

BIOMARKERS SOLUTIONS FROM DISCOVERY TO CLINICAL QUALIFICATION

HTG EdgeSeq technology

www.firalis.com



# HTG SERVICES

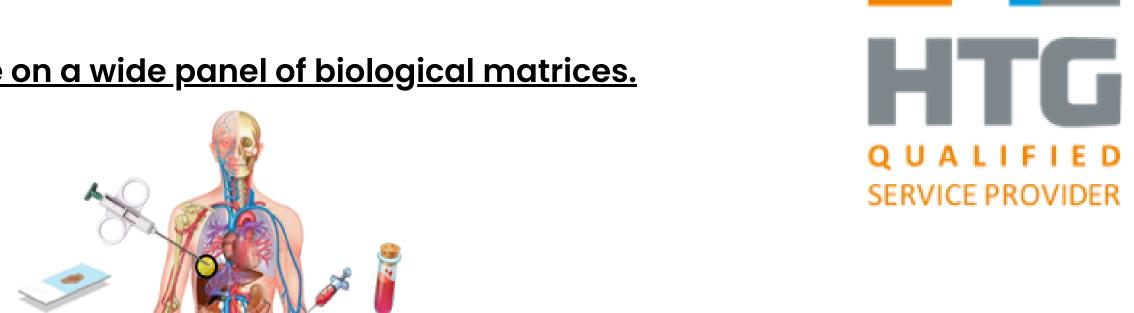
# HTG EdgeSeq technology

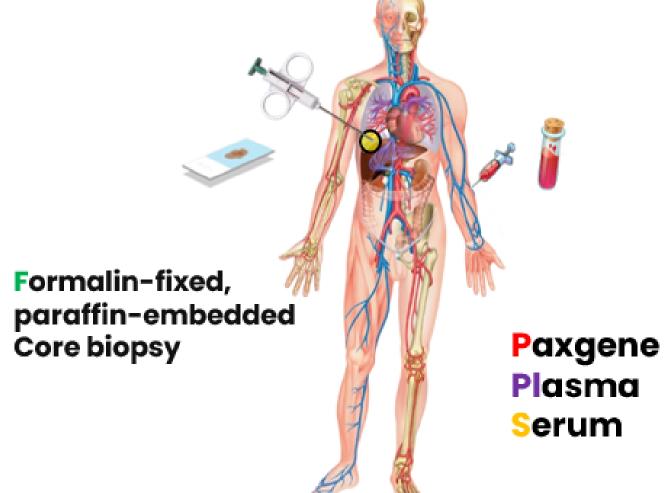


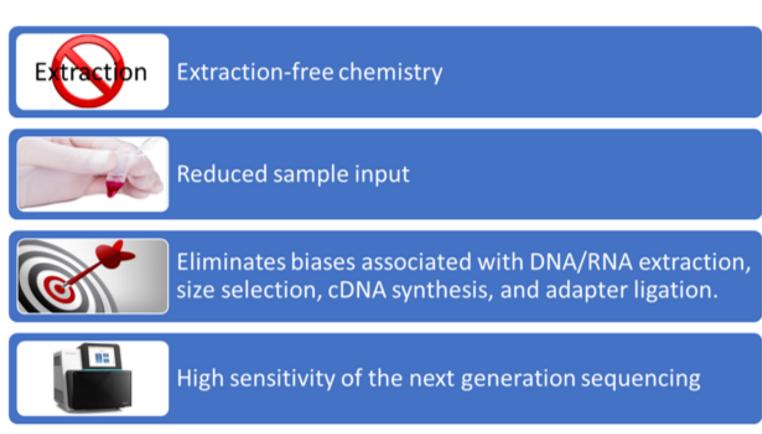
If you have low volume of precious samples and you want to detect and explore a large panel of miRNAs on them, HTG Technology is made for you!

- Firalis molecular precision is the reference lab for HTG Molecular in Europe.
- This technology is a combination of nuclease protection assay (qNPA) and next generation sequencing for targeted sequencing to provide accurate and sensitive measurement of gene expression.

# <u>Applicable on a wide panel of biological matrices.</u>







Simultaneous, quantitative detection of 2,083 human miRNA transcripts.

Profile circulating miRNA: obtain miRNA profiles from 15 µl of plasma or serum.

**Extraction-free: reduce extraction**associated data bias and sample loss.

Gain insights faster: results in as little as 36 hours.

Simplified data analysis: raw numerical data output.

# HTG EdgeSeq miRNA Whole Transcriptome Assay

The HTG EdgeSeq miRNA Whole Transcriptome Assay (miRNA WTA) enables users to measure the expression of 2,083 human miRNA transcripts using next-generation sequencing (NGS). The HTG EdgeSeq chemistry is compatible with fixed tissue samples, biofluids, and cell lines.

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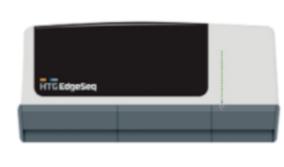
## HTG EdgeSeq technology in 5 Steps.

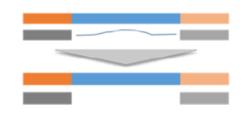
## 1. Sample preparation

# Cells Plasma/ Extracted Serum PAXgene RNA FFPE Tissue

- · Small sample input amount
- · Lysis only chemistry
- No nucleic acid extraction

## 2. Library preparation







#### 2a. Target Protection

- Fully automated
- Nuclease protease assay
- Up to 96 samples / plate

#### 2b. Library amplification

- Add barcodes and adaptators
- 16 PCR Cycles

#### 5. Data Analysis







4. Sequencing

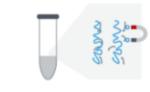






3. Library quantification & Normalization





**3b. Library quantification**QuBit Fluorometer 3.0

**3a. Clean up**Library clean up to remove excess of primers

#### **HTG** parser

- Data parsing
- On FastQ files
- Up to 2500 targets

#### **Next Generation Sequencing**

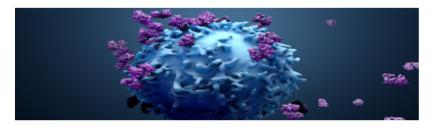
- Illumina NextSeq 500Up to 96 samples / run
- 1\*50 bp

# A wide variety of sequencing panel are available according to your projects.



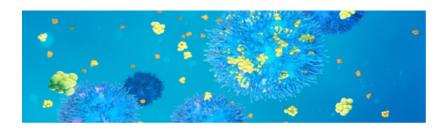
#### **HTG Oncology Biomarker Panel**

Comprehensive characterization of genes associated with tumor biology 2549 mRNAs



#### **HTG Precision Immuno-Oncology Panel**

Characterize tumor microenvironment and immune response 1392 mRNAs



#### **HTG Immune Response Panel**

Analyze genes associated with immune response to infection and AI diseases 2002 mRNAs



# HTG Mouse mRNA Tumor response Panel

Analyze genes associated with Oncology, Immunology and Inflammation 1659 mRNAs



#### **HTG Transcriptome Panel**

Comprehensive analysis of the human mRNA transcriptome 19396 mRNAs

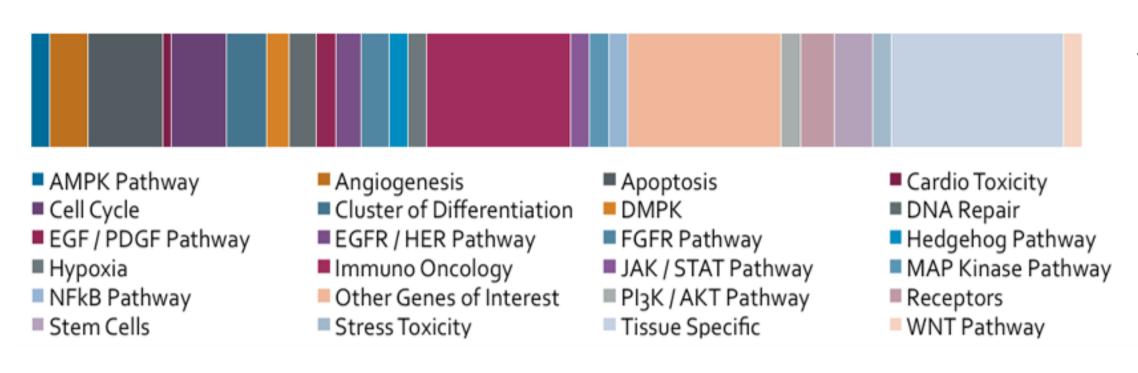
# HTG SERVICES

# HTG EdgeSeq technology



HTG Technology combined with Firalis molecular precision exceptional quality standards leads to very reproducible results.

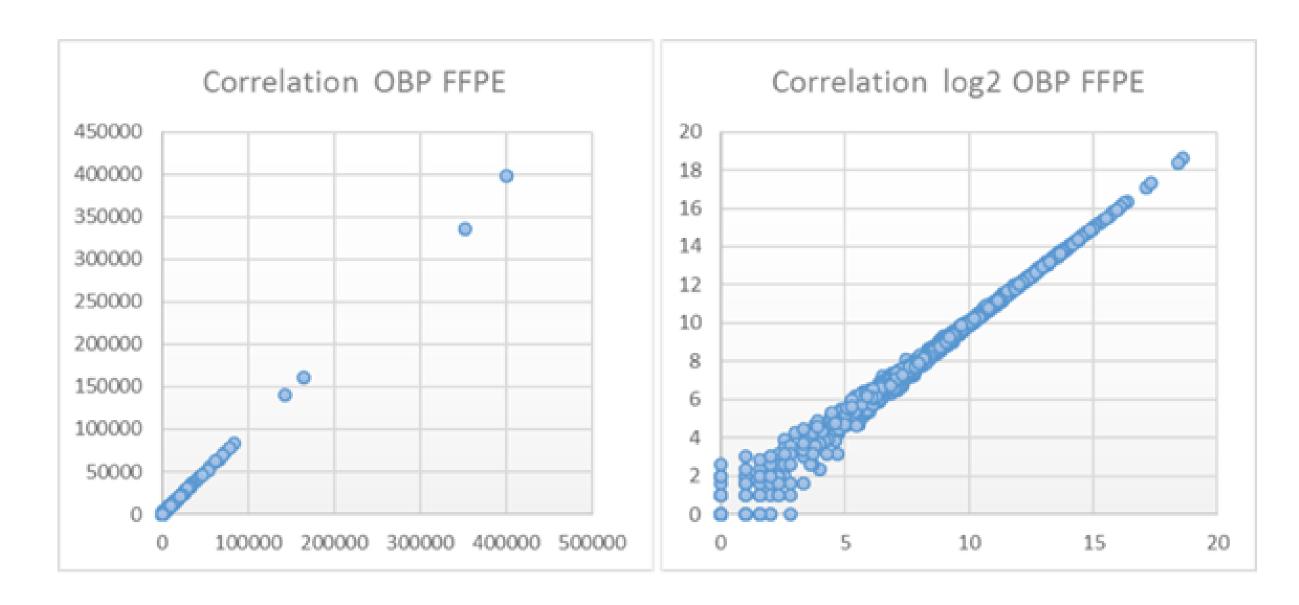
# Example on HTG EdgeSeq Oncology Biomarker Panel



## **Sample inputs**

- Use slide-mounted sections (FFPE until 27 year old).
- Tumor percentage of 70% or greater is ideal.

# Reproducibility on successive FFPE slices.



**Excellent reproducibility** is observed for a wide dynamic range on independent experiments performed on successive Formalin-fixed, paraffin-embedded Core biopsy.

#### **FIRALIS MOLECULAR PRECISION**

Firalis molecular precision is a biotechnology company with a mission to improve disease outcome, therapeutic decisions and generate savings in healthcare through biomarker discovery, development and regulatory qualification that ultimately leads to biomarker-based diagnostics. Firalis is active in the field of drug safety, cardiovascular, inflammatory, neurodegenerative and autoimmune diseases. The company has been awarded with several national and international prizes for its innovative approaches. Firalis Group is certified ISO 13485 (GMP compliant) and ISO 9001 for the development and production of CE-marked assays, certified NF S 96-900 for its biobank and accredited ISO 17025 (GCLP compliant) for testing laboratory.

Contact us to start your study at sales@firalis.com

To respect sharp requirements and satisfy the high demands of the pharma industry, we generate and deliver all data with cutting-edge technology platforms and in a complete quality environment certified for highest standards (ISO 9001, ISO 13845, ISO 17025 and NF S 96-900).











