

# Treponema Pallidum Serology

## General:

Diagnostic procedure: TPHA is considered a screening test; if negative, there is no sign of recent or postacute Treponema pallidum infection. If TPHA is positive, TP Western blot IgG or IgM is recommended; VDRL should be tested only as therapy monitoring or in case of suspicious reactivation. It is not specific and represents an activity marker only.

The following tests are available:

- **TPHA (Treponema Pallidum Heme Agglutination Assay) in serum**

Indication: Screening test for the recognition of antibodies against Treponema pallidum (both IgG and IgM)

Material: 1 ml serum

TAT: same day, FML

Method: TPHA

Units: Titer

Ref.- range: <1:80

Note: The TPHA titer is usually persisting over many years (sometimes lifelong); possible cross-reactions with Borrelia antibodies possible, therefore an exclusion of borrelia infection is recommended. False positive results are observed in patients with immune disorders.

- **TPHA in CSF**

Material: 1 ml CSF

TAT: 3 - 6 days\*

Method: HA

Units: Titer

Ref.- range: <1:2

- **Treponema pallidum IgM antibodies**

Indication: Suspicion of acute infection

Material: 2 ml serum

TAT: 5-7 days\*

Method: Western blot

Ref.- range: see reports

- **Treponema pallidum IgG antibodies**

Indication: Confirmation test in positive TPHA ; suspicion of Neurolues

Material: 2 ml serum

TAT: 5-7 days\*

Method: Western blot

Ref.- range: see reports

- **VDRL / Venereal disease of research laboratory test<sup>^</sup>**

General:

With VDRL testing, antibodies are made visible through cardiolipin aggregation. Cardiolipin is a phospholipid and is sometimes released as endogenous antigen (auto-antigen) during certain infections, such as lues. The reaction is not lues-specific. The reaction is positive in the second phase of a primary syphilis (regional lymphadenitis). It can be false negative in the tertiary stage.

An isolated positive result does not confirm a lues infection. Temporary or persisting positive non-specific results are observed in autoimmune disorders, acute and chronic infections, collagenosis, neoplasms, in pregnancy, with different medicines and drugs. VDRL always reacts positive in infections with treponema species (T. pertenuis/Framboesia, T. carateum/ Pinta.) VDRL is suitable only for therapy monitoring during lues treatment.

The following tests are available:

- **VDRL in blood, qualitative/quantitative**

Indication: Activity marker, course monitoring

Material: 1 ml serum

TAT: same day, FML

Method: AGGL

Units: Qualitative, Titer

Ref.- range: negative



- **VDRL in CSF, quantitative**

Material: 0.3 ml CSF

TAT: 5 -7 days, Germany

Method: PA

Units: Titer

Ref.- range: see report

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit  
<http://www.fml-dubai.com/parameter-listings/>