

# 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

Stability: 7 days at 2 to 8°C

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 (Please note that this test has been discontinued.)**

Material: 1 ml CSF

TAT: 7 - 10 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 Neurolyues

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 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

Stability: 7 days at 2 to 8°C

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/>