

# Synovasure®

## Comprehensive Infection Panel

### Test Requisition

Place Test Sticker Provided  
in Kit Here  
(stickers not intended for use on tubes)

\* Indicates required field. Failure to provide information will delay results.

CD Laboratories Account	Account Number*							
	Ordering Provider* (Physician accounts only)							
	Provider NPI* (Physician accounts only)							
	Practice/Laboratory Name & Address*							
	Phone*							
	Fax*							
	Email							
Patient	Name* (Last, First)							
	Date of Birth*							
	Gender* <input type="checkbox"/> Male <input type="checkbox"/> Female							
	Patient Address*							
Specimen	Phone							
	Specimen Obtained in*	<input type="checkbox"/> Hospital <input type="checkbox"/> ASC <input type="checkbox"/> Clinic						
	Collection Date*							
	Aspiration Site*	<table border="0"> <tr> <td><u>Knee</u></td> <td><u>Hip</u></td> <td><u>Other</u> _____</td> </tr> <tr> <td><input type="checkbox"/> Right <input type="checkbox"/> Left</td> <td><input type="checkbox"/> Right <input type="checkbox"/> Left</td> <td><input type="checkbox"/> Right <input type="checkbox"/> Left</td> </tr> </table>	<u>Knee</u>	<u>Hip</u>	<u>Other</u> _____	<input type="checkbox"/> Right <input type="checkbox"/> Left	<input type="checkbox"/> Right <input type="checkbox"/> Left	<input type="checkbox"/> Right <input type="checkbox"/> Left
<u>Knee</u>	<u>Hip</u>	<u>Other</u> _____						
<input type="checkbox"/> Right <input type="checkbox"/> Left	<input type="checkbox"/> Right <input type="checkbox"/> Left	<input type="checkbox"/> Right <input type="checkbox"/> Left						

#### For Physician Accounts Only

Note: A front/back scan of insurance card(s) may be submitted

Patient Insurance	Insurance Type*	<input type="checkbox"/> Medicare <input type="checkbox"/> Commercial <input type="checkbox"/> VA/Govt <input type="checkbox"/> Medicaid <input type="checkbox"/> Other
	Primary Insurer*	
	Address*	
	Member ID*	
	Group ID*	
	Name of Insured*	
	Relationship to Patient* <input type="checkbox"/> Self <input type="checkbox"/> Spouse <input type="checkbox"/> Other _____	
	Secondary Insurer (if applicable)	
	Member ID	
	Group ID	
Diagnosis/ICD-10-CM Coding (see reverse for example codes)		
	Primary Code*	
	Secondary Code (if applicable)	
Patient Acknowledgment		
By signing this form, I hereby authorize Zimmer Biomet to furnish my designated insurance carrier the information on this form, if necessary, for reimbursement. I also authorize benefits to be payable to Zimmer Biomet. I understand that I am responsible for any amounts not paid by insurance for reasons including, but not limited to, non-covered and non-authorized services. I permit a copy of this authorization to be used in place of the original.		
	Signature*	
	Date*	

#### Test Information – Comprehensive Panel

Synovasure® Comprehensive Test Panels require three (3) tubes of synovial fluid: (2) No Additive tubes (BD 366703 or equivalent) AND (1) EDTA tube (BD367856 or equivalent). Refer to Test Submission Instructions within kit for equivalent tube options.

- Synovasure® Comprehensive Periprosthetic Joint Infection (PJI) Test Panel**  
Includes: Synovasure Alpha Defensin for PJI (alpha defensin and CRP), Synovasure Microbial Identification, Synovasure Neutrophil Elastase, WBC Count w/ Differential and RBC count, and Culture  
**Required Volume:** 3.0mL (No Additive Tube), 3.0mL (No Additive Tube) & 0.5mL (EDTA tube)  
 **Add-on: Crystal Analysis** (add addt'l 0.5mL to EDTA tube)
- Synovasure® Comprehensive Native Septic Arthritis (NSA) Test Panel**  
Includes: Synovasure Alpha Defensin for NSA (alpha defensin and lactate), Synovasure Microbial Identification, Synovasure Neutrophil Elastase, WBC Count w/ Differential and RBC count, Culture, and Crystal Analysis  
**Required Volume:** 3.0mL (No Additive Tube), 3.0mL (No Additive Tube) & 1.0mL (EDTA tube)  
**Not available in New York State**

- Synovasure® Comprehensive Periprosthetic Joint Infection (PJI) Test Panel – NEW YORK STATE PATIENTS**  
Includes: Synovasure Alpha Defensin for PJI (alpha defensin and CRP), Synovasure Neutrophil Elastase, WBC Count w/ Differential, and RBC count, and Culture  
**Required Volume:** 3.0mL (No Additive Tube), 2.0mL (No Additive Tube) & 0.5mL (EDTA tube)  
 **Add-on: Crystal Analysis** (add addt'l 0.5mL to EDTA tube)

#### Test Information – Individual Tests (select only if Comprehensive Panel is NOT desired)

- Synovasure® Alpha Defensin for PJI** (alpha defensin and CRP)  
**Required Volume:** 0.5mL (No Additive Tube)
- Synovasure® Microbial Identification** (Not available in New York State)  
**Required Volume:** 1.0mL (No Additive Tube)



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CLIA Registration No.: 21D0216863

### Synovasure® Comprehensive PJI Test Panel

The Synovasure® Comprehensive PJI Test Panel is intended as an aid in diagnosing periprosthetic joint infection (PJI) through a combination of proprietary and standard of care (SoC) synovial fluid tests for patients experiencing joint pain and/or inflammation following a total joint arthroplasty. The panel includes the following tests:

- Synovasure® Alpha Defensin for PJI  
*Includes alpha defensin ELISA and CRP*
  - Synovasure® Microbial Identification
  - Synovasure® Neutrophil Elastase
  - Synovial Fluid Culture
  - WBC Count with Differential and RBC count
  - Specimen Integrity
- Note: Crystal Analysis available as add-on to comprehensive panel**

### Synovasure® Comprehensive NSA Test Panel

The Synovasure® Comprehensive NSA Test Panel is intended as an aid in diagnosing native septic arthritis (NSA) through a combination of proprietary and standard of care (SoC) synovial fluid tests for patients experiencing joint pain and/or inflammation in a native joint. The panel includes the following tests:

- Synovasure® Alpha Defensin for NSA  
*Includes alpha defensin ELISA and lactate*
- Synovasure® Microbial Identification
- Synovasure® Neutrophil Elastase
- Synovial Fluid Culture
- WBC Count with Differential and RBC count
- Crystal Analysis
- Specimen Integrity

### Specimen Integrity Testing

The accuracy of diagnostic tests such as synovial fluid white blood cell count, neutrophil percentage, and others, can be significantly impacted by the quality of the specimen that is submitted for evaluation. As part of every analysis, specimen integrity tests are performed. Physicians are notified when a suboptimal specimen has been submitted. Our specimen integrity tests assess:

- **Absorbance at 280 nm (A280)** – Specimens that fall outside the normal range for synovial fluid may be caused by dilution via saline lavage or use of contrast agents
- **Red Blood Cell Count** – Specimens are verified as characteristic of synovial fluid, not blood.

<b>Synovasure® Alpha Defensin for PJI</b>	The Synovasure® Alpha Defensin lab developed test (LDT) for PJI consists of assays for synovial fluid alpha defensin ELISA and CRP and has been validated for use as an adjunct to aid in the diagnosis of periprosthetic joint infection.
<b>Synovasure® Alpha Defensin for NSA</b>	The Synovasure® Alpha Defensin lab developed test (LDT) for NSA consists of assays for synovial fluid alpha defensin ELISA and lactate and has been validated for use as an adjunct to aid in the diagnosis of native septic arthritis.
<b>Synovasure® Microbial Identification</b>	The Synovasure® Microbial Identification LDT is an assay intended for the early detection of microbial antigen in synovial fluid. The assay can detect microbial antigen in some samples where an organism is present but was not able to be cultured. Current panel identifies <i>Staphylococcus</i> species, <i>Enterococcus</i> species, <i>Candida</i> species and <i>Propionibacterium acnes</i> .
<b>Synovasure® Neutrophil Elastase</b>	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 NE LDT is designed and validated specifically for synovial fluid, while the LE test strip is designed for urine. 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.
<b>Synovial Fluid Culture</b>	Anaerobic and aerobic culture bottles incubated for 7 days. Includes organism identification and antibiotic susceptibilities. Shoulder specimen cultures are supplemented to enhance growth and incubated for 14 days.
<b>Synovial Fluid WBC Count w/ Differential and RBC Count</b>	Automated high-performance cell count system with differential and RBC count. Elevated white blood cells (>3000 cells/μL) are confirmed with a manual count.
<b>Crystal Analysis</b>	An assessment of synovial fluid using polarized light microscopy is performed for the presence of CPPD (calcium pyrophosphate dihydrate) and/or MSU (monosodium urate) crystals.

### Example Diagnosis Codes (not all inclusive)

Primary Diagnosis Code	Secondary Diagnosis Code
M25.469 (Effusion, unspecified knee)	secondary diagnosis allowed
M25.551 (Pain in right hip)	secondary diagnosis allowed
M25.552 (Pain in left hip)	secondary diagnosis allowed
M25.561 (Pain in right knee)	secondary diagnosis allowed
M25.562 (Pain in left knee)	secondary diagnosis allowed
Primary Dx required (identify infection)	T84.50XA (Infection and inflammatory RX due to unspecified internal joint prosthesis, initial encounter)
Primary Dx required (identify infection)	T84.52XD (Infection and inflammatory RX due to internal left hip prosthesis, subsequent encounter)
Primary Dx required (identify infection)	T84.53XS (Infection and inflammatory RX due to internal right knee prosthesis, sequential encounter)
Primary Dx required	Z96.641 (Presence of artificial hip joint, right)
Primary Dx required	Z96.642 (Presence of artificial hip joint, left)
Primary Dx required	Z96.651 (Presence of artificial knee joint, right)
Primary Dx required	Z96.652 (Presence of artificial knee joint, left)

For customer assistance, contact CD Laboratories Customer Service at 888-981-8378 or email [customerservice@CDLaboratories.com](mailto:customerservice@CDLaboratories.com)

To order more Synovasure® Infection Specimen Transportation kits (00-8888-130-01), contact your local Zimmer Biomet representative or Zimmer Biomet Customer Service at 1-800-348-2759, Option 1