

# The future of newborn sequencing research



revvity

A customizable, end-to-end sequencing workflow  
equipped to your laboratory's needs.

For research use only. Not for use in diagnostic procedures

# Newborn sequencing research, reimagined.

With the latest advancements in next-generation sequencing (NGS), we are experiencing rapid acceleration in genetic disease research. While NGS maintains the power to detect genetic variants responsible for many diseases, these technologies have been inaccessible for many laboratories.

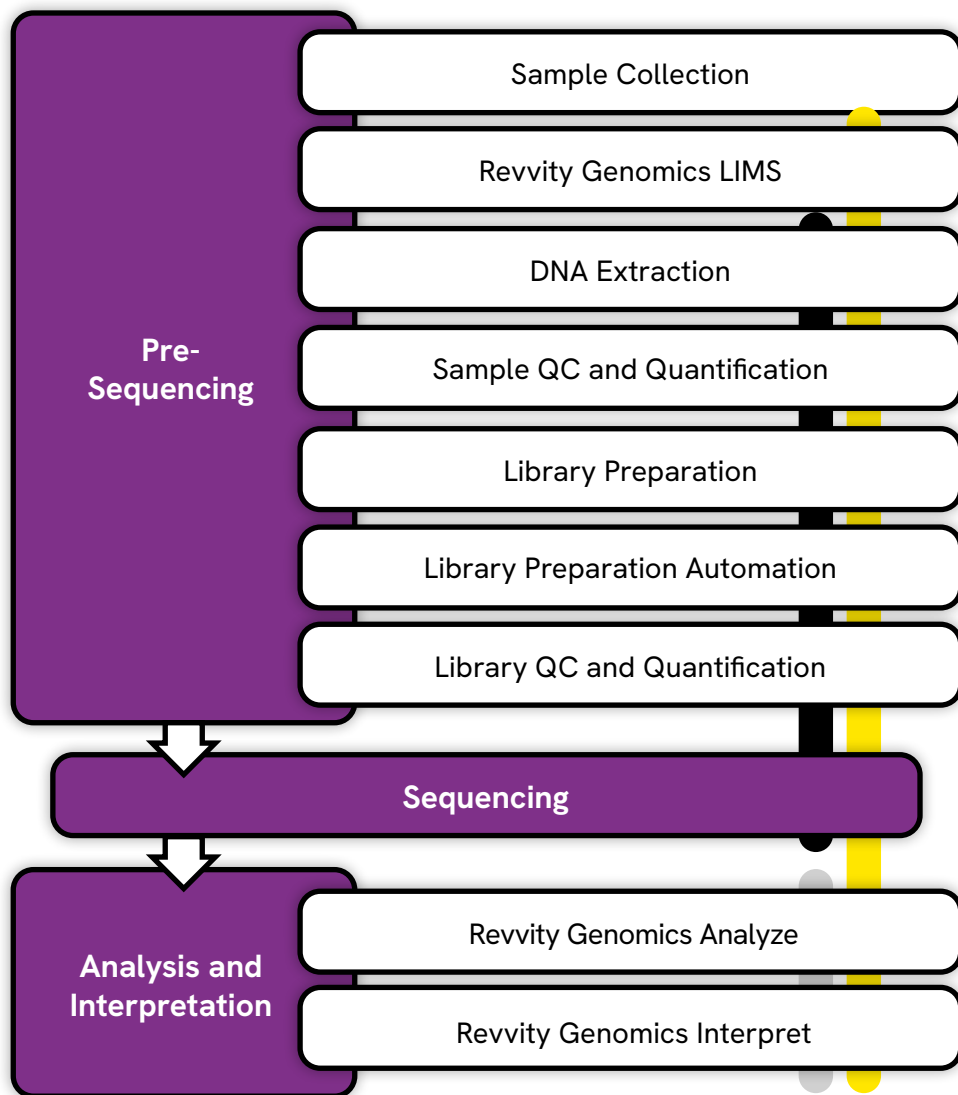
Through our decades of experience in rare disease technologies, Revvity has developed an end-to-end NGS workflow to suit your needs.

**Discover how you can amplify your research with Revvity's newborn sequencing workflow today.**



# A complete sequencing workflow designed for flexibility.

Our customizable, holistic workflow – from the DNA extraction of dried blood spot samples, library preparation, automated liquid handling, sequencing, to final data analysis – is built to bring newborn research into the hands of more laboratories.



*Note: Workflow can be compatible with a host of lab instruments to best suit your needs. Please reach out to your Revvity representative for more information.*

## Options for Outsourcing

- Full end-to-end service
- Tech-only data generation service or flowcell / lane rental
- Reporting service

## Multiple starting points, multiple options.

As an alternative to adopting our solution, you may choose to consider outsourcing the workflow through Revvity Omics. With many ways to engage, see how you can leverage our genomic technologies and bioinformatic pipelines through Revvity Omics today.

# From sample to final result, we cover the entire sequencing process.

1

## Sample Collection

### 226 Sample Collection Device

A dried blood spot card that delivers reliable and homogenous analytical results from across the dried sample area. Enables simplified sample collection and delivery.

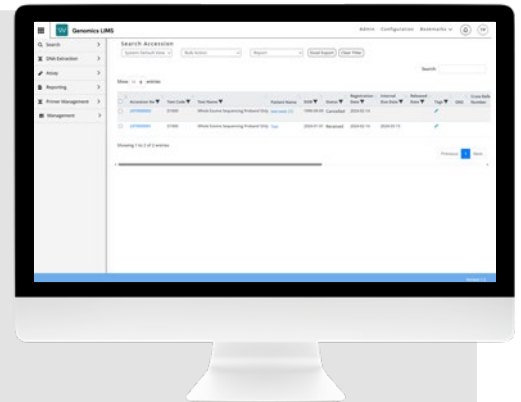


2

## Laboratory LIMS

### Revvity Genomics LIMS

Our cloud-based, platform solution is primed for secure data management and LIS integration. The solution operates on ISO27001 certified cloud technology while the application is designed to comply with GDPR and HIPAA requirements.



# 3

## Sample Extraction

### Revvity Puncher Instruments (Multiple Options)

Simplified and robust options for your DBS (dried blood spot) punching needs. Equipped with semi-automatic punching capabilities and a changeable head, punch DBS samples into microtitration plates with ease.



### Chemagen 360 Instrument & Kits

Chemagen's well-established magnetic bead-based technology brings reliability to sample extraction. Chemagen is optimized for extracting high-quality and high-yield genomic DNA from dried blood spot samples, making it the perfect choice for newborn sequencing research.



# 4

## Sample QC and Quantification

### Multiple Options

With a host of solutions, we offer several reliable systems that are designed to quantify and assess the quality of your DNA samples. Get fast, high-throughput QC analysis of your samples.

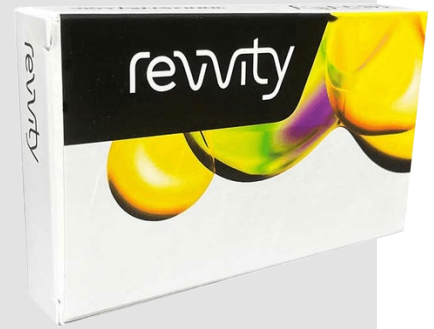


5

## Library Preparation

### NEXTflex® Kits

Offers robust genome coverage to identify variants in 350+ genes. Targeted regions are designed for comprehensive research of early onset disorders. Library prep is also Illumina® and Element Biosciences compatible.

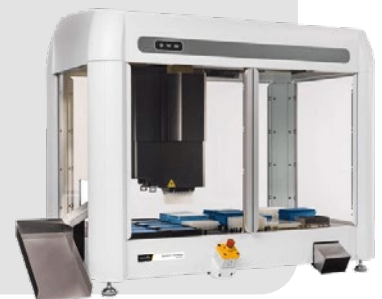


6

## Library Preparation Automation

### Multiple options

With a portfolio of automated liquid handling solutions, Revvity offers flexibility and throughput to meet your needs. Our instrumentation is designed to minimize cross-contamination and user error.

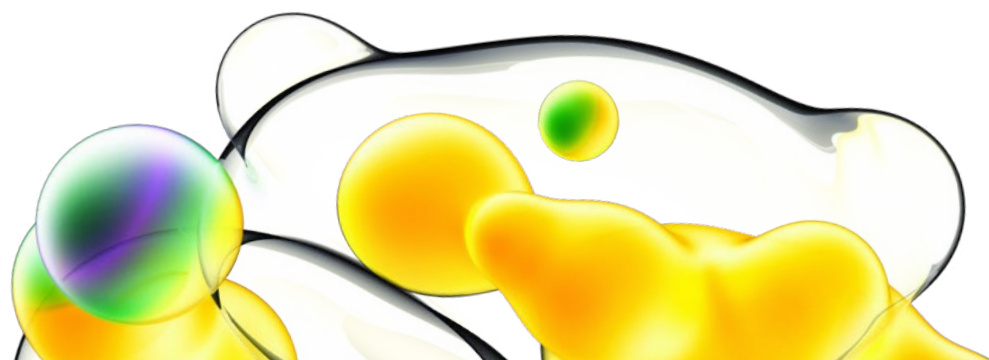


7

## Library QC and Quantification

### Multiple options

With a host of solutions to serve your unique needs, Revvity delivers fast, high-throughput QC analysis of NGS libraries. Enables a simplified approach to DNA fragment analysis, including NGS library QC.



8

## Sequencing

### Element Biosciences AVITI™ System and Illumina®

Compatible library with AVITI Systems and Illumina platforms. With unparalleled performance, the cost-effective AVITI System reimagines sequencing with your needs in mind. Built for high accuracy, flexibility, and fast turnaround time, the AVITI benchtop sequencer can complete two parallel 2x150 runs with indexing, generating up to 600 GB of data and 2 billion reads in 38 hours.

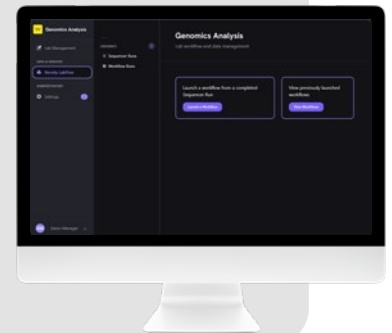


9

## Primary and Secondary Analysis

### Revvity Genomics Analyze

Built to offer a seamless fit to your analytical needs for sequencing data, our software offers alignment and variant calling to your laboratory. Software operates on the same closed & secure platform as our LIMS solution and is compatible with both Element Biosciences and Illumina sequencers.

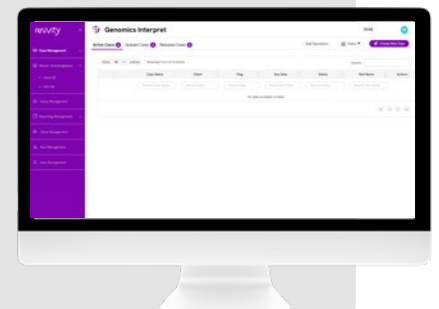


10

## Tertiary Analysis and Reporting

### Revvity Genomics Interpret

Our software enables easy result interpretation for your research needs. Preview, add comments and select your report delivery method, all in-app. A cloud-based application, users can login from anywhere for easy-access reporting. Software operates on the same closed & secure platform as our LIMS solution.





Power your newborn  
sequencing research  
with Revvity today.

For research use only. Not for use in diagnostic procedures

[www.revvity.com](http://www.revvity.com)

revvity

Revvity, Inc.  
940 Winter Street, Waltham, MA 02451 USA  
(800) 762-4000 | [www.revvity.com](http://www.revvity.com)

For a complete listing of our global offices, visit [www.revvity.com](http://www.revvity.com)  
Copyright ©2024, Revvity, Inc. All rights reserved.