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Guide to Interpreting Syphilis Lab Test Results

Key: NR – Non Reactive. RPR – Rapid Plasma Reagin, EIA – Enzyme Immuno-Assay, TPPA – Treponema Pallidum Partical Agglutination

| | Initial Test – Non Reactive | Initial Test – Equivocal or Reactive | | | | | 2 week Repeat Test | | | |
|--------------------|---|--|--|--|---------------------------------------|--|---|---|---|---------------------|
| EIA | Non Reactive | Equivocal | Reactive | | | | Equivocal | Reactive | | |
| RPR | | | NR or Reactive | NR or Reactive (RPR unchanged or decreased) | ≥1:8 and has increased 1 dilution | Reactive with increased RPR > 1 dilution | | NR or Reactive | | |
| TPPA | | | Non Reactive | Reactive | Previously Positive | Previously Positive | Previously Positive | Non Reactive | Reactive | |
| Interpretation | Not a case, although early incubating syphilis cases can be Non-reactive before antibodies have developed. | May be false positive, early, old treated or untreated syphilis. | May be false positive, early, old treated or untreated syphilis. | Case, possible interpretation: A) Early Stage B) Late Stage C) Previously Treated | Not a case (Previous syphilis) | Possible Lab Variation or New Case | Probable case | False Positive | Initial test EIA: 1. Equivocal: Further consultation advised 2. Reactive: Possible False Positive | Probable Early Case |
| Recommended Action | <ul style="list-style-type: none"> Repeat serology in 2 weeks if high risk DFA smear &/or PCR swab (if a suspicious syphilis lesion is present) | Repeat serology in 2 weeks | Repeat serology in 2 weeks | Repeat serology in 2 weeks to differentiate early vs. late latent syphilis | No New Diagnosis; no action required. | Repeat serology in 2 weeks | <ul style="list-style-type: none"> Copy of results to BCCDC physician BCCDC physician calls testing HCP to discuss diagnosis & management | BCCDC Physician consults with microbiologist, Dr. Morshed | <ul style="list-style-type: none"> Copy of results to BCCDC physician BCCDC physician calls testing HCP to discuss diagnosis & management | |

For questions about diagnosis, management and treatment of syphilis, please contact the Provincial STI/HIV Clinic at BCCDC 604-707-5600