List of Xcelom Send Out Test - NGS

Service	Testing Scope	Sample Type	TAT
Non-Invasive Prenatal Testing (NIPT) Illumina NGS	Fetal chromosomal aneuploidies caused by trisomies, SCA and microdeletions >3Mb, as well as other chromosomal and sub-chromosomal findings >3Mb	Maternal blood (≥ 10 weeks for singleton, ≥ 12 weeks for twin, and ≥ 14 weeks for triplet)	5 working days
Non-Invasive Prenatal Testing of Single Gene Disorders (NIPT-SGD) Illumina NGS	P/LP SNVs/InDels ≤3bp within 34 genes associated with 66 single gene disorders Note: P/LP InDels >3bp within 34 genes associated with the 66 disorders is reported as supplementary	Maternal blood (≥ 10 weeks for singleton pregnancy only)	20 working days
CNV-seq CNVs: Illumina NGS UPD add-on: Fluorescent PCR-capillary electrophoresis	Genetic disorders caused by chromosomal aneuploidies or CNVs > 100 kb with mosaicism UPD add-on testing for 10 UPD-related disorders available with prenatal CNV-seq	Peripheral blood, cord blood, or gDNA from blood/ tissue/ prenatal sample	14 working days
PGT-A Illumina NGS	Aneuploidies and microdeletions/microduplications >10Mb with mosaicism	Trophoblasts with blank control	14 working days
smrtPGT-M/-SR, PGT-M/-SR PGT-M/-SR: Illumina Infinium BeadChip smrtPGT-M/-SR: PacBio SMRT sequencing	PGT-M Known single gene disorders, HLA typing, and genetic susceptibility-related tumors (36 disorders) PGT-SR Balanced translocations, Robertsonian translocations, inversions, and pathogenic microdeletions/microduplications <10Mb smrtPGT-M/-SR + PGT-M/-SR Known single gene disorders/ Balanced translocations and inversions	Embryo: Trophoblasts with blank control; Parent/ Family reference: Peripheral blood or gDNA	PGT-M/-SR: 14 working days smrtPGT-M/-SR + PGT-M/-SR: 21 working days
Expanded Carrier Screening Illumina NGS	21-Gene Panel Detects 4,032 P/ LP variants across 21 genes 51-Gene Panel Detects 7,343 P/ LP variants across 51 genes 129-Gene Panel Detects 11,280 P/LP variants in 129 genes associated with 155 X-linked and autosomal recessive disorders 1766-Gene Panel Detects variants across 1,766 genes associated with 1,784 autosomal recessive and X-linked recessive disorders (This panel is available only for couple-based testing. We report P/ LP variants only when both partners carry variants in the same gene, or when the female partner carries an X-linked variant. Single-carrier findings for autosomal recessive conditions and VUS are not disclosed in the final report.) Variant Types Reported: SNVs in exons and splice boundaries, InDels < 50bp in exons, and selected CNVs in *DMD*, *SMN1*, and *HBA1/2* genes (if included in panel). Add-on analysis with LRS is available for Fragile X Syndrome (CGG/AGG repeats) and hemophilia A (*F8* Inv1/ 22).	Peripheral blood or gDNA from blood	20 working days

Service	Testing Scope	Sample Type	TAT
Newborn Genetic Screening - NGS approach Illumina NGS	Jaundice Panel Detects P/ LP variants in 82 genes associated with single-gene disorders presenting with a jaundice phenotype Inherited Metabolic Disorders Panel Detects P/ LP variants in 57 genes associated with 72 inherited metabolic diseases 358-Gene Panel Detects P/ LP variants across 358 genes associated with 411 single-gene disorders 737-Gene Panel Detects P/ LP variants across 737 genes associated with 1,287 single-gene disorders Reporting: P/ LP variants (SNVs in exons and ±5 bp exon–intron boundaries; InDels <50bp in exon; selected CNVs in *DMD*, *SMN1*, or *HBA1/2* genes (if included in panel)) within the scope are reported. Carrier status for autosomal recessive and X-linked recessive conditions is not reported.	Peripheral blood, DBS, or gDNA from blood	15 working days
Prenatal / General Whole Exome Sequencing (WES) Illumina NGS	Targeted regions: Genes with defined molecular mechanisms in OMIM, expert-reviewed genes in ClinGen, regulatory elements/ intronic regions with defined pathogenicity, mitochondrial genome, and RNA regions in RefGene Type of variants reported: SNVs, InDels, exonic CNVs, aneuploidy, absence of heterozygosity (AOH)/ uniparental disomy (UPD, for *trio*), and dynamic mutations (trinucleotide repeats) in clinically well-known genes	Peripheral blood, DBS, cord blood, or gDNA from blood/ tissue/ prenatal sample	Prenatal WES: 15 working days General WES: 23 working days
Whole Genome Sequencing (WGS) Illumina NGS	Type of variants: SNVs, InDels, CNVs, aneuploidy, absence of heterozygosity (AOH)/ uniparental disomy (UPD, for trio), and dynamic mutations (trinucleotide repeats) in clinically well-known genes	Peripheral blood, cord blood, or gDNA from blood/ tissue	34 working days

Test customization is available.
For details, please contact **marketing@xcelom.com**

Note:
TAT starts from the date of sample arrival at the testing laboratory.
It is recommended to provide the maternal sample along with the prenatal sample to rule out maternal contamination.
Sample QC and transportation requirements vary by test. Please contact us for details.

Website (Global) **LinkedIn**

Information in this document is subject to change without notice. Information provided is intended for reference only. All trademarks are the property of Berry Genomics, or their respective owners.
INT_XCLSentOutListNGSv1.21062026

© 2026 Xcelom Limited. All rights reserved.