

EasyCOV, the high-performance and efficient field saliva PCR

In the field and in real life, the EasyCOV test, a saliva test for COVID 19, has demonstrated superiority in terms of performance, ease of use and comfort for patients.

What is EasyCOV? It is a LAMP RT-PCR, similar to laboratory RT-qPCR tests which are widely used in particular to analyze nasopharyngeal swabs. The principle consists of targeting part of the viral genome and amplifying it to detect it more easily. In both cases, therefore, it is a gene amplification technique different from rapid antigenic tests.

The EasyCOV solution was developed by a French consortium bringing together private and public players*, recognized in scientific research (CNRS), innovation, industry and digital. This consortium has demonstrated its effectiveness and relevance by being among the first in the world to develop and market a saliva test for COVID 19, starting in the spring of 2020. This choice of saliva has since been widely validated by the community of international scientists who gradually adopted saliva as a relevant sample.

On the performance side to begin with, the EasyCOV test has been validated via a double-blind clinical study carried out at the Montpellier University Hospital and has demonstrated a sensitivity of 86% and a specificity of 99%. During this study, nasopharyngeal RT-qPCR revealed a sensitivity below 70%.

On the ease-of-use side, EasyCOV can be carried out outside of a laboratory as close as desired to the patient. Reading the result is simple because it is colorimetric. It does not require special logistics to repatriate samples to a central laboratory (although it is possible), or to have heavy equipment. Finally, EasyCOV makes it possible to return a result on site within the hour.

On the comfort side, EasyCOV requires the collection of four drops of saliva under the tongue, which is easy and does not cause discomfort, unlike the collection of a nasopharyngeal sample. This point is particularly relevant for people who have to do frequent tests (ex: health professionals, nursing home staff, athletes, etc.), for children (ex: schools and universities) or even the elderly.

Regarding the use of EasyCOV in the field, the test was validated by a clinical study at the Montpellier University Hospital, in particular at the "drive". The objective was to operate in real conditions: the study participants came to be tested with all the diversity of a drive screening (patients with or without symptoms, various forms or different viral load levels, etc.).

With a CE marking obtained in June 2020, the test also has extensive and very diverse field experience feedback. For example, Djibouti has been using EasyCOV for more than 6 months at its airport to control entries at its border. This country has a remarkably low number of contaminations, which it attributes to EasyCOV, among others. In Europe, the test is used, among others, in Belgium in medical-social centers where it allows in particular to test elderly people with symptomatic and asymptomatic disabilities.

Efficient, suitable for field use, practical, connected, painless and proven, EasyCOV has therefore demonstrated its qualities and the relevance of its use.

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