

ASI *Evolution*[®]

Automated Nontreponemal RPR Syphilis Analyzer

FDA CLEARED



For Diagnostic and Blood Donor Screening

- Reduce Labor
- Improve Efficiency
- Better Quality
- Lower Costs

ARLINGTON
SCIENTIFIC

Your Syphilis Authority®

Arlington Scientific, Inc.® (ASI®) is an industry leader in the development, manufacturing and commercialization of *in vitro* diagnostic products with an emphasis in syphilis. For over 30 years ASI has been a pioneer in delivering new products and technologies to meet the growing demands of clinical and blood screening laboratories worldwide. ASI brings creative solutions to better manage and deliver the efficiencies and cost savings our customers expect.

The ASI Evolution Advantage

Clinical Value

- Standardized methodology
- Fewer false-positives
- Detect, diagnose and monitor therapy
- CDC recommended testing algorithm
- Accurate and reproducible results

Operational Value

- Walk-a-way system
- Run 190 tests/hour/analyzer
- Titers up to 1:2048
- Single operator can run multiple ASI Evolutions simultaneously
- Data Management (Analyze, Archive, Retrieve)

Financial Value

- Lowest cost syphilis automated test
- Minimal consumables required
- Lower total healthcare cost
- Reduce labor expense

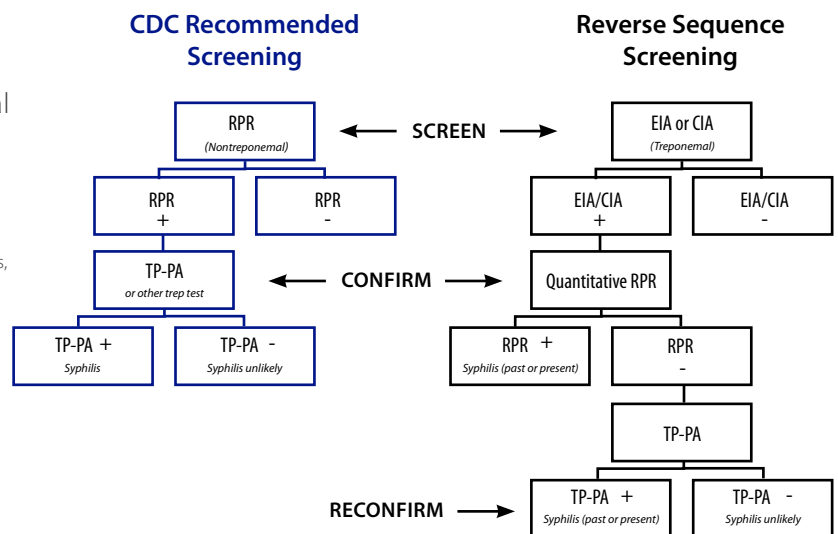
For Diagnostic Testing and Blood Donor Screening

The ASI Evolution® is the world's first and only fully-automated system for nontreponemal RPR Syphilis testing for diagnostic testing and blood donor screening. Simply load your reagents and samples, then walk-away. The Evolution automates the processing, analysis, reporting and archival of results for RPR screens.

Recommended Algorithm

"The CDC continues to recommend the traditional screening algorithm using a nontreponemal test (e.g., RPR or VDRL), with reactive nontreponemal tests confirmed by treponemal testing."

Gail Bolan, MD; Director, Division of STD Prevention; National Center For HIV/AIDS, Viral Hepatitis, STD, and TB Prevention



End Point Titers 1:2048

The ASI Evolution® uses a proprietary software algorithm that analyzes the agglutination of each microtiter well and reports a qualitative test result (reactive or nonreactive). In addition the ASI Evolution can serially dilute samples up to 1:2048 for each reactive microtiter well and reports semiquantitative endpoint titers for those wells.

Nontreponemal vs. Treponemal

A 2015 CDC study determined that nontreponemal tests can detect infection up to 14 days earlier than treponemal tests.

Day since 1st Bleed	Nontreponemal Test			Treponemal Test					
	ASI RPR	BD RPR	NT EIA	Treponema	PK TP	Serodia	Trinity Biotech		
				Syphilis	Syphilis	TPPA Syp	Syphilis IgG	Syphilis IgM	
Day 0	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG
Day 5	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG
Day 10	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG
Day 13	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG	NEG
Day 31	POS	POS	NEG	NEG	NEG	NEG	NEG	NEG	NEG
Day 45	POS	POS	POS	POS	POS	POS	IND	POS	POS
Day 48	POS	POS	POS	POS	POS	POS	IND	POS	POS
Day 52	POS	POS	POS	POS	POS	POS	IND	POS	POS
Day 59	POS	POS	POS	POS	POS	POS	POS	POS	POS

NEG = Negative, POS = Positive, IND = Indeterminate, Syphilis Seroconversion panel PSS901

Courtesy of Centers for Disease Control and Prevention

Automation Time Saving Advantage

The ASI Evolution reduces the amount of hands on time required to run an RPR test; freeing up valuable lab resources.

15 Min. Hands-on time **ASI Evolution® Automated RPR Syphilis Testing**

180 Min. Hands-on time **Manual RPR Syphilis Testing**

900 Test Comparison = **92% Less Hands-on Time**

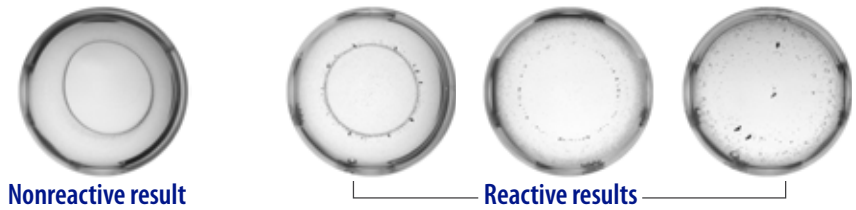
In a study comparing the hands-on time required to run 900 tests on the ASI Evolution vs manually, it was found that the ASI Evolution required 92% less hands-on time vs the manual process. A lab tech using 30 well cards was able to perform 900 samples manually in 3 hours, 2 minutes and 3 seconds. For the Evolution®, samples were placed into 5 racks (4x192 + 1x132) prior to running the samples. Total hands-on time to run 5 racks of samples was 15 minutes and 28 seconds, 1/12 the hands-on time required to perform the test manually.

As a fully automated system, the ASI Evolution can process and analyze up to 190 samples per hour. One technician can easily run three Evolutions simultaneously, with the ability to perform well over 4,000 tests in an eight-hour shift.



Digital Results

The ASI Evolutions HD camera, allows the proprietary algorithm to digitally analyze particles to determine reactivity.



The Nontreponemal Advantage

Competitive Matrix		
	Trep	Nontrep
Can monitor response to therapy		✓
Lowest cost per result		✓
Can provide titers of sample		✓
Can be automated for high thruput	✓	✓
Earliest detection of infection method		✓
Recommended for prenatal screening*		✓

*American Academy of Pediatrics, American College of Obstetricians and Gynecologists, and March of Dimes Birth Defects Foundation. Guidelines for Perinatal Care, 6th ed. Elk Grove Village, Ill.: American Academy of Pediatrics; 2008.

<https://www.aafp.org/afp/2010/0115/od1.html#afp20100115od1-b3>

ASI Evolution® System (For Technical Specs go to: <http://www.arlingtonscientific.com/evolutionspecs.html>)

ASI Evolution® Automated Syphilis Analyzer	1	Operations Manual	1
Laptop	1	Power Cord	1
ASI Evolution Sample Racks	3	Data Cord	1
Bar Code Reader	1		

Ordering Information

ASI Evolution® Automated Syphilis Analyzer	#2800-000	ASI Automated RPR Control Set 2.5ml	#905002.5A
ASI Automated 480 Test Kit	#900480A	ASI Automated RPR Control Set 5ml	#905005A
ASI Automated 768 Test Kit	#900768A	ASI Evolution® Waste System (Stand and waste container)	#2800-019
ASI Automated 4800 Test Kit	#9004800A	ASI Evolution Sample Rack	#2800-021



(800) 654-0146 (801) 489-8911
 Fax (801) 489-5552
 Springville, UT, USA
info@arlingtonscientific.com

www.arlingtonscientific.com, www.automatedrpr.com, www.asievolution.com