

Detection of mutations related to approved drugs in solid and liquid biopsies in oncology

NGS / DNA / biopsy / blood plasma / tumour / oncology



CONTEXT

Conventional methods for detecting DNA mutations lack sensitivity and completeness. In addition, the poor quality of the DNA extracted from paraffin biopsies is responsible for 20% of unsuccessful analyses by next-generation sequencing (NGS) using the Amplicon method. We have developed a method to overcome these drawbacks and have applied it to better diagnosis of several cancers and improved theranostics.

DESCRIPTION

The laboratory has developed a next-generation "One Shot" sequencing method based on 11 genes for the detection of mutations related to drugs with a Marketing Authorization (MA) in oncology.

The accuracy and depth of the analysis provides the ability to detect these mutations, even the rarest, in the circulating DNA of blood plasma.

This technology drastically improves theranostics in the area of oncology and improves the ability of the oncologists to diagnose the cancer and choose the therapeutic strategy.

COMPETITIVE ADVANTAGES

- Analysis on blood samples and solid biopsies
- 1 single run for 11 genes linked to several MA
- High accuracy, very low background noise, detection of rare mutations even on degraded DNA
- Nearly 1 in 2 non-biopsiable patients now benefit from specific treatment
- Fluidity of analyses on all types of next-generation sequencers



Markets & applications

Oncology - Theranostics:

- ❖ Analysis of tumor mutations from DNA of solid biopsies and blood plasmas
- ❖ Therapeutic decision assistance
- ❖ Basic & applied research



Development stage

- ❖ Method validated on 228 patients (165 solid tumors and 63 blood plasmas)
- ❖ 2,000 patients routinely tested (2018)
- ❖ Approximately 1 in 4 patients benefits from a therapeutic improvement compared to gold standards



Intellectual property

European patent application submitted on April 11th, 2018



Target partnership

Patent licensing

CONTACT-US

Daniel KIRCHHERR

Business Development Manager

+33 (0)7 76 16 66 90

daniel.kirchherr@sayens.fr