

EVALUATION OF A RAPID IMMUNOCHROMATOGRAPHIC POINT OF CARE TEST THAT DETECTS THE RESPIRATORY SYNCYTIAL VIRUS IN RESPIRATORY SAMPLES

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1 INTRODUCTION AND PURPOSE

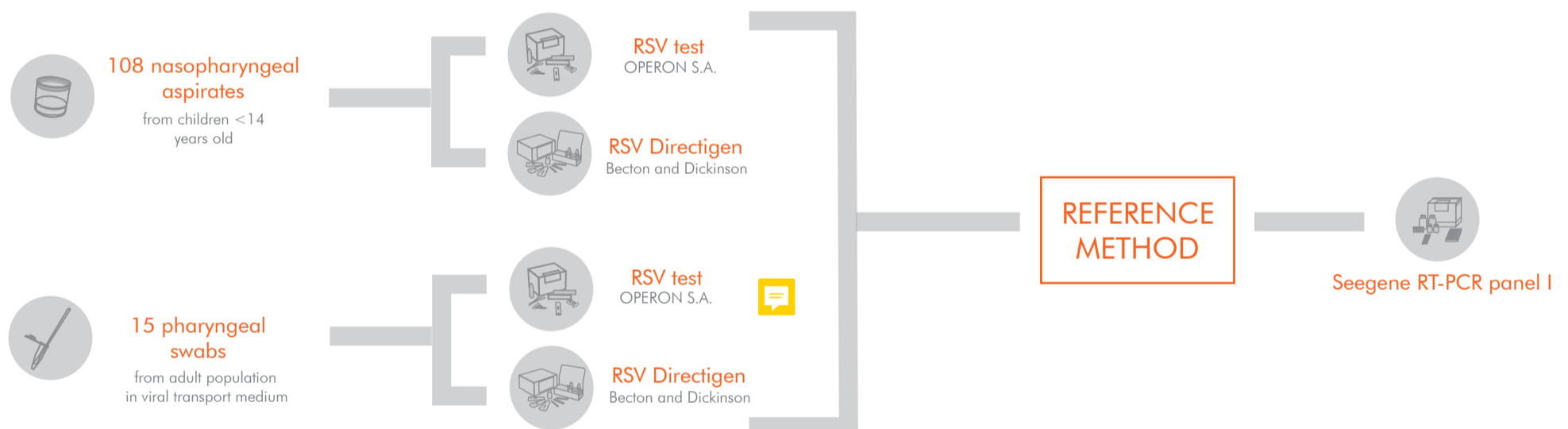


The Respiratory Syncytial Virus (RSV) is the leading cause of emergency rooms visits and hospitalizations for acute lower respiratory tract infections in infants and young children worldwide¹ during winter. RSV can also become a serious problem in the elderly, adults with heart and lung diseases, or anyone with a very weak immune system (immunocompromised)². RSV is one of the main causes of nosocomial infection³ due to its high infectivity, the virus potential to be spread over extensive periods, and its ability to survive for hours on environmental surfaces. Outbreaks due to RSV infection occur each year during the autumn and winter months, it is a very seasonal infection⁴. The rapid identification of this virus⁵ is very important since it allows to reduce the number of hospitalised patients and the number of prescribed antibiotics which, as a result, reduces healthcare costs.

The Simple/Stick RSV (OPERON S.A., Spain) is a one-step lateral flow assay which allows the qualitative and rapid detection of the RSV in about 20 minutes, from sample collection till the end of the lateral flow run. The test shows a mean analytical sensitivity of 62.5 ng/ml using a pure preparation of the RSV obtained from the Long culture strain in Hep-2 cells, though 31.2 ng/ml is often detected. The test can be easily performed without any specialized equipment, which makes it a real option for point of care testing.

The objective of this study is to demonstrate that the RSV test from OPERON, S.A is suitable for the rapid detection of the RSV in clinical environments.

2 METHODS



3 RESULTS

	SENSITIVITY	SPECIFICITY	PPV	NPV
OPERON	73,4%	97,7%	98,3%	67,2%
BECTON AND DICKINSON	75,9%	97,7%	98,4%	69,4%

4 CONCLUSIONS

The RSV test from OPERON, S.A. is a new rapid test, easy to use and interpret that can be used as a point of care for RSV detection.

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