

DIAGNOSIS OF INVASIVE ASPERGILLOSIS: COMPARISON OF METHODS

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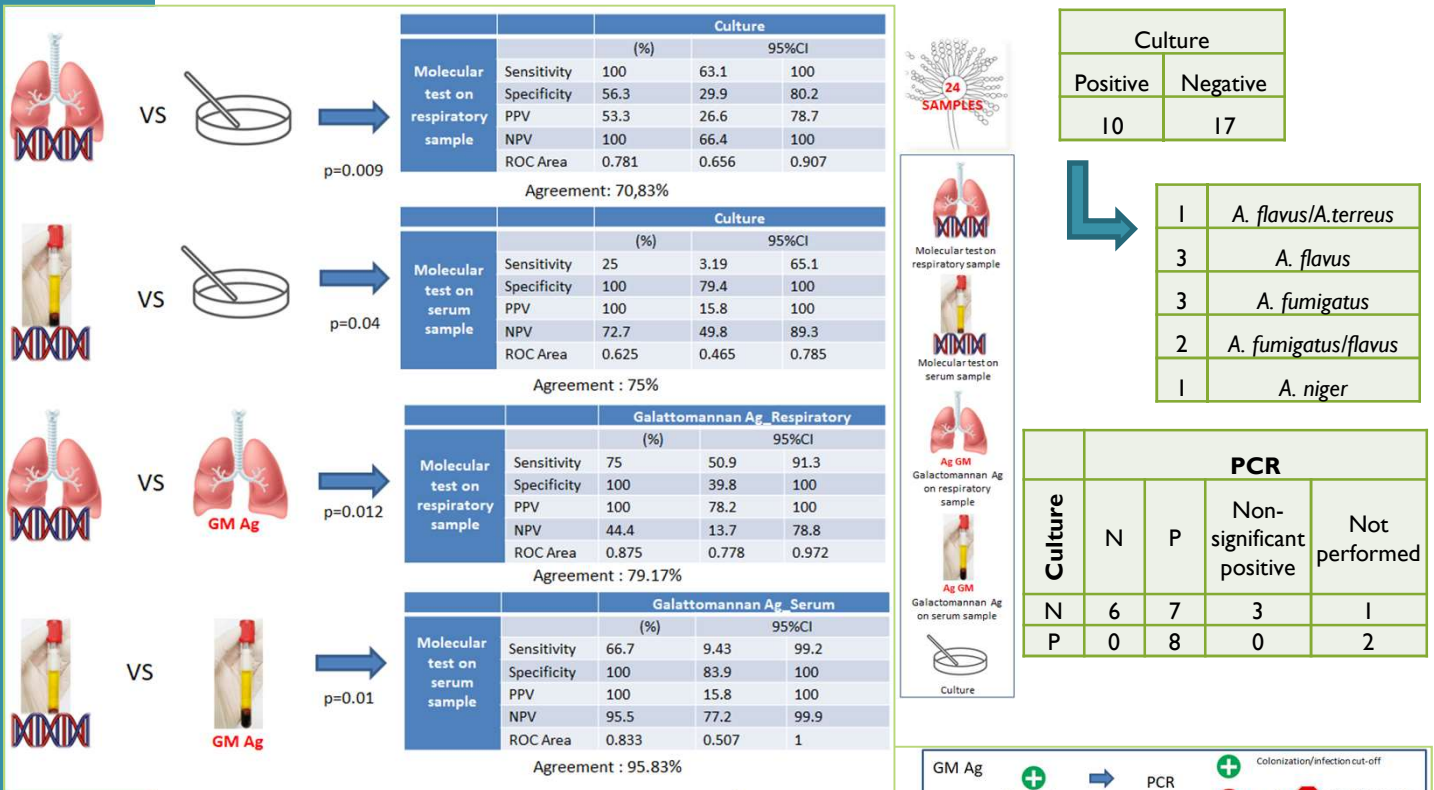
INTRODUCTION

Early diagnosis is one of the main obstacles to timely treatment of Invasive Aspergillosis (IA). The aim of this work, which is part of a multicentre study, was to evaluate the performance of the Aspergillus ELITE MGB® test in detecting *Aspergillus* spp. DNA in patients with suspected IA according to EORTC/MSG criteria.

METHODS

Between 2021 and 2023, at the AUSL Piacenza, twenty-seven patients were enrolled. Twenty-four serum and twenty-seven respiratory samples were evaluated for the *Aspergillus* galactomannan (GM) antigen with Aspergillus EIA-VirCLIA (Vircell). Respiratory samples were cultured on Sabouraud Dextrose Agar and incubated at 30°C for 21 days. The totality of serum samples and 24 respiratory samples were analysed with Aspergillus ELITE MGB® on the ELITE InGenius platform (ElitechGroup S.p.A., Turin, Italy); RT-PCR results were considered positive when the *Aspergillus* DNA copies/mL were >120 for respiratory samples and >50 for serum samples. Descriptive statistical analysis was performed with the STATA program.

RESULTS



CONCLUSION

The results highlighted excellent performance of the Elitech molecular test, particularly when performed on respiratory specimen, and support the indication to use GM as a screening test, followed by molecular confirmation of positive cases for better diagnostic specificity. These preliminary results require to be evaluated on a larger sample population. It will also be necessary to further investigate the clinical correlations between laboratory data and EORTC/MSG definitions.

Bronchial aspirate/
Bronchoalveolar lavage

Suspicion of
Invasive
Aspergillosis

Serum

