

February 18, 2021

DiaSorin Inc. Carol Depouw Principal Regulatory Affairs Specialist 1951 Northwestern Avenue Stillwater, Minnesota 55082

Re: K202574

Trade/Device Name: LIAISON Lyme IgG, LIAISON Lyme IgG Control Set, LIAISON Lyme Total

Antibody Plus

Regulation Number: 21 CFR 866.3830

Regulation Name: Treponema Pallidum Treponemal Test Reagents

Regulatory Class: Class II

Product Code: LSR

Dated: September 2, 2020 Received: September 4, 2020

Dear Carol Depouw:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm identifies combination product submissions. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's

requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801 and Part 809); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to https://www.fda.gov/medical-device-problems.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (https://www.fda.gov/training-and-continuing-education/cdrh-learn) and CDRH Learn (https://www.fda.gov/training-and-continuing-education/cdrh-learn). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Maria Ines Garcia, Ph.D.
Branch Chief
Division of Microbiology Devices
OHT7: Office of In Vitro Diagnostics
and Radiological Health
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

Indications for Use

Form Approved: OMB No. 0910-0120
Expiration Date: 06/30/2020

Expiration Date: 06/30/2020 See PRA Statement below.

510(k) Number (if known) K202574
Device Name LIAISON® Lyme IgG assay: LIAISON® Lyme IgG Control Set
Indications for Use (Describe) The LIAISON® Lyme IgG assay uses chemiluminescent immunoassay (CLIA) technology for the qualitative detection of IgG antibodies to Borrelia burgdorferi in human serum and plasma specimens (K2-EDTA, Li-heparin). This assay is intended for use on samples from patients with signs and symptoms consistent with or patients suspected of having Lyme disease to assess the presence of IgG antibodies and exposure to Borrelia burgdorferi. In addition, the LIAISON® Lyme IgG assay may be used as a confirmatory test in the modified two-tier test (MTTT) in combination with the DiaSorin LIAISON® Lyme Total Antibody Plus assay.
If used as a first stage test, positive or equivocal results with the LIAISON® Lyme IgG assay should be confirmed through additional testing with a Standard two-tier test (STTT) methodology using an IgG Borrelia burgdorferi Western blot test following current guidelines.
Positive supplemental results are supportive evidence of the presence of antibodies and exposure to Borrelia burgdorferi and may be used along with patient history, symptoms and other laboratory data to support a clinical diagnosis of Lyme disease. Negative results by the LIAISON® Lyme IgG assay should not be used to exclude Lyme disease.
The test must be performed on the LIAISON® XL Analyzer.
The DiaSorin LIAISON® Lyme IgG Control Set is intended for use as assayed quality control samples to monitor the performance of the LIAISON® Lyme IgG assay. The performance characteristics of LIAISON® Lyme IgG controls have not been established for any other assays or instrument platforms different from the LIAISON® XL.
Type of Use (Select one or both, as applicable)
Prescription Use (Part 21 CFR 801 Subpart D) Over-The-Counter Use (21 CFR 801 Subpart C)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

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5.0 510(k) SUMMARY

SUBMITTED BY: Carol A. DePouw

DiaSorin Inc.

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Email carol.depouw@diasorin.com

DATE PREPARED: September 01, 2020

NAME OF DEVICE:

Trade Name: LIAISON[®] Lyme IgG

LIAISON® Lyme IgG Control Set

Common Names/Descriptions: Borrelia burgdorferi IgG assay and

Borrelia burgdorferi IgG controls

Classification Names: Treponema pallidum; treponemal test reagents

Class II, 21 CFR: 866.3830; Microbiology

Product Code: LSR and QCH

Predicate Device: ZEUS ELISA B. burgdorferi IgG Test System

(K895292)/modified (K191398)

INTENDED USE:

The LIAISON® Lyme IgG assay uses chemiluminescent immunoassay (CLIA) technology for the qualitative detection of IgG antibodies to *Borrelia burgdorferi* in human serum and plasma specimens (K2-EDTA, Li-heparin). This assay is intended for use on samples from patients with signs and symptoms consistent with or patients suspected of having Lyme disease to assess the presence of IgG antibodies and exposure to *Borrelia burgdorferi*. In addition, the LIAISON® Lyme IgG assay may be used as a confirmatory test in the modified two-tier test (MTTT) in combination with the DiaSorin LIAISON® Lyme Total Antibody Plus assay.

If used as a first stage test, positive or equivocal results with the LIAISON® Lyme IgG assay should be confirmed through additional testing with a Standard two-tier test (STTT) methodology using an IgG *Borrelia burgdorferi* Western blot assay following current guidelines.

Positive supplemental results are supportive evidence of the presence of antibodies and exposure to *Borrelia burgdorferi* and may be used along with patient history, symptoms and other laboratory data to support a clinical diagnosis of Lyme disease.

Negative results by the LIAISON® Lyme IgG assay should not be used to exclude Lyme disease.

The test must be performed on the LIAISON® XL Analyzer.

The LIAISON® Lyme IgG Control Set is intended for use as assayed quality control samples to monitor the performance of the LIAISON® Lyme IgG assay. The performance characteristics of LIAISON® Lyme IgG controls have not been established for any other assays or instrument platforms different from the LIAISON® XL.

KIT DESCRIPTION:

The LIAISON® Lyme IgG assay is an indirect chemiluminescence immunoassay (CLIA) for the qualitative detection of IgG antibodies to *Borrelia burgdorferi* in human serum and plasma samples. All assay steps (with the exception of magnetic particle resuspension) and incubations are performed by the Analyzer. The principal components of the test are magnetic particles (solid phase) coated with recombinant *Borrelia* antigens and a conjugate reagent containing an anti-human IgG mouse monoclonal antibody linked to an isoluminol derivative (isoluminol-antibody conjugate). During the first incubation, anti-*Borrelia burgdorferi* antibodies present in calibrators, samples or controls bind to the solid phase. Unbound material is then removed with a wash cycle. During the second incubation, the antibody conjugate reacts with anti-*Borrelia burgdorferi* IgG antibodies that have bound to the solid phase. Excess antibody conjugate is then removed with a wash cycle. Subsequently, the starter reagents are added and a flash chemiluminescence reaction is induced. The light signal, and hence the amount of isoluminol-antibody conjugate, is measured by a photomultiplier as relative light units (RLU) and is indicative of the presence of *Borrelia burgdorferi* IgG antibodies present in calibrators, samples or controls.

COMPARISON TO PREDICATE DEVICE

Table 1: Table	of Similarities	
Characteristic	Candidate Device LIAISON [®] Lyme IgG	Predicate Device ZEUS ELISA Borrelia burgdorferi IgG Test System – K895292/K191398
Intended Use	burgdorferi in human serum and plasma specimens. This assay is intended for use on samples from patients with signs and symptoms consistent with or patients suspected of having Lyme disease to assess the presence of IgG	Qualitative detection of IgG class antibody to Borrelia burgdorferi in human serum. The assay is intended for testing serum samples from symptomatic patients or those suspected of Lyme Disease.
	antibodies and exposure to <i>Borrelia burgdorferi</i> . In addition, the LIAISON® Lyme IgG assay may be used as a confirmatory test in the modified two-tier test (MTTT) in combination with the DiaSorin LIAISON® Lyme Total Antibody Plus assay.	Positive and equivocal test results with the ZEUS ELISA <i>Borrelia burgdorferi</i> IgG Test System for the presence of <i>Borrelia burgdorfer</i> antibodies must be confirmed through additionatesting by one of the following approaches:
	If used as a first stage test, positive or equivocal results with the LIAISON® Lyme IgG assay should be confirmed through additional testing with a Standard two-tier test (STTT) methodology using an IgM Borrelia burgdorferi Western blot test	 (1) Standard two-tier test methodology (STTT) using IgG Western blot testing following current guidelines; or - (2) Modified two-tier test methodology using the
	following current guidelines. Positive supplemental results are supportive	ZUES ELISA Borrelia VIsE1/pepC10 IgG/IgN Test System.
	evidence of the presence of antibodies and exposure to <i>Borrelia burgdorferi</i> and may be used along with patient history, symptoms and other laboratory data to support a clinical diagnosis of Lyme disease.	Positive test results by either the STTT or MTTT methodology are supportive evidence for the presence of antibodies and exposure to <i>Borrelia burgdorferi</i> , the cause of Lyme disease. A diagnosis of Lyme disease should be made
	Negative results by the LIAISON® Lyme IgG assay should not be used to exclude Lyme disease.	based on the presence of <i>Borrelia burgdorferi</i> antibodies history, symptoms and other laboratory data.
Results	Qualitative	Same

Characteristic	Candidate Device LIAISON [®] Lyme IgG	Predicate Device ZEUS ELISA Borrelia burgdorferi IgM Test System – K895292/K191398
Measurand	IgG antibodies to Borrelia burgdorferi	Same
Intended Population	Patients with signs and symptoms consistent with <i>Borrelia</i> infection (Lyme disease)	Same
Assay Principle	Uses <i>Borrelia</i> antigens coated on a solid phase to capture specific patient IgG antibodies.	Uses <i>B. burgdorferi</i> antigen on coated solid phase (wells) to bind with IgG antibodies in patient sample
Conjugate antibody specificities	Anti-human IgG	Same
Assay Output	Index	Same

Table 2: Table of Differences									
Feature	Candidate Device LIAISON® Lyme IgG	Predicate Device ZEUS ELISA Borrelia burgdorferi IgM Test System – K895292/K191398							
Test Format	CLIA (indirect chemiluminescent assay)	ELISA							
Sample Type	Human serum, serum separator tubes, K ₂ -EDTA, lithium heparin plasma	Human serum							
Reporter Molecule	Isoluminol derivative conjugated to anti-human IgG	TMB (as a substrate for Horseradish peroxidase conjugated to anti-human IgG).							
Antigen	Recombinant antigens: VIsE (<i>B. burgdorferi</i> strain B31) Peptide for C6 region of VIsE	Whole cell antigen from B. burgdorferi (B31 strain)							
Assay Procedure	Automated (on the LIAISON® XL Analyzer)	Manual							
Calibration	Two-point verification (in triplicate) of stored 10 point master curve	Single Cut-off Calibrator assayed in triplicate							
Output Signal	Flash chemiluminescent response is integrated over a 3 second reading period to generate a relative light unit	Microtiter well O.D. (450 nm) is measured after the enzyme reaction is halted by 1M H ₂ SO ₄ /0.7M HCI.							
Measurement System	Photomultiplier (flash chemiluminescence reader)	Spectrophotometer (EIA Microtiter plate reader)							

PERFORMANCE DATA:

METHOD COMPARISON:

Two thousand six hundred twenty one (2621) human serum specimens were collected in 14 states which represented five (5) distinct U.S. geographical regions. Of the 2621 samples: 44.1% were male, 55.7% were female, 0.2% gender unknown, the ages ranged from 2 years to 103 years of age.

Testing with the LIAISON® Lyme IgG assay on the LIAISON® XL was performed in three (3) laboratories (2 external and internally at DiaSorin).

 Table 3: First Tier Percent Agreement with Predicate Device

	Predicate Assay (ELISA IgG)									
LIAISON Lyme IgG	Positive	Positive Equivocal		Total						
Positive	156	4	86	246						
Equivocal	6 0		24	30						
Negative	119	16	2210	2345						
Total	281	20	2320	2621						

Agreement Results

Positive % Agreement* 55.1% (166/301) 95% CI: 49.5% - 60.7% Negative % Agreement 96.5% (2210/2320) 95% CI: 94.3% - 96.1%

Standard Two-Tier Testing Methodology:

Western blot testing was performed on the samples that were positive or equivocal by the test device and the predicate following the current guidelines for Standard Two-Tier testing methodology. The following results were obtained:

Table 4: Standard Two-Tier Western Blot

Test System	Tier 1 + or Eqv	WB IgG +	WB IgG -
Predicate assay	301	109	192
LIAISON® Lyme IgG	276	109	167
Predicate assay + LIAISON® Lyme IgG	166	97	69

Agreement Results:

2nd Tier PPA 89.0% (97/109) 95%CI: 81.7% - 93.6% 2nd Tier NPA 99.5% (2500/2512) 95%CI: 99.2% - 99.7%

Modified Two Tier Testing Methodology – Prospective Population

All 2621 prospective (all comer) specimens were tested with the first-tier assay, LIAISON® Lyme Total Antibody Plus. There were 202 positive and 23 equivocal results. In the STTT protocol, the specimens that are positive or equivocal (n=225) are then tested with a *B. burgdorferi* (IgG) Western Blot.

Using the MTTT algorithm, the positive/equivocal specimens (n=225) were tested on the LIAISON® Lyme IgG assay. The second-tier LIAISON® Lyme IgG equivocal and positive results were considered positive. The equivocal and positive results were added together, and the results compared with the STTT positive results. The results obtained are shown in Table 5.

^{*}Includes Positive and Equivocal combined

Table 5: MTTT LIAISON Lyme IgG compared to STTT WB IgG

			WB-STTT (Ig	ıG)
		+	-	Total
	+	93	90	183
XL -MTTT (IgG)	-	3	39	42
	Total	96	129	225

Agreement Results

PPA: 96.9% (93/96) 95% CI: 91.2% - 98.9% NPA: 30.2% (39/129) 95% CI: 23.0% - 38.6%

Characterized Lyme Panel:

Two hundred eighty samples of various reactivity were acquired from the CDC and evaluated internally at the manufacture's site. The results of the testing are presented here as a means of conveying further information on the performance of the LIAISON® Lyme IgG assay with a characterized serum panel. This does not imply an endorsement of the assay by the CDC.

Table 6: Testing of CDC Lyme Reference Sera

CDC Reference Classification											
Comple					Lyme IgG	Predicate IgG					
Sample Category	N	Pos	Neg	Eqv	PPA 95% Wilson CI	Pos	Neg	Eqv	PPA 95% Wilson CI		
Acute	39	28	10	1	74.4% (29/39) 58.9% - 85.4%	23 15 1		1	61.5% (24/39) (45.9% - 75.1%)		
Convalescent	31	29	2	0	93.5% (29/31) 79.3% - 98.2%	22	6	3	80.6% (25/31) (63.7% - 90.8%)		
Late	20	20	0	0	100% (20/20) 83.9% - 100%	20	0	0	100% (20/20) (83.9% - 100%)		
Look-alike Diseases	90	9	81	0	90% (81/90) 82.1% - 94.6%	9	77	4	85.6% (77/90) (76.8% - 91.4%)		
Healthy controls	100	3	97	0	97.0% (97/100) 91.5% - 99.0%	1	98	1	98.0% (98/100) (93.0% - 99.4%)		

Modified Two Tier Testing Methodology-Retrospective population

The 280 retrospective samples from the CDC were first tested with the LIAISON® Lyme Total Antibody Plus. One (1) sample, belonging to endemic negative control group, did not have sufficient volume for testing; therefore 279 retrospective samples were evaluated. The LIAISON® Lyme Total Antibody Plus assay yielded 82 positive and equivocal samples. The 82 positive and equivocal samples were then tested by the IgG Western Blot (STTT) or the LIAISON® Lyme IgG assay (MTTT).

The results of MTTT-IgG compared to WB-STTT (IgG) are in the following table.

	Stage I (n=60)		Stage II (n=10)		Stage III (n=20)		Healthy		Disease Controls	
								99)	(n=90)	
	STTT-	MTTT-	STTT-	MTTT-	STTT-	MTTT-	STTT-	MTTT-	STTT-	MTTT-
	WB lgG	XL lgG	WB lgG	XL lgG	WB lgG	XL lgG	WB lgG	XL lgG	WB lgG	XL lgG
Positive	18	48	5	9	20	20	0	0	0	2
Negative	42	12	5	1	0	0	99	99	90	88
Sensitivity or PPA	30%	80%	50%	90%	100%	100%	N/A	N/A	N/A	N/A
Specificity or NPA	N/A	N/A	N/A	N/A	N/A	N/A	100%	100%	100%	97.8%

PRECISION STUDY

A 12 day precision/repeatability was conducted at DiaSorin Inc. on two (2) lots of the LIAISON® Lyme IgG assay. Six (6) serum samples and two (2) lots of LIAISON® Lyme IgG Controls were tested for 12 days, 2 runs/day, and 2 reps per run by multiple technicians for a total of 48 replicates per lot spanning 2 calibration cycles. One (1) lot is presented below. The CLSI Document EP5-A3 was consulted in the preparation of the testing protocol.

Sample ID		Mean	With	in Run	Betwe	en Run	Betwe	en Day		TAL nin-lot)
-			SD	%CV	SD	%CV	SD	%CV	SD	%CV
Negative Control Lot V1	48	0.46	0.02	4.2%	0.02	4.7%	0.00	0.0%	0.03	5.9%
Positive Control Lot V1	48	2.22	0.10	4.4%	0.11	4.8%	0.03	1.5%	0.15	6.7%
Negative Control LotV2	48	0.09	0.00	4.1%	0.00	3.5%	0.00	4.7%	0.01	7.2%
Positive Control Lot V2	48	2.39	0.07	2.9%	0.21	8.6%	0.00	0.0%	0.17	7.2%
LG-QC1	48	0.77	0.03	3.9%	0.04	5.4%	0.00	0.0%	0.05	6.1%
LG-QC3	48	1.37	0.04	2.7%	0.05	3.8%	0.04	2.7%	0.07	5.4%
LG-QC4	48	4.89	0.11	2.3%	0.11	2.3%	0.11	2.2%	0.19	3.9%
LG-QC5	48	0.82	0.05	6.4%	0.04	5.2%	0.04	5.4%	0.08	9.8%
LG-QC6	48	1.47	0.05	3.3%	0.06	4.2%	0.00	0.0%	0.08	5.2%
LG-QC7	48	0.48	0.02	3.3%	0.01	1.7%	0.01	2.3%	0.02	4.4%

REPRODUCIBILITY STUDY

A five (5) day precision/reproducibility study was performed internally at DiaSorin Inc. and at two (2) external U.S. laboratories with one (1) lot of the LIAISON® Lyme IgG assay.

The study was performed for 5 days, 2 runs/day, and 3 replicates/run. Each day, two operators, at each testing site performed the testing for a total of 30 replicates at each site. The combined results from the 3 sites are provided. CLSI document EP15-A3 was consulted in the preparation of the testing protocol.

Sample	_			n Run	Betwee	n Day	Betwe	en Run	Betwe	en Site	TO	TAL
ID	n	mean	SD	%CV	SD	%CV	SD	%CV	SD	%CV	SD	%CV
Negative Control	90	0.128	0.006	4.3%	0.004	3.3%	0.00	0.0%	0.006	4.8%	0.009	7.3%
Positive Control	90	2.25	0.064	2.9%	0.048	2.1%	0.037	1.7%	0.113	5.0%	0.144	6.4%
LG-QC1	90	0.820	0.018	2.2%	0.032	4.0%	0.016	2.0%	0.043	5.3%	0.060	7.3%
LG-QC3	90	1.40	0.039	2.8%	0.035	2.5%	0.041	2.9%	0.039	2.8%	0.077	5.5%
LG-QC4	90	5.05	0.113	2.2%	0.142	2.8%	0.068	1.3%	0.203	4.0%	0.280	5.5%
LG-QC5	90	0.735	0.021	2.8%	0.030	4.1%	0.017	2.2%	0.034	4.6%	0.053	7.2%
LG-QC6	90	1.63	0.048	3.0%	0.029	1.8%	0.035	2.1%	0.065	4.0%	0.092	5.7%
LG-QC7	90	0.542	0.013	2.5%	0.020	3.7%	0.006	1.1%	0.033	6.2%	0.041	7.7%

CROSS-REACTIVITY STUDY

The cross-reactivity study was designed to evaluate 222 specimens from twenty-two (22) disease states either known to contain potentially cross reactive antibodies to *B. burgdorferi* or from patients with diagnoses that can exhibit signs and symptoms similar to Lyme disease and cause false positive results.

Organism/Disease State	Samples Tested (n)	LIAISON® Lyme IgG Pos or Eqv
Tick Borne Diseases*		
Babesiosis IgG	10	5
Autoimmune Disorders		
Anti-Nuclear Antibodies (ANA)	10	0
Multiple Sclerosis	10	0
Viral Diseases		
Cytomegalovirus (CMV) IgG	10	0
Epstein-Barr Virus (EBV) IgG	10	0
Epstein-Barr Virus (EBV) EBNA IgG	10	1
Epstein-Barr Virus (VCA) IgG	10	0
Herpes Simplex Virus (HSV) IgG	10	0
Human Immunodeficiency Virus (HIV)	10	0
Influenza Virus	10	0
Parvovirus IgG	10	0
Varicella Zoster Virus (VZV) IgG	10	0
Bacterial Diseases		
H. pylori	10	1
Syphilis	10	0
Leptospirosis	2	1
Rheumatic Diseases		
Fibromyalgia	10	0
Rheumatoid Arthritis	10	0
Rheumatoid Factor	10	0
Systemic Lupus Erythematosus (SLE)	10	0
Sjogrens Syndrome	10	1
Additional Markers		
Chronic Fatigue Syndrome	10	1
Human Anti-mouse Antibodies (HAMA)	10	0
E. coli	10	0
Total	222	10

INTERFERING SUBSTANCES

"Controlled studies of potentially interfering substances from endogenous interferents spiked into serum specimens containing *B. burgdorferi* IgG antibodies at levels near the cut-off showed that assay performance was not affected at the concentration for each substance listed below. The testing was based on CLSI-EP7-A3.

Substances	Tested Concentrations	
Hemoglobin	1000 mg/dL	
Triglycerides	1500 mg/dL	
Bilirubin	40 mg/dL	
Total protein	15 g/dL	
Cholesterol	400 mg/dL	
Biotin	3600 ng/mL	

MATRIX EQUIVALENCE STUDY:

Thirty-two (32) matched patient sets of serum, SST serum, K₂-EDTA plasma and lithium heparin plasma samples were tested to determine if these sample types provide equivalent results. Sample regression analysis was done by Passing & Bablok regression. All sample types met acceptance criteria for use in the LIAISON® Lyme IgG assay. A summary of the results are shown in the following table.

Comparison to Serum		Bias	95% CI
Serum SST	Constant	-0.01	-0.04 to 0.00
	Proportional	1.04	1.01 to 1.10
EDTA Plasma	Constant	0.00	-0.01 to 0.03
	Proportional	0.96	0.93 to 1.01
Lithium Heparin Plasma	Constant	0.01	-0.04 to 0.04
	Proportional	0.97	0.91 to 1.03

CONCLUSION:

The material submitted in this premarket notification supports a substantial equivalence decision. The labelling satisfies the requirements of 21CFR 809.10.