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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

End-to-end solutions

SAMPLE PREP  ➔  SMRT SEQUENCING  ➔  DATA ANALYSIS

Total Addressable Market Opportunity

>$20 Billion

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

![Diagram showing HiFi reads and variant calling errors](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

![Graph showing the increase in cumulative terabases sequenced from April to December 2019 and 2020, with a notable increase due to Covid-19 in March 2020.]
Preliminary Q4 Revenues

- Revenue: ~$27M
- Sequential Growth: 41%
- Ending Cash/Investments Balance: >$318M
- Sequel II/Ile Install Base: 203
LabCorp Expands PacBio Sequencing for CDC COVID Work

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

- 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

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, Qiandong Zeng, John Pruitt

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.


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

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

>2X
A Decade of Development Ready for Clinical Impact

Increased Throughput | >10,000-fold
Increased Read Length | >100-fold
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

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<thead>
<tr>
<th>Karyotype</th>
<th>Microarrays</th>
<th>Short-read Sequencing</th>
<th>Long-read Sequencing</th>
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<tbody>
<tr>
<td>Chromosomal abnormalities</td>
<td>Copy-number variants &gt;50kb</td>
<td>SNVs &amp; indels, some large exonic variants</td>
<td>SNVs, indels, some large variants</td>
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</tbody>
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<thead>
<tr>
<th>~5% solve rate</th>
<th>Exome</th>
<th>Genome</th>
<th>HiFi Genome</th>
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Collaborations, presentations & publications to date
Adoption by Leading Medical Institutes & Consortia

https://www.pacb.com/blog/solve-rd-team-adopts-pacbio-sequel-ii-system-to-solve-rare-diseases/
https://investor.pacificbiosciences.com/node/11431/pdf
Accelerating Development to Support a WGS Workflow

Automation
Reducing Input

Loading
Faster polymerase
Nucleotide analogs
ZMW density

Raw base calling
HiFi compute algorithm
Secondary analysis
Cloud implementation

Genome as a Platform

Pediatric
- Rare Disease
- Pediatric Oncology
- Newborn screening

Early Adult
- Cancer Risk
- Cardiac Risk
- Reproductive Health
- Pharmaco-genomics

Elderly
- Cancer Risk
- Cardiac Risk
- Neuro-degenerative concerns
- Pharmaco-genomics

Acute Indications
- Germline Cancer mutations (Tx)
- Neuro-degenerative concerns
- Pharmaco-genomics
- Cardiac/metabolic event
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