

# Publication: Etiologic predictive value of a rapid immunoassay for detection of group A streptococcus antigen from throat swabs in patients presenting with a sore throat

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Etiologic predictive value of a rapid immunoassay for detection of group A streptococcus antigen from throat swabs in patients presenting with a sore throat.

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[Source: User]

## Abstract

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### Context:

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A sore throat is a common symptom mainly caused by virus but also by a variety of bacteria such as group A beta-haemolytic streptococci (GAS) often resulting in unnecessary antibiotic prescribing. Combinations of symptoms and scores are not specific enough to accurately sort out aetiology. Rapid diagnostic antigen tests (RADT) have demonstrated high sensitivity and specificity in detecting presence of GAS.

### Objective:

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Establish the probability that finding of GAS in a RADT shows a true link between symptoms and GAS while considering carriers of GAS ill from a virus.

### Design:

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Cross-sectional study comparing two groups.

### Setting:

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Emergency department (ED) also managing primary health care cases in a remote rural town with 22,000 residents.

### Patients / Participants:

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101 consecutive children aged 3-15 years attending for a sore throat as the main complaint and 147 consecutive children of the same age attending the same ED for other reasons than an infection.

### Main And Secondary Outcome Measures:

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## Results:

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Positive EPV was 98% (88-100%). Negative EPV was 98% (97-99%). The positive EPV depends on setting and findings in this study and may not be transferable to other settings. It was mathematically shown that negative EPV found in this study is valid in all other reasonable settings and hence can be transferred to any other setting.

## Conclusions:

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The evaluated RADT (Alere Test Pack+Plus With OBC Strep A) is always useful to rule out GAS infection in patients with an uncomplicated sore throat. It is often, depending on setting, useful to rule in a GAS infection in these patients.

## This publication is referred to in the following documents and applications

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### 1 document

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1. [Usefulness of Group A Streptococci Point of Care Testing](#)

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, from James Cook University

<http://www.researchweb.org/is/jcu/document/publication?ref=2449401>