



J.P. Morgan 39th Annual Healthcare Conference

January 14, 2021

Christian Henry

President & Chief Executive Officer

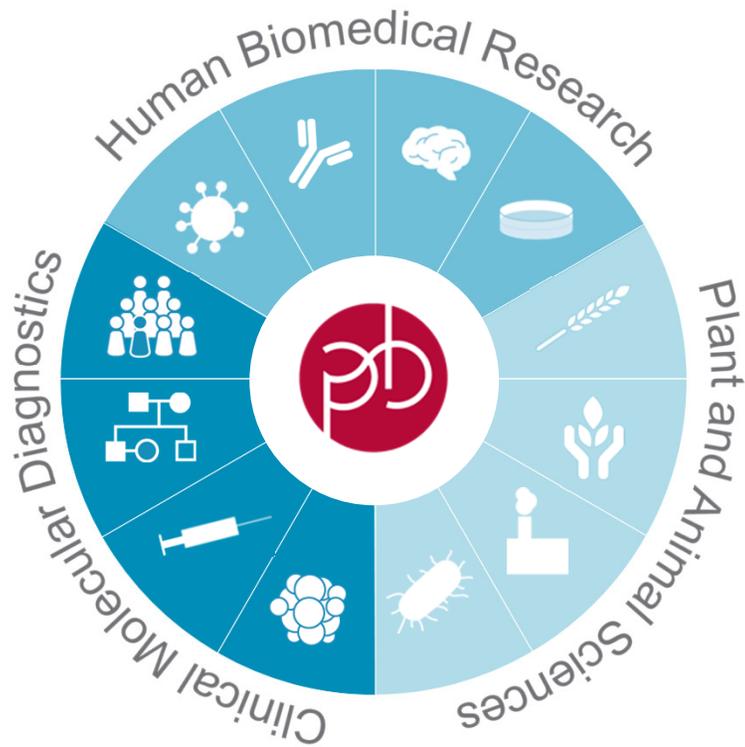
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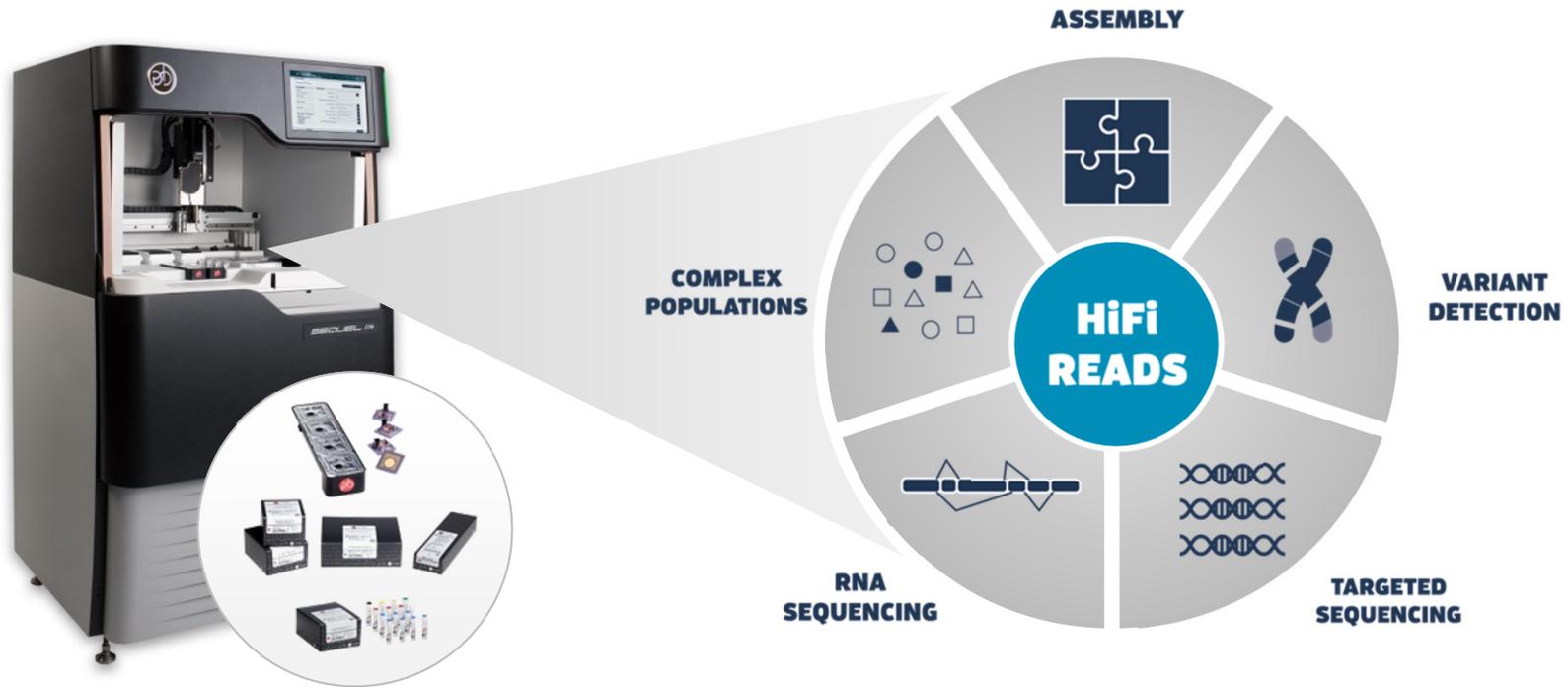
The COVID-19 pandemic and efforts to control its spread have affected our financial results for the three and nine months ended September 30, 2020 and will likely continue to adversely impact our revenues during the fourth quarter of 2020. Due to the uncertain scope and duration of the pandemic, we cannot reasonably estimate the future impact to our operations and financial results. Even after the COVID-19 pandemic has subsided, we may continue to experience an adverse impact to our business as a result of its global *economic impact*, including any recession that has occurred or may occur in the future.

A Global Leader in Complete & Accurate Long-Read Sequencing

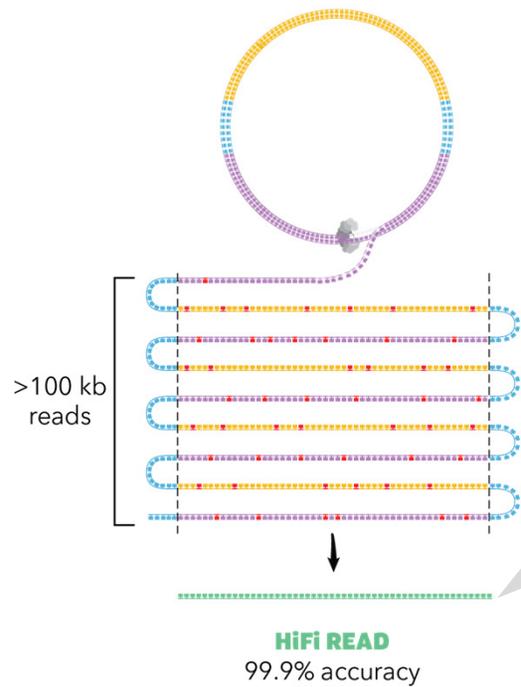


Markets & Markets Report: Next Generation Sequencing Market Global Forecasts to 2025

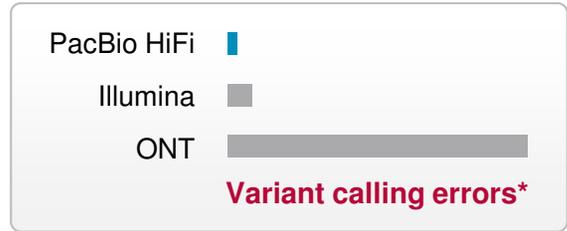
Technology to Deliver Comprehensive Solutions



PacBio HiFi Reads are Transforming Genomics



- Even coverage
- Genome completeness
- Extraordinary accuracy
- Allele resolution, long-range phasing
- Best performance for all variant classes
SNVs | Indels | Structural Variants



*<https://precision.fda.gov/challenges/10/view/results>

Sequel IIe System – HiFi Reads with a Dramatic Reduction in Data Cost



Launched Q4 2020

On-instrument data processing

~90% reduction in data storage needs

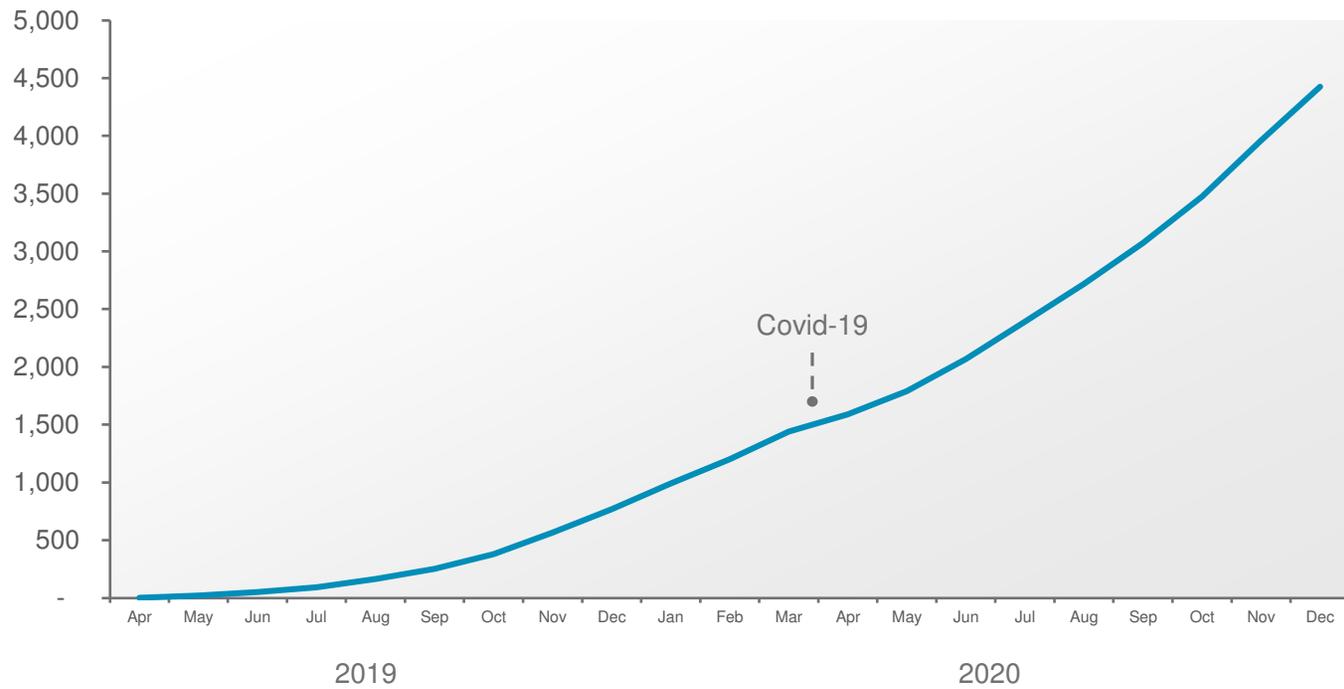
~70-85% reduction in data analysis time

Cloud enablement

Compute cost savings of \$700/human genome

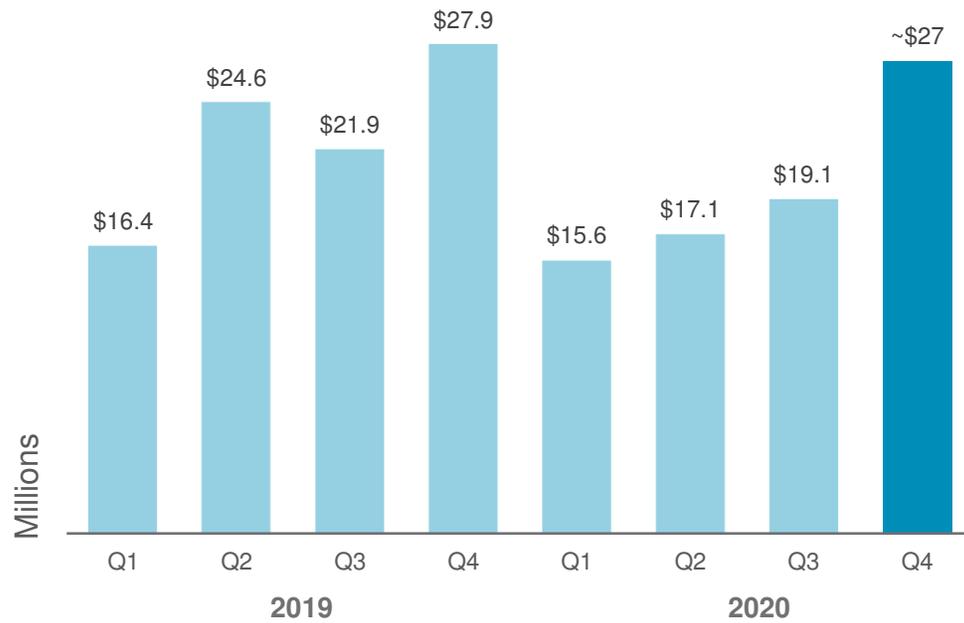
Sequel II/Ile Utilization Accelerated

Cumulative Terabases Sequenced



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Preliminary Q4 Revenues



Revenue | **~\$27M**

Sequential Growth | **41%**

Ending Cash/Investments Balance | **>\$318M**

Sequel II/IIe Install Base | **203**

LabCorp Expands PacBio Sequencing for CDC COVID Work

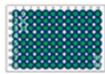
JANUARY 7, 2021 | SOURCE: LABCORP

Labcorp Awarded CDC Contract to Study Variants of COVID-19 Virus and Improve Public Health Response

Genomic Sequencing Aims to Help Define Changes in Transmission and Identify New Mutations

Sequencing Pipeline

Condensed Plate of Positive High Value Samples → Whole Genome Tiled Amplification (2 Pools of Overlapping 1.2kb Amplicons) → Library Preparation → PacBio Sequel II



- 600-1000 genomes per SMRT cell with CCS reads
- Whole viral genome sequencing with Sequel II
 - No missing regions of the genome
 - Very high resolution
 - Able to identify new mutations with confidence



Brian Krueger • 1st

Associate Vice President, Technical Director, R&D at LabCorp

1d • 🌐

Our behind the scenes work to characterize the SARS-CoV2 pandemic using **Pacific Biosciences** sequencing is now transitioning into a much larger collaboration with the CDC. Amazing work from the entire Molecular Micro and Genetics R&D teams, the LabCorp Center for Bioinformatics and all of the operations labs nationwide. This is very important work that is a long time coming and I couldn't be more proud of the team and the LabCorp family for the work they've put in while at the same time testing hundreds of thousands of SARS-CoV2 samples every day. Truly remarkable work. **Michael Levandoski, Ph.D.**, **Stan Letovsky**, **Lakshmanan Iyer**, **Jonathan Williams**, **Qiangong Zeng**, **John Pruitt**



Labcorp

96,622 followers

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Labcorp is pleased to announce we will be working with the CDC in their effort to study mutations to the COVID-19 virus. We will be helping the **Centers for Disease Control and Prevention** in a large-scale longitudinal genomic survey that aims to improve understanding of these mutations, how they are transmitted, and how the public health response to these mutations can be improved. Through this program, the **#CDC** aims to more than double the rate at which it conducts genomic sequencing of the **#COVID19** virus.

Learn More: <https://bit.ly/3s6QA7Y>

<https://www.labcorp.com/coronavirus-disease-covid-19/news/labcorp-awarded-cdc-contract-study-variants-covid-19-virus-and-improve-public-health-response>

<https://www.youtube.com/watch?v=NfK-C-mqv7Q&feature=youtu.be>; https://www.linkedin.com/posts/briankruegerphd_cdc-covid19-activity-6753086749557198848-aNI-



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Darwin Tree of Life (DToL) Initiative Demonstrates our Leadership in Plant and Animal Genomics



>300 species sequenced to date with PacBio HiFi data

Plan to sequence ~2,000 additional genomes as part of first, two-year phase



Sequence all 66,000 UK species over 10 years

Wellcome Sanger Institute Increases Investment in PacBio Long-Read Sequencing to Support Darwin Tree of Life Research Initiative

Seven new Sequel IIe Systems will support expanded generation of high-quality genomes for improving fundamental understanding of biology and aiding biodiversity conservation



<https://www.darwintreeoflife.org/>; <https://www.youtube.com/watch?v=aK1Ek39z4sA>; <http://ow.ly/YtJ550D3icv>



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Strategic Objectives for 2021

1 | Expand Commercial Reach



2 | Drive Product Development Pipeline



3 | Market Leadership in Whole-Genome Clinical Sequencing



Aggressive Commercial Expansion Objectives to Enable Growth

1 | Expand executive team with commercial experience

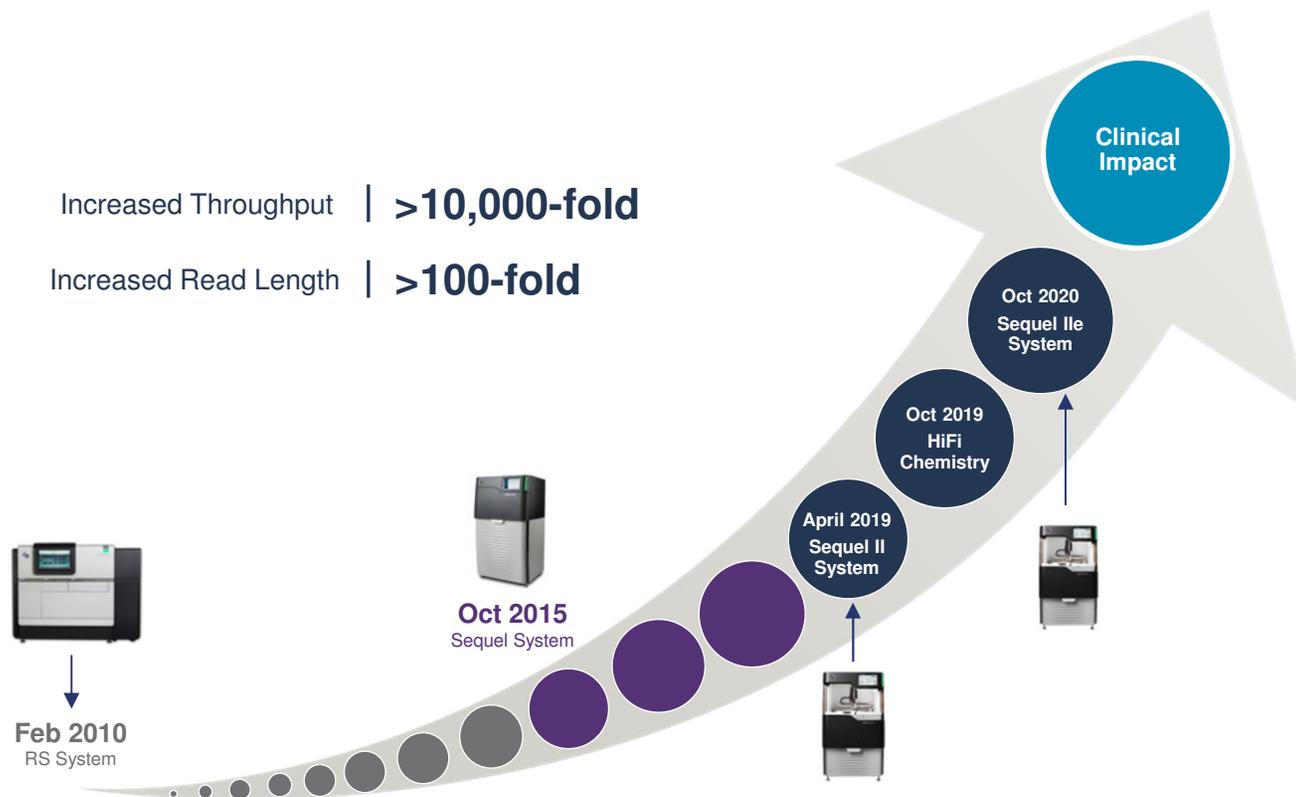
2 | More than double our commercial footprint

3 | Increase digital presence

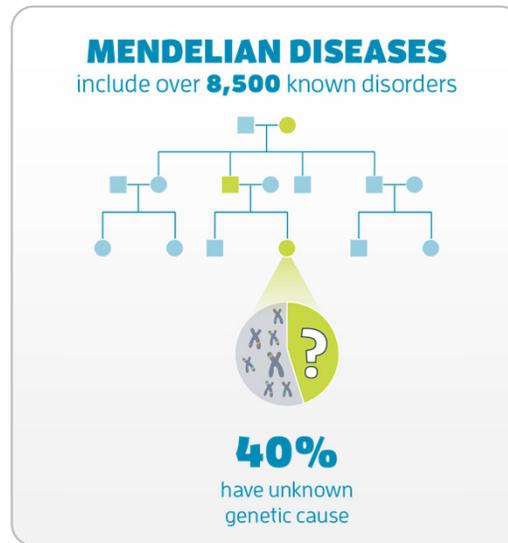
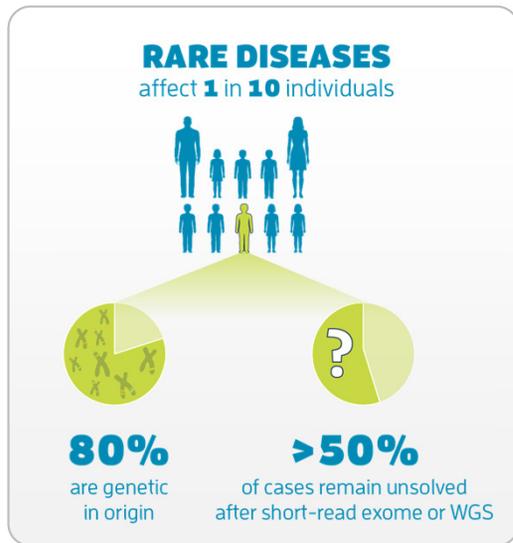
Global Commercial Footprint



A Decade of Development Ready for Clinical Impact



Clinical Impact: Rare and Inherited Disease Diagnosis

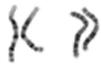


PacBio provides a more comprehensive and accurate whole genome

Our goal in 2021 is to demonstrate the increased Dx power with PacBio in Rare and Inherited Disorders as the first of many clinical indications

Clinical WGS is the future of medicine

More Complete Detection Yields More Diagnoses



Karyotype	Microarrays	Short-read Sequencing		Long-read Sequencing
		Exome	Genome	HiFi Genome
Chromosomal abnormalities	Copy-number variants >50kb	SNVs & indels, some large exonic variants	SNVs, indels, some large variants	SNVs, indels, SVs, CNVs, phasing, translocations, inversions, repeat expansions
~5% solve rate				
Phelan Proc. of Greenwood Genetics Center 1996	De Vries AJHG 2008	De Ligt NEJM 2012	Gilissen Nature 2014	Collaborations, presentations & publications to date

Adoption by Leading Medical Institutes & Consortia



Radboud Universiteit

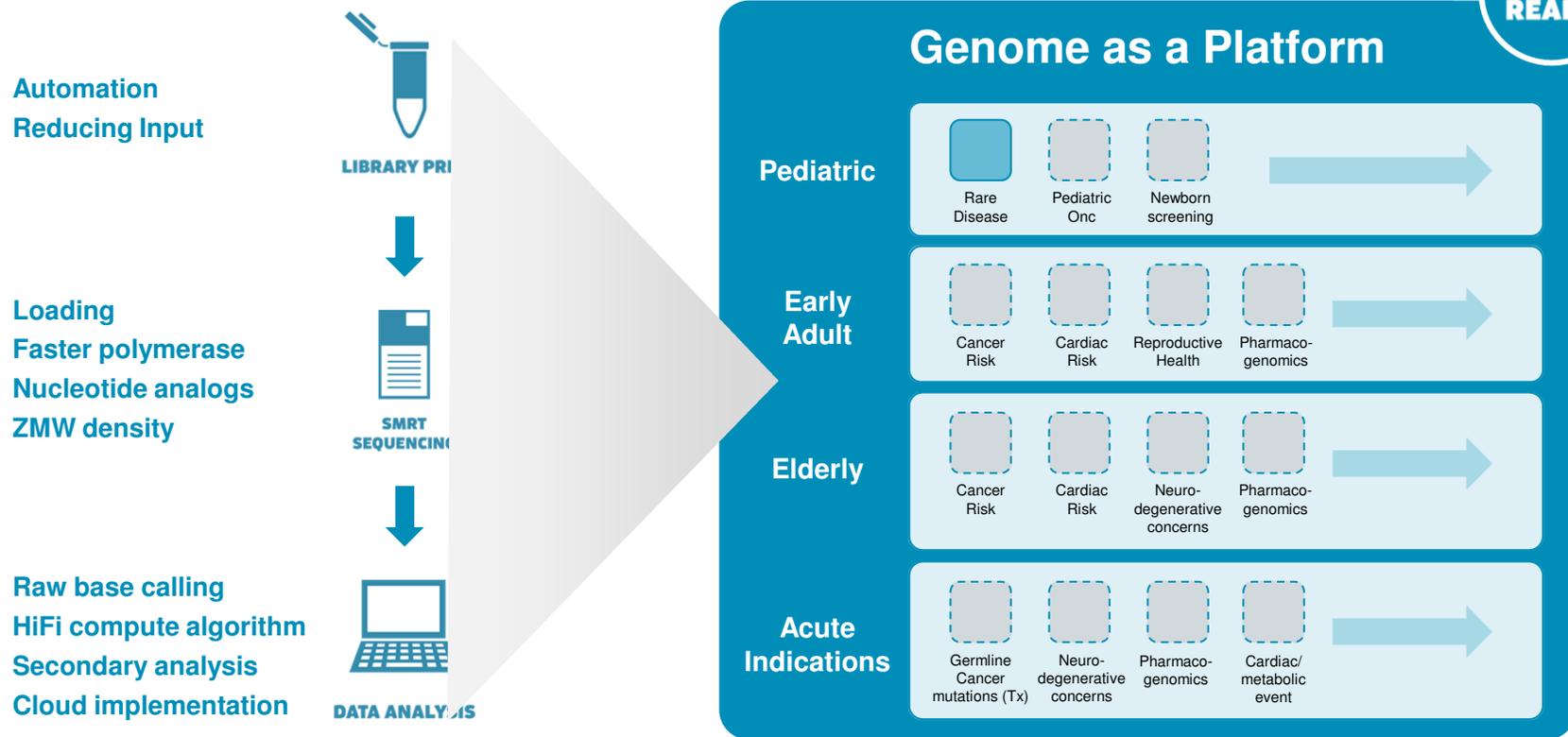


<https://www.pacb.com/blog/solve-rd-team-adopts-pacbio-sequel-ii-system-to-solve-rare-diseases/>
<https://investor.pacificbiosciences.com/news-releases/news-release-details/childrens-mercy-kansas-city-teams-pacific-biosciences-fight-rare>
<https://allofus.nih.gov/news-events-and-media/announcements/nih-funds-new-all-us-research-program-genome-center-test-advanced-sequencing-tools>
<https://investor.pacificbiosciences.com/node/11431/pdf>



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Accelerating Development to Support a WGS Workflow



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Collaboration to Accelerate Long Read WGS into Routine Clinical Care



Joint development of production scale high-throughput clinical whole genome sequencing platform, leveraging PacBio's HiFi Reads

Expected to deliver the most clinically relevant whole genome at substantially less than \$1,000, opening adoption in routine medical care



Enables Invitae to dramatically scale their whole genome testing capabilities

Summary

- Leading long-read sequencing capability
- Launch of Sequel IIe drives strong performance
- Our collaboration with Invitae aims to deliver on the promise of routine WGS in medicine
- Commercial expansion will help drive growth in 2021

