Sonora Quest Laboratories
A Subsidiary of Laboratory Sciences of Arizona

1255 West Washington Street
Tempe, Arizona 85281
602.685.5000 | 800.766.6721
www.SonoraQuest.com

Fax Transmission Cover Sheet

Confidentiality Statement: The information contained in this facsimile is confidential information belonging to a CLIA licensed clinical laboratory and therefore may include personal patient health information. State Law prohibits further disclosure of this information without specific written consent of the person to whom it pertains or as otherwise permitted by law.

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Re-disclosure Statement for Federal Substance Abuse Cases: This information has been disclosed to you from records protected by Federal Confidentiality Rules (42 CFR Part 2). The federal rules prohibit you from making any further disclosure of this information unless further disclosure is expressly permitted by the written consent of the person to whom it pertains or is otherwise permitted by 42 CFR Part 2. The general authorization for the release of medical and other information is not sufficient for this purpose. The federal rules restrict the use of the information to criminally investigate or prosecute any alcohol or drug abuse patient.

Re-disclosure Statement For Communicable Disease/HIV Cases: This information is provided to you from confidential records which are protected by State Law that prohibits further disclosure of this information without the specific written consent of the person to whom it pertains, or as otherwise permitted by law.

Date:	02/26/2020	**Time:**	07:19
To:	Orthoarizona Chan Village	**Fax:**	4807865202
Subject:	Laboratory Information / Patient Results (3 Reports)		
From:	Sonora Quest Laboratories	**Fax:**	602-685-5401
Phone:	602-685-5050		

Report Status PARTIAL
Route 2016

Orthoarizona Chan Village
525 S Chandler Village Dr
Chandler, AZ 85226

Shelden Martin, MD

Sonora Quest Laboratories™
A Subsidiary of Laboratory Sciences of Arizona

Patient Information:
RABO, KADIN
Order #: 16633-A00106 / NL46191594
DOB: 05/30/2002 Age: 17Y-8M-15D
Sex: M
Patient Phone: 602-703-8551

Account: 16633
ID/MR#:

Collected: 02/14/2020 10:00 AM
Received: 02/15/2020 01:56 AM
Reported: 02/26/2020 07:04 AM

TEST	RESULTS	REFERENCE RANGES	UNITS	PL
HEMATOLOGY				
Cell Count and Differential, Synovial Fluid				
Source: Synovial				
Color	**Red**	Colorless - Yellow		
Appearance	**Cloudy**	Clear		
RBC	**251000 H**	≤3000	/mm3	
Total Nucleated Cells	**1215 H**	0 - 200	/mm3	
Total Cells Counted	100			
Segmented Neutrophils	5	0 - 25	%	
Lymphocytes	52	0 - 78	%	
Monocytes/Macrophages	43	0 - 71	%	

TEST	RESULTS/UNITS	PL
INFECTIOUS DISEASE MICROBIOLOGY		
Culture, Body Fluid, Anaerobic		
Status:	Final	
Source:	Knee fluid, right	
Other Source:	SYNOVIAL	
Culture:	No anaerobes isolated	
Culture, Body Fluid, Sterile, w/Gram Stain		
Status:	Final	
Source:	Knee fluid, right	
Other Source:	SYNOVIAL	
Gram Stain:	No WBC or organisms seen Smear performed on centrifuged specimen.	
Culture:	No growth	

Although smaller volumes of sterile body fluid will be cultured, submission of larger volumes will increase the recovery of pathogens.

AFB Culture and Smear		
Status:	Preliminary	
Source:	Other - Please Specify	

Report Status PARTIAL
Route 2016

Orthoarizona Chan Village
525 S Chandler Village Dr
Chandler, AZ 85226

Shelden Martin, MD

Sonora Quest Laboratories™
A Subsidiary of Laboratory Sciences of Arizona

Patient Information:
RABO, KADIN
Order #: 16633-A00106 / NL46191594

Account: 16633
ID/MR#:

Collected: 02/14/2020 10:00 AM
Received: 02/15/2020 01:56 AM
Reported: 02/26/2020 07:04 AM

DOB: 05/30/2002 Age: 17Y-8M-15D
Sex: M
Patient Phone: 602-703-8551

Other Source:	R KNEE SYNOVIAL	
AFB smear:	No acid-fast bacilli seen Swab received. Collection with swabs provides suboptimal amounts of material and may fail to recover pathogens. Interpret results with caution. Recollect if clinically warranted.	GS
Culture:	No AFB isolated to date (Any positive finding will be immediately called; final report will be issued at the end of the incubation period).	GS

Fungus Culture, Miscellaneous

Status:	Preliminary	
Source:	Other - Please Specify	
Other Source:	R KINEE SYNOVIAL	
Culture:	No mould or yeast isolated to date (Any status change will be reported).	GS

Tests Ordered: Culture, Fluid, Aerobic/Anaerobic, w/Gram Stain; AFB Culture and Smear; Fungus Culture, Miscellaneous; Cell Count and Differential, Synovial Fluid

Values Outside of Reference Range

TEST	RESULTS	REFERENCE RANGES	UNITS
Color	**Red**	Colorless - Yellow	
Appearance	**Cloudy**	Clear	
RBC	**251000 H**	≤3000	/mm3
Total Nucleated Cells	**1215 H**	0 - 200	/mm3

Values listed above may not include all results considered abnormal for this patient (e.g., text-only results, such as those for some pathology/cytology specimens, and results for analytes without established reference ranges will not appear). Always review the entire patient report and correlate all results with the patient's clinical condition.

Unless otherwise noted, testing performed by: Sonora Quest Laboratories, 1255 W. Washington St., Tempe, AZ 85281 800.766.6721
Testing noted as GS performed by: Banner - University Medical Center Phoenix, 1111 E McDowell Rd, Phoenix, AZ 85006 800.766.6721

End of Report

L=Low, H=High, C=Critical Abnormal, CL=Critical Low, CH=Critical High, *=Comment

Distribution #: 332136218-13902228

Autolims Version 3.4.17 On 02/26/2020

02/26/2020 6:22AM (GMT-08:00)

Report Status FINAL
Route 2016

Orthoarizona Chan Village
525 S Chandler Village Dr
Chandler, AZ 85226

Amy Ingersoll, PA

Sonora Quest Laboratories™
A Subsidiary of Laboratory Sciences of Arizona

Patient Information:
RUIZ, ARTURO
Order #: 166330000481 / NL46447697
DOB: 01/16/1975 Age: 45Y-1M-9D
Sex: M Fasting: Yes
Patient Phone: 408-772-4843

Account: 16633
ID/MR#: RUIZAR75
Collected: 02/25/2020 08:15 AM
Received: 02/25/2020 08:16 AM
Reported: 02/26/2020 02:24 AM

ORDER COMMENTS
RUIZAR75
FASTING

TEST	RESULTS	REFERENCE RANGES	UNITS	PL
CHEMISTRY				
Uric Acid	4.5	3.5 - 8.0	mg/dL	
Comprehensive Metabolic Panel				
Glucose	**101 H ***	65 - 99	mg/dL	
Urea Nitrogen (BUN)	20	8 - 25	mg/dL	
Creatinine	0.93	0.60 - 1.50	mg/dL	
GFR Estimated (Non-African American)	99	≥60	mL/min/1.73m2	
GFR Estimated (African American)	114	≥60	mL/min/1.73m2	
BUN/Creatinine Ratio	21.5	10.0 - 28.0		
Sodium	140	134 - 147	mmol/L	
Potassium	4.6	3.6 - 5.3	mmol/L	
Chloride	101	95 - 108	mmol/L	
Carbon Dioxide (CO2)	27	19 - 31	mmol/L	
Anion Gap	12	4 - 18		
Protein, Total	7.1	6.0 - 8.0	g/dL	
Albumin	4.7	3.6 - 5.1	g/dL	
Globulin	2.4	1.9 - 3.7	g/dL	
Albumin/Globulin Ratio	1.9	1.0 - 2.5		
Calcium	9.1	8.7 - 10.4	mg/dL	
Alkaline Phosphatase	68	40 - 140	IU/L	
Alanine Aminotransferase	31	5 - 60	IU/L	
Aspartate Aminotransferase	22	10 - 50	IU/L	
Bilirubin, Total	0.5	0.2 - 1.3	mg/dL	

*Glucose: Glucose reference range reflects fasting state.

Tests Ordered: Uric Acid; Comprehensive Metabolic Panel

Values Outside of Reference Range

TEST	RESULTS	REFERENCE RANGES	UNITS
Glucose	**101 H**	65 - 99	mg/dL

Values listed above may not include all results considered abnormal for this patient (e.g., text-only results, such as those for some pathology/cytology specimens, and results for analytes without established reference ranges will not appear). Always review the entire patient report and correlate all results with the patient's clinical condition.

Unless otherwise noted, testing performed by: Sonora Quest Laboratories, 1255 W. Washington St., Tempe, AZ 85281 800.766.6721

End of Report

Report Status FINAL
Route 2016

Orthoarizona Chan Village
525 S Chandler Village Dr
Chandler, AZ 85226

Douglas Hartzler, MD

Sonora Quest Laboratories™
A Subsidiary of Laboratory Sciences of Arizona

Patient Information:
HAYDEN, RONALD L
Order #: 166330000482 / NL46461733
DOB: 06/03/1950 Age: 69Y-8M-22D
Sex: M
Patient Phone: 480-212-3628

Account: 16633
ID/MR#: HAYDENRO50
Collected: 02/25/2020 11:32 AM
Received: 02/25/2020 11:33 AM
Reported: 02/25/2020 10:41 PM

TEST	RESULTS	REFERENCE RANGES	UNITS	PL
HEMATOLOGY				
CBC w/ Differential, w/ Platelet				
WBC	8.9	4.0 - 11.0	k/mm3	
RBC	**6.17 H**	4.30 - 6.00	m/mm3	
Hemoglobin	16.6	13.0 - 18.0	g/dL	
Hematocrit	52.5	40.0 - 53.0	%	
MCV	85.1	78.0 - 100.0	fL	
MCH	**26.9 L**	27.0 - 34.0	pg	
MCHC	31.6	31.0 - 37.0	g/dL	
Platelet Count	314	130 - 450	k/mm3	
RDW(sd)	48.7	38.0 - 49.0	fL	
RDW(cv)	**16.4 H**	11.0 - 15.0	%	
MPV	11.2	7.5 - 14.0	fL	
Segmented Neutrophils	57.8*		%	
Lymphocytes	22.8		%	
Monocytes	13.1		%	
Eosinophils	5.1		%	
Basophils	0.8		%	
Absolute Neutrophil	5.16	1.60 - 9.30	k/uL	
Absolute Lymphocyte	2.04	0.60 - 5.50	k/uL	
Absolute Monocyte	1.17	0.10 - 1.60	k/uL	
Absolute Eosinophil	0.46	0.00 - 0.70	k/uL	
Absolute Basophil	0.07	0.00 - 0.20	k/uL	
Immature Granulocytes	0.4		%	
Absolute Immature Granulocytes	0.04	0.00 - 0.10	k/uL	
NRBC RE, Nucleated Red Blood Cell Percent	0.0	0.0 - 1.0	%	

*Segmented Neutrophils: Automated Diff

Erythrocyte Sedimentation Rate

Erythrocyte Sedimentation Rate	8	≤20	mm/hr	

Erythrocyte Sedimentation Rate (ESR) specimens are stable for 4-6 hours at room temperature, and 24 hours if refrigerated. ESR results trend lower with increased specimen age. Consider use of C-reactive protein (CRP) to assess acute phase responses.

CHEMISTRY

CRP	5.4	≤7.9	mg/L	

Significantly decreased C-Reactive Proteins values may be obtained from samples taken from patients who have been treated with carboxypenicillins.

Report Status FINAL
Route 2016

Orthoarizona Chan Village
525 S Chandler Village Dr
Chandler, AZ 85226

Douglas Hartzler, MD

Sonora Quest Laboratories™
A Subsidiary of Laboratory Sciences of Arizona

Patient Information:
HAYDEN, RONALD L
Order #: 166330000482 / NL46461733

Account: 16633
ID/MR#: HAYDENRO50

Collected: 02/25/2020 11:32 AM
Received: 02/25/2020 11:33 AM
Reported: 02/25/2020 10:41 PM

DOB: 06/03/1950 Age: 69Y-8M-22D
Sex: M
Patient Phone: 480-212-3628

Tests Ordered: CRP; CBC w/ Differential, w/ Platelet; Erythrocyte Sedimentation Rate

Values Outside of Reference Range

TEST	RESULTS	REFERENCE RANGES	UNITS
RBC	**6.17 H**	4.30 - 6.00	m/mm3
MCH	**26.9 L**	27.0 - 34.0	pg
RDW(cv)	**16.4 H**	11.0 - 15.0	%

Values listed above may not include all results considered abnormal for this patient (e.g., text-only results, such as those for some pathology/cytology specimens, and results for analytes without established reference ranges will not appear). Always review the entire patient report and correlate all results with the patient's clinical condition.

Unless otherwise noted, testing performed by: Sonora Quest Laboratories, 1255 W. Washington St., Tempe, AZ 85281 800.766.6721

End of Report

HAYDEN, RONALD L Order #: 166330000482 / NL46461733 - FINAL Report

L=Low, H=High, C=Critical Abnormal, CL=Critical Low, CH=Critical High, *=Comment

Distribution #: 333445084-13902228

Autolims Version 3.4.17 On 02/26/2020

Sonora Quest Laboratories
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Tempe, Arizona 85281
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Date:	03/30/2020	**Time:**	11:10
To:	Orthoarizona Chan Village	**Fax:**	4807865202
Subject:	Laboratory Information / Patient Results (1 Reports)		
From:	Sonora Quest Laboratories	**Fax:**	602-685-5401
Phone:	602-685-5050		

Report Status FINAL
Route 2016

Orthoarizona Chan Village
525 S Chandler Village Dr
Chandler, AZ 85226

Shelden Martin, MD

Sonora Quest Laboratories™
A Subsidiary of Laboratory Sciences of Arizona

Patient Information:
RABO, KADIN
Order #: 16633-A00106 / NL46191594
DOB: 05/30/2002 Age: 17Y-8M-15D
Sex: M
Patient Phone: 602-703-8551

Account: 16633
ID/MR#:

Collected: 02/14/2020 10:00 AM
Received: 02/15/2020 01:56 AM
Reported: 03/30/2020 10:59 AM

TEST	RESULTS	REFERENCE RANGES	UNITS	PL
HEMATOLOGY				
Cell Count and Differential, Synovial Fluid				
Source: Synovial				
Color	**Red**	Colorless - Yellow		
Appearance	**Cloudy**	Clear		
RBC	**251000 H**	≤3000	/mm3	
Total Nucleated Cells	**1215 H**	0 - 200	/mm3	
Total Cells Counted	100			
Segmented Neutrophils	5	0 - 25	%	
Lymphocytes	52	0 - 78	%	
Monocytes/Macrophages	43	0 - 71	%	

TEST	RESULTS/UNITS	PL
INFECTIOUS DISEASE MICROBIOLOGY		
Culture, Body Fluid, Anaerobic		
Status:	Final	
Source:	Knee fluid, right	
Other Source:	SYNOVIAL	
Culture:	No anaerobes isolated	
Culture, Body Fluid, Sterile, w/Gram Stain		
Status:	Final	
Source:	Knee fluid, right	
Other Source:	SYNOVIAL	
Gram Stain:	No WBC or organisms seen Smear performed on centrifuged specimen.	
Culture:	No growth	

Although smaller volumes of sterile body fluid will be cultured, submission of larger volumes will increase the recovery of pathogens.

AFB Culture and Smear		
Status:	Final	
Source:	Other - Please Specify	

L=Low, H=High, C=Critical Abnormal, CL=Critical Low, CH=Critical High, *=Comment

Distribution #: 339454771-14240743

Autolims Version 3.4.17 On 03/30/2020

03/30/2020 11:12AM (GMT-07:00)

Report Status FINAL
Route 2016

Orthoarizona Chan Village
525 S Chandler Village Dr
Chandler, AZ 85226

Shelden Martin, MD

Sonora Quest Laboratories™
A Subsidiary of Laboratory Sciences of Arizona

Patient Information:
RABO, KADIN
Order #: 16633-A00106 / NL46191594
DOB: 05/30/2002 Age: 17Y-8M-15D
Sex: M
Patient Phone: 602-703-8551

Account: 16633
ID/MR#:
Collected: 02/14/2020 10:00 AM
Received: 02/15/2020 01:56 AM
Reported: 03/30/2020 10:59 AM

Other Source:	R KNEE SYNOVIAL	
AFB smear:	No acid-fast bacilli seen Swab received. Collection with swabs provides suboptimal amounts of material and may fail to recover pathogens. Interpret results with caution. Recollect if clinically warranted.	GS
Culture:	Final Report No acid-fast bacilli isolated	GS

Fungus Culture, Miscellaneous

Status:	Final	
Source:	Other - Please Specify	
Other Source:	R KINEE SYNOVIAL	
Culture:	Final Report No mould or yeast isolated	GS

Tests Ordered: Culture, Fluid, Aerobic/Anaerobic, w/Gram Stain; AFB Culture and Smear; Fungus Culture, Miscellaneous; Cell Count and Differential, Synovial Fluid

Values Outside of Reference Range

TEST	RESULTS	REFERENCE RANGES	UNITS
Color	**Red**	Colorless - Yellow	
Appearance	**Cloudy**	Clear	
RBC	**251000 H**	≤3000	/mm3
Total Nucleated Cells	**1215 H**	0 - 200	/mm3

Values listed above may not include all results considered abnormal for this patient (e.g., text-only results, such as those for some pathology/cytology specimens, and results for analytes without established reference ranges will not appear). Always review the entire patient report and correlate all results with the patient's clinical condition.

Unless otherwise noted, testing performed by: Sonora Quest Laboratories, 1255 W. Washington St., Tempe, AZ 85281 800.766.6721
Testing noted as GS performed by: Banner - University Medical Center Phoenix, 1111 E McDowell Rd, Phoenix, AZ 85006 800.766.6721

End of Report

L=Low, H=High, C=Critical Abnormal, CL=Critical Low, CH=Critical High, *=Comment

Distribution #: 339454771-14240743

Autolims Version 3.4.17 On 03/30/2020

03/30/2020 11:12AM (GMT-07:00)

CD Laboratories
Citrano Diagnostic Labs
810 Gleneagles Court, Suite 100
Baltimore, Maryland 21286
Office: 410-296-1400 | Fax: 410-296-1403

Fax Number: *16022884697* Pages: *4*

Subject: *Patient Reports from CD Laboratories* Date / Time: *02/17/2020 Mon / 14:06*

Result Reports Sent In This Transmission:

Acc No.	Pat ID	Last Name	First Name	Attn:
0001473325	90057-0530	RABO	KADIN	PROVIDER: MARTI

PRELIMINARY

CD Laboratories®
Confidence in Diagnostics
810 Gleneagles Court, Suite 100
Baltimore, Maryland 21286
Office: 410-296-1400 | Fax: 410-296-1403
Laboratory Director: Paul Endres, M.D.

Patient:	**RABO, KADIN**			**Accession #:**	**1473325**
Provider:	MARTIN, M.D., SHELDEN L.	Birth:	5/30/2002		
Home Phone:		Age:	17 years	Collection Date:	2/14/2020
		Gender:	Male	Received in Lab:	2/15/2020 10:53 AM

Organization: ARIZONA ORTHOPAEDIC ASSOCIATES

Test Name	Result	Units	Flag
			Run by: GS on 2/17/2020 2:00 PM
SYNOVASURE® ALPHA DEFENSIN NSA	NEGATIVE		
SPECIMEN SITE	RIGHT KNEE		
ALPHA-DEFENSINS-SF	NEGATIVE		
HEMOGLOBIN-SF	NORMAL		
LACTATE - SF	21.2	mg/dL	

For technical assistance regarding the Synovasure® Alpha Defensin NSA assay call 1-888-981-8378.

Synovasure® Alpha Defensin NSA is a laboratory developed test (LDT) intended as an adjunct for the detection of infection in synovial fluid in patients experiencing pain and or inflammation in a joint. Synovasure® Alpha Defensin NSA LDT utilizes a panel of tests that measure markers, including alpha-defensin and lactate, in the synovial fluid of joints that are infected. The alpha-defensin cutoff is adjusted for cell lysis using hemoglobin concentration. Synovasure® Alpha Defensin LDT results are intended to be used in conjunction with other clinical and diagnostic findings to aid in a patient's diagnosis of infection.

Synovasure® Alpha Defensin NSA is intended to determine whether there is an infection present in synovial fluid. It is not intended to identify a specific type of infection or to establish the origin or severity of an infection. It is intended to provide the physician with a specific positive or negative result for the presence of biomarkers that are in synovial fluid as a result of the infection.

The Synovasure® Alpha Defensin NSA LDT test is intended for clinical use. It was developed and its performance characteristics determined by CD Laboratories. CD Laboratories is certified under the Clinical Laboratories Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity testing. Synovasure® Alpha Defensin NSA has not been reviewed by the U.S. Food and Drug Administration. This test is covered by U.S. patent 7598080.

CD Laboratories
Confidence in Diagnostics
810 Gleneagles Court, Suite 100
Baltimore, Maryland 21286
Office: 410-296-1400 | Fax: 410-296-1403
Laboratory Director: Paul Endres, M.D.

PRELIMINARY

Patient: RABO, KADIN
Provider: MARTIN, M.D., SHELDEN L.
Home Phone:
Birth: 5/30/2002
Age: 17 years
Gender: Male
Accession #: 1473325
Collection Date: 2/14/2020
Received in Lab: 2/15/2020 10:53 AM
Organization: ARIZONA ORTHOPAEDIC ASSOCIATES

Test Name	Result	Units	Flag	
CELL COUNT/DIFF, SYNOVIAL				*Run by: MH on 2/15/2020 11:47 AM*
RED BLOOD CELL COUNT, FLUID	83000	/uL		
TOTAL NUCLEATED CELL COUNT	1061	/uL	HIGH	<150
NEUTROPHILS	13.1	%		<25.0
MONONUCLEAR CELLS	86.9	%	HIGH	<75.0

There have been a number of reported cutoffs for both PJI and Native Septic Arthritis (NSA) in the literature. The literature below can be referenced as guidance for the interpretation of your result.

Periprosthetic Joint Infection

The Musculoskeletal Infection Society (MSIS) currently recommends that any:
White cell count over 3000 cells/uL meets a minor criterion for PJI
Percent PMN over 80% meets a minor criterion for PJI

Native Septic Arthritis (NSA)

There is no fixed cutoff for NSA. A number of cutoffs (1700 - 100,000 cells/uL) have been reported with varying sensitivities and specificities. The commonly referenced cutoff of 50,000 white cell count/uL provides only 50% sensitivity for septic arthritis. Elevated white cell counts and %PMNs need to be interpreted along with all other clinical information available.

1) *http://www.msis-na.org/international-consensus*
2) *Carpenter CR, Schuur JD, Everett WW, Pines JM. Acad Emerg Med. 2011Aug;18(8):781-96.*

Run by: GS on 2/17/2020 2:00 PM

SYNOVASURE® NEUTROPHIL ELASTASE NEGATIVE

The Synovasure® Neutrophil Elastase (NE) LDT was designed to be a replacement for the Leukocyte Esterase (LE) test strip which can serve as one of the criteria in the MSIS infection algorithm. The Neutrophil Elastase LDT has been shown to out perform the LE test strip in internal studies. The NE LDT is not prone to the high rate of invalid results due to blood contamination that have been reported with the LE test strip. A positive NE result should be interpreted as meeting the MSIS criteria of a positive LE test strip.

Run by: KG on 2/17/2020 11:07 AM

CRYSTAL ID, SYNOVIAL FLUID NO CRYSTALS FOUND

PRELIMINARY

CD Laboratories
Confidence in Diagnostics
810 Gleneagles Court, Suite 100
Baltimore, Maryland 21286
Office: 410-296-1400 | Fax: 410-296-1403
Laboratory Director: Paul Endres, M.D

Patient: RABO, KADIN
Provider: MARTIN, M.D., SHELDEN L.
Home Phone:

Birth: 5/30/2002
Age: 17 years
Gender: Male

Accession #: 1473325
Collection Date: 2/14/2020
Received in Lab: 2/15/2020 10:53 AM

Organization: ARIZONA ORTHOPAEDIC ASSOCIATES

Test Name	Result	Units	Flag
EXPANDED SYNOVASURE® MICROBIAL ID PANEL			*Run by: EL on 2/17/2020 1:55 PM*
P. ACNES	NEGATIVE		
STAPHYLOCOCCUS PANEL	NEGATIVE		
CANDIDA PANEL	NEGATIVE		
ENTEROCOCCUS PANEL	NEGATIVE		

The Synovasure® Microbial ID Test is a qualitative in vitro diagnostic test intended for the detection of microbial antigen in synovial fluid of patients experiencing joint pain and/or inflammation. The Synovasure® Microbial ID Test measures antigen from bacterial and fungal species in the synovial fluid from organisms which commonly cause joint infections. The Synovasure® Microbial ID Test results are intended to be used as an adjunct to synovial fluid culture and may provide detection of an organism in some samples that are not able to be cultured.

FLUID CULTURE SCREEN **** Results still pending*

PRELIMINARY RESULTS: **** Results still pending*

NO GROWTH TO DATE

CD Laboratories
Citrano Diagnostic Labs
810 Gleneagles Court, Suite 100
Baltimore, Maryland 21286
Office: 410-296-1400 | Fax: 410-296-1403

Fax Number: *16022884697* Pages: *3*

Subject: *Patient Reports from CD Laboratories* Date / Time: *02/22/2020 Sat / 14:39*

Result Reports Sent In This Transmission:

Acc No.	Pat ID	Last Name	First Name	Attn:
0001473325	90057-0530	RABO	KADIN	PROVIDER: MARTI

CD Laboratories
Confidence in Diagnostics
810 Gleneagles Court, Suite 100
Baltimore, Maryland 21286
Office: 410-296-1400 | Fax: 410-296-1403
Laboratory Director: Paul Endres, M.D.

FINAL COPY

Patient: RABO, KADIN
Provider: MARTIN, M.D., SHELDEN L.
Home Phone:
Birth: 5/30/2002
Age: 17 years
Gender: Male
Accession #: 1473325
Collection Date: 2/14/2020
Received in Lab: 2/15/2020 10:53 AM
Organization: ARIZONA ORTHOPAEDIC ASSOCIATES

Test Name	Result	Units	Flag

Run by: GS on 2/17/2020 2:00 PM Reported on 2/17/2020 2:10 PM

SYNOVASURE® ALPHA DEFENSIN NSA	NEGATIVE		
SPECIMEN SITE	RIGHT KNEE		
ALPHA-DEFENSINS-SF	NEGATIVE		
HEMOGLOBIN-SF	NORMAL		
LACTATE - SF	21.2	mg/dL	

For technical assistance regarding the Synovasure® Alpha Defensin NSA assay call 1-888-981-8378.

Synovasure® Alpha Defensin NSA is a laboratory developed test (LDT) intended as an adjunct for the detection of infection in synovial fluid in patients experiencing pain and or inflammation in a joint. Synovasure® Alpha Defensin NSA LDT utilizes a panel of tests that measure markers, including alpha-defensin and lactate, in the synovial fluid of joints that are infected. The alpha-defensin cutoff is adjusted for cell lysis using hemoglobin concentration. Synovasure® Alpha Defensin LDT results are intended to be used in conjunction with other clinical and diagnostic findings to aid in a patient's diagnosis of infection.

Synovasure® Alpha Defensin NSA is intended to determine whether there is an infection present in synovial fluid. It is not intended to identify a specific type of infection or to establish the origin or severity of an infection. It is intended to provide the physician with a specific positive or negative result for the presence of biomarkers that are in synovial fluid as a result of the infection.

The Synovasure® Alpha Defensin NSA LDT test is intended for clinical use. It was developed and its performance characteristics determined by CD Laboratories. CD Laboratories is certified under the Clinical Laboratories Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity testing. Synovasure® Alpha Defensin NSA has not been reviewed by the U.S. Food and Drug Administration. This test is covered by U.S. patent 7598080.

CELL COUNT/DIFF, SYNOVIAL FLUID

Run by: MH on 2/15/2020 11:47 AM Reported on 2/17/2020 2:10 PM

RED BLOOD CELL COUNT	83000	/uL		
TOTAL NUCLEATED CELL COUNT	1061	/uL	HIGH	<150
NEUTROPHILS	13.1	%		<25.0
MONONUCLEAR CELLS	86.9	%	HIGH	<75.0

Clinical Decision Limit: Total nucleated cells: > 3000 cells/µL or Neutrophils: > 80%
Based on Musculoskeletal Infection Society (MSIS) recommended criteria for Periprosthetic Joint Infection

CD Laboratories
Confidence in Diagnostics
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Baltimore, Maryland 21286
Office: 410-296-1400 | Fax: 410-296-1403
Laboratory Director: Paul Endres, M.D.

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Patient: **RABO, KADIN** **Accession #:** **1473325**
Provider: MARTIN, M.D., SHELDEN L. Birth: 5/30/2002
Home Phone: Age: 17 years Collection Date: 2/14/2020
Gender: Male Received in Lab: 2/15/2020 10:53 AM

Organization: ARIZONA ORTHOPAEDIC ASSOCIATES

Test Name	Result	Units	Flag
SYNOVASURE® NEUTROPHIL ELASTASE			*Run by: GS on 2/17/2020 2:00 PM Reported on 2/17/2020 2:10 PM*
SYNOVASURE® NEUTROPHIL ELASTASE	NEGATIVE		
CRYSTAL ID, SYNOVIAL FLUID			*Run by: KG on 2/17/2020 11:07 AM Reported on 2/17/2020 2:10 PM*
CRYSTAL ID, SYNOVIAL FLUID	NO CRYSTALS FOUND		
SYNOVASURE® MICROBIAL ID PANEL			*Run by: EL on 2/17/2020 1:55 PM Reported on 2/17/2020 2:10 PM*
P. ACNES	NEGATIVE		
STAPHYLOCOCCUS PANEL	NEGATIVE		
CANDIDA PANEL	NEGATIVE		
ENTEROCOCCUS PANEL	NEGATIVE		
FLUID CULTURE SCREEN			*Run by: BP on 2/22/2020 2:26 PM Reported on 2/22/2020 2:29 PM*
AEROBIC CULTURE RESULTS	No Growth		
INCUBATION TIME	7	Days	
ANAEROBIC CULTURE RESULTS	No Growth		
INCUBATION TIME	7	Days	