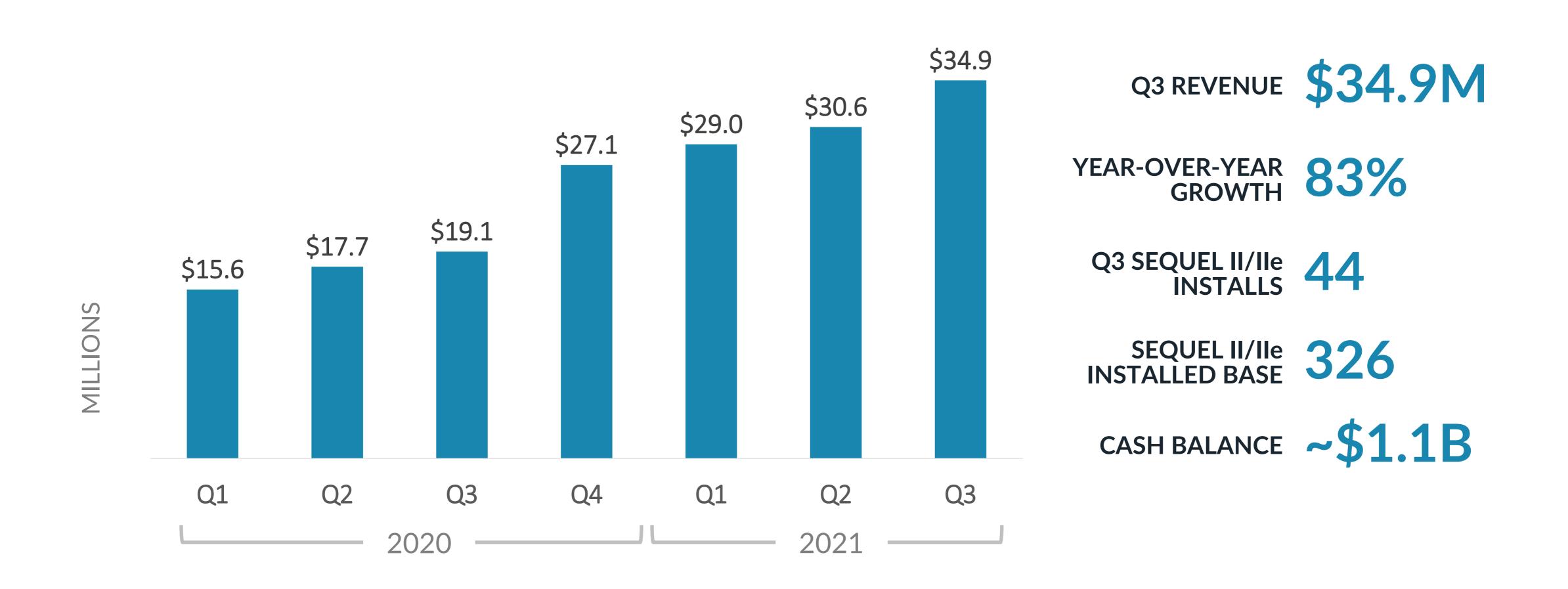
^{4.} https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6485936/

^{5.} https://jmg.bmj.com/content/early/2020/12/14/jmedgenet-2020-107320

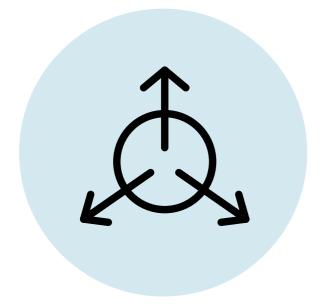
^{6.} https://journals.plos.org/plosgenetics/article?id=10.1371/journal.pgen.1008409

^{7.} https://www.sciencedirect.com/science/article/pii/S1083879118317014?via%3Dihub

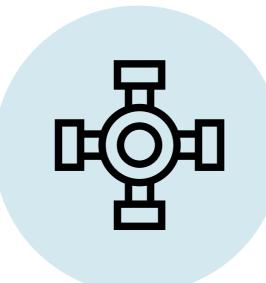
SIXTH CONSECUTIVE QUARTER OF GROWTH AND NEW RECORD



STRATEGIC OBJECTIVES FOR 2021



1. EXPAND
COMMERCIAL REACH



2. DRIVE PRODUCT DEVELOPMENT PIPELINE



3. MARKET LEADERSHIP IN WHOLE GENOME CLINICAL SEQUENCING

acquire Omniome

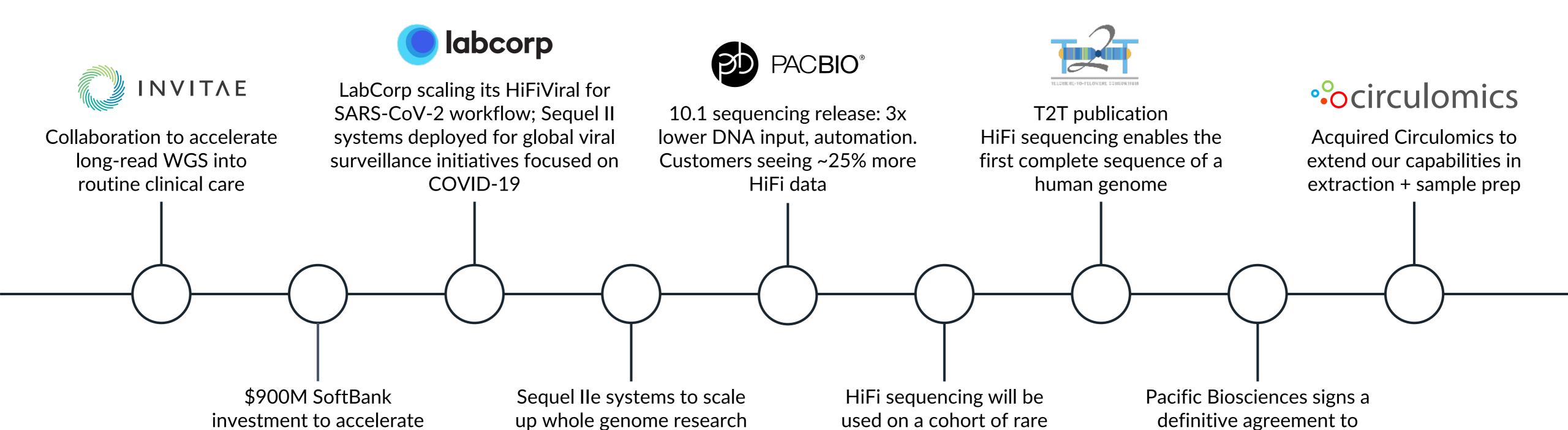
(completed 9/20)

OMNIOME

commercial + R&D

SoftBank

MAKING EXCELLENT PROGRESS IN OUR STRATEGIC OBJECTIVES IN 2021



disease cases

Rady

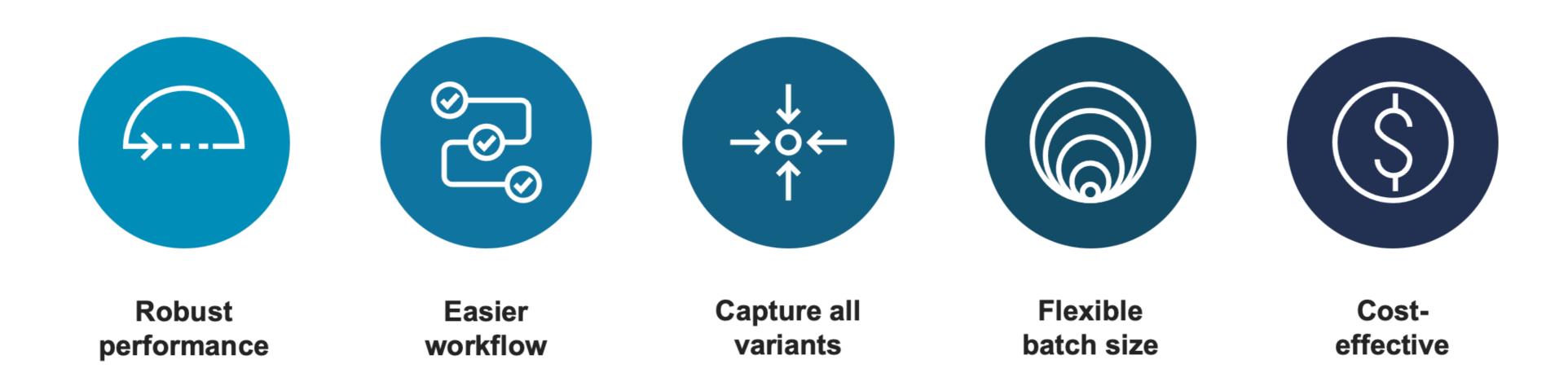
initiatives focused on rare

disease diagnosis

Children's Mercy

INTRODUCED HIFI VIRAL SARS-CoV-2 KIT THIS QUARTER

Quickly and efficiently scale genomic surveillance by sequencing with an accurate and robust solution that captures all variants



ENABLING THE PROMISE OF GENOMICS TO BETTER HUMAN HEALTH

We create some of the world's most advanced sequencing technologies.

