

# Target the Dengue Virus from Day 1 ...

## Advantage Dengue **NS1 Ag & Ab** Combi Card

Rapid visual test for the detection of Dengue virus **NS1 Ag** & differential detection of **IgM & IgG** antibodies in Human Serum/ Plasma

- ✓ First-Line Testing Kit for Detecting Infection from **Day 1** with Dengue virus NS1 Antigen & Differential Detection of IgM & IgG Antibodies
- ✓ Reliable Diagnosis for both Primary & Secondary Dengue Infection
- ✓ Unique sample processing method, ensures highest accuracy in results.
- ✓ Detection of all 4 serotypes of Dengue Virus Antigen
- ✓ Significant Reduction of Window Period
- ✓ Shelf Life : **18 Months at 2-30°C**
- ✓ Convenient Pack size : 10 Tests, 25 Tests

For Dengue IgM/IgG Antibody Test:

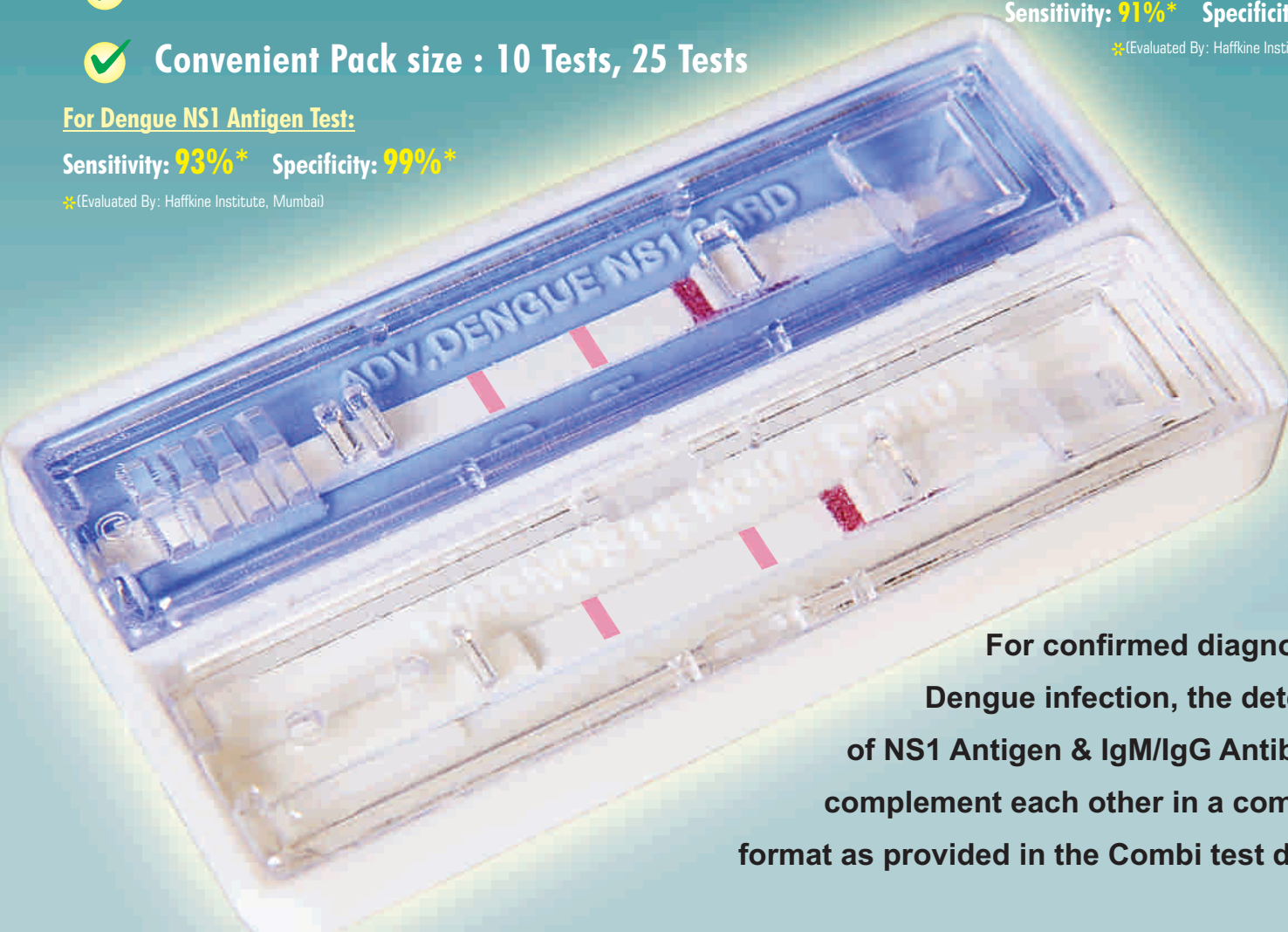
Sensitivity: **91%\*** Specificity: **98%\***

\* (Evaluated By: Haffkine Institute, Mumbai)

For Dengue NS1 Antigen Test:

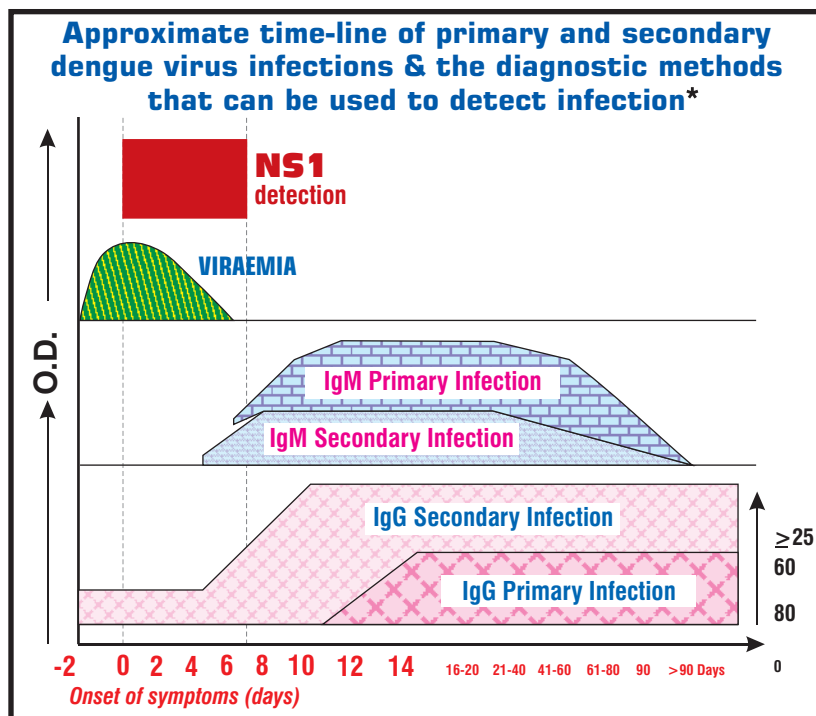
Sensitivity: **93%\*** Specificity: **99%\***

\* (Evaluated By: Haffkine Institute, Mumbai)



For confirmed diagnosis of Dengue infection, the detection of NS1 Antigen & IgM/IgG Antibodies complement each other in a combined format as provided in the Combi test device.

# Dengue Infection Immune Response



Detection of NS1 antigen is important for early and accurate diagnosis of dengue. NS1 Antigen can be detected from Day 1 to Day 5 of fever setting in.

In primary infection, IgM antibodies become detectable about 5-6 days after onset of disease. When the viremia declines, IgM level rises quickly to reach peak in about 2 weeks. Antibody production of IgG will be at a lower level when compared to IgM.

Secondary infection, in contrast to primary infection, with dengue virus results in appearance of high levels of anti-dengue IgG antibodies before IgM antibodies. The IgG antibody level rises quickly reaching to peak in about 2 weeks after the onset of symptoms and may persists for years.

\* source: Dengue Guidelines for Diagnosis, Treatment, Prevention & Control, New edition : 2009, WHO, Page No.: 92  
[http://whqlibdoc.who.int/publications/2009/9789241547871\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241547871_eng.pdf)

*For Educational Purpose only.*

## Why Dengue NS1 Antigen & Antibodies (Combi tests) makes Dengue Diagnosis more Reliable

- A) Dengue Diagnosis usually relies on clinical assessment, ideally confirmed by laboratory tests such as enzyme-linked immunosorbent assay (Elisa), polymerase chain reaction (PCR) and Virus culture. Rapid tests detecting Anti-Dengue antibodies (antibody detection assays) or Dengue viral protein (antigen detection assays) can be a useful for surveillance and support diagnosis of dengue infection in conjunction with clinical symptoms, medical history and other epidemiologic information.

Source : Updates on the principle and use of rapid tests in Dengue :  
[www.wpro.who.int/interact/resources](http://www.wpro.who.int/interact/resources).

- B) In an effort to “bridge” the diagnostic challenges pointed by the initial period of viremia and the delayed immunological responses, considerable interest is being given to the possibility of using combination of both NS1 Antigen and IgM tests for Dengue Diagnosis.

(Source : Page 6 ; Recommendations from the Asia Specific and the American Dengue prevention Board :  
[www.pdvi.org/email\\_news/pdf/Dengue\\_diagnostics\\_recommendations\\_combined](http://www.pdvi.org/email_news/pdf/Dengue_diagnostics_recommendations_combined))-Sponsored by Pediatric Dengue Vaccine Institute.

- C) The combined Dengue antigen/antibody tests aims to detect dengue infection at both the early stage(when virus is circulating) and the later stage(when antibodies appear).

Source : Updates on the principle and use of rapid tests in Dengue :  
[www.wpro.who.int/interact/resources](http://www.wpro.who.int/interact/resources).

For further enquiries, Please contact:

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