

OPTICAL GENOME MAPPING

Optical Genome Mapping (OGM) is a novel, high resolution test that includes a genome-wide analysis of structural variants including:

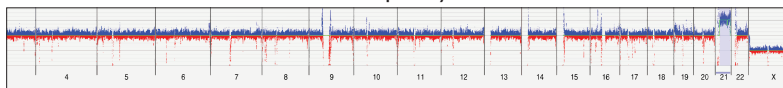
Aneuploidies
Insertions

Deletions
Inversions

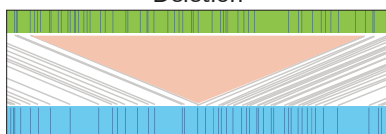
Duplications
Translocations

1000x Higher resolution than traditional chromosome analysis.

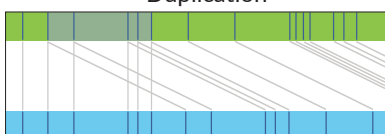
Aneuploidy



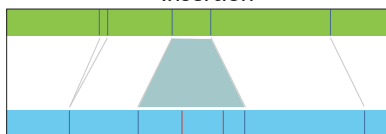
Deletion



Duplication



Insertion



Inversion



Translocation



OGM has the ability to identify hidden pathogenic structural variants.¹

One test that can make up for the deficiencies in:

FISH

KARYOTYPING

MICROARRAY

SEQUENCING

100% concordance compared to CMA findings for pathogenic variants.^{1,2}

100% concordance compared to karyotyping for all aberrations with non-centromeric breakpoints.^{3,4}

100% concordance compared to FISH analysis.^{1,3}

Optical Genome Mapping at GGC

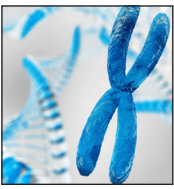
OGM Complete

- Genome-wide analysis • 81354 • \$1,950 • fresh or frozen blood

OGM Targeted

- Specific gene(s) or region • 81479 • \$1,450 • fresh or frozen blood

OGM is available for patients suspected of having a constitutional disorder caused by a structural variant that has not been previously identified by traditional testing methods.

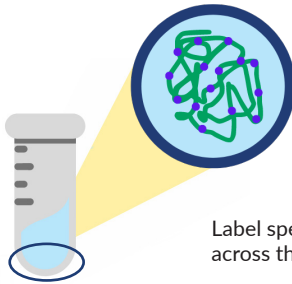


OPTICAL GENOME MAPPING

How does OGM work?



Isolate high molecular weight DNA.



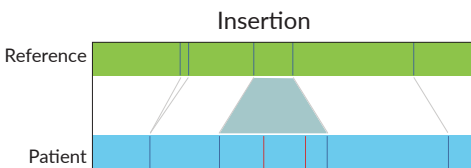
Label specific sequences across the entire genome.



Transfer labeled DNA into the cartridge for scanning.



Convert images into molecules.



Consensus maps are generated and compared to a reference to detect structural variants.



Scan the QR code to learn more.

¹doi:10.3390/cancers15041294

²doi:10.3390/genes14101868

³doi:10.1016/moldx.2022.12.005CNV

⁴doi:10.1002/mgg3.1936¹