

### **Reporting Title:** NASH-FibroTest **Performing Location:** Rochester

#### Ordering Guidance:

This test is not offered for patients younger than 14 years of age. Testing will be canceled if a specimen is received from a patient in this age group.

#### Necessary Information:

Age and sex are required.

#### **Specimen Requirements:**

Both serum and plasma are required for this test.

Patient Preparation: Fasting for at a minimum of 12 hours is required

Specimen Type: Serum
Supplies: Amber Frosted Tube, 5 mL (T915)
Collection Container/Tube:
Preferred: Serum gel
Acceptable: Red top
Submission Container/Tube: Amber vial
Specimen Volume: 4 mL
Collection Instructions:
1. Centrifuge and aliquot serum into an amber vial within 2 hours of collection.
2. Centrifuged serum must be light protected within 4 hours of collection. It is acceptable to draw the blood and then protect it from light after centrifugation as long as it's within 4 hours of collection.
3. Label specimen as serum.

Specimen Type: Plasma Collection Container/Tube: Gray top (potassium oxalate/sodium fluoride) Submission Container/Tube: Plastic vial Specimen Volume: 1 mL Collection Instructions: 1. Centrifuge and aliquot plasma into plastic vial. 2. Label specimen as plasma.

### Specimen Minimum Volume:

Serum: 2 mL Plasma: 0.25 mL

#### Forms:

If not ordering electronically, complete, print, and send Gastroenterology and Hepatology Test Request (T728) with the



#### specimen

Specimen Type	Temperature	Time	Special Container
Plasma NaFl-KOx	Refrigerated (preferred)	7 days	
	Frozen	14 days	
	Ambient	7 days	
Serum	Refrigerated (preferred)	7 days	LIGHT PROTECTED
	Frozen	14 days	LIGHT PROTECTED
	Ambient	24 hours	LIGHT PROTECTED

### **Result Codes:**

Result ID	Reporting Name	Туре	Unit	LOINC®
SCRF	FibroTest Score	Numeric		48795-9
STGF	FibroTest Stage	Alphanumeric		48794-2
INTEF	FibroTest Interpretation	Alphanumeric		88447-8
SCRN2	NashTest 2 Score	Numeric		93692-2
GRDN	NashTest 2 Grade	Alphanumeric		93693-0
INTEN	NashTest 2 Interpretation	Alphanumeric		93694-8
SCRS2	SteatoTest 2 Score	Numeric		93695-5
GRDS	SteatoTest 2 Grade	Alphanumeric		93696-3
INTEI	SteatoTest 2 Interpretation	Alphanumeric		93697-1
CMMS	NASH-FibroTest Comment	Alphanumeric		48767-8
NUM	BioPredictive Serial Number	Numeric		74715-4
APOAF	Apolipoprotein A1, S	Numeric	mg/dL	1869-7
A2MF	Alpha-2-Macroglobulin, S	Numeric	mg/dL	1835-8
	Also used by tests: A2MF			
HAPTF	Haptoglobin, S	Numeric	mg/dL	46127-7
	Also used by tests: HAPTF			
ALTF	Alanine Aminotransferase (ALT), S	Numeric	U/L	1743-4
	Also used by tests: ALTF			

LABORATORIES

Nonalcoholic Steatohepatitis (NASH)-FibroTest, Serum and Plasma

Result ID	Reporting Name	Туре	Unit	LOINC®
GGTF	Gamma Glutamyltransferase (GGT), S	Numeric	U/L	2324-2
	Also used by tests: GGTF			
TBILF	Bilirubin, Total, S	Numeric	mg/dL	1975-2
	Also used by tests: TBILF			
ASTF	Aspartate Aminotransferase (AST), S	Numeric	U/L	30239-8
	Also used by tests: ASTF			
CHOLF	Cholesterol, Total, S	Numeric	mg/dL	2093-3
	Also used by tests: CHOLF			
TRIGF	Triglycerides, S	Numeric	mg/dL	2571-8
	Also used by tests: TRIGF			
GLURF	Glucose, Fasting, P	Numeric	mg/dL	1558-6

LOINC and CPT codes are provided by the performing laboratory.

### Supplemental Report:

No

#### Components:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
INTNS	NASH-FibroTest, Interpretation			Yes	No
APOAF	Apolipoprotein A1, S			Yes	No
A2MF	Alpha-2-Macroglobulin, S			Yes	Yes (Order A2M)
HAPTF	Haptoglobin, S			Yes	Yes (Order HAPT)
ALTF	Alanine Aminotransferase (ALT), S			Yes	Yes (Order ALT)
GGTF	Gamma Glutamyltransferase (GGT), S			Yes	Yes (Order GGT)
TBILF	Bilirubin, Total, S			Yes	Yes (Order BILIT)
ASTF	Aspartate Aminotransferase (AST), S			Yes	Yes (Order AST)



Nonalcoholic Steatohepatitis (NASH)-FibroTest, Serum and Plasma

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
CHOLF	Cholesterol, Total, S			Yes	Yes (Order CHOL)
TRIGF	Triglycerides, S			Yes	Yes (Order TRIG)
GLURF	Glucose, Fasting, P			Yes	No

### **CPT Code Information:**

0003M

#### **Reference Values:**

#### NASHTEST 2 INTERPRETATION

NashTest 2 score	Grade	Interpretation
0.00-0.25*	NO	No NASH
0.25-0.50*	N1	Mild NASH
0.50-0.75*	N2	Moderate NASH
0.75-1.00*	N3	Severe NASH

\*Boundary values can apply to 2 stages based on rounding. For example, a NashTest 2 score of 0.245 will round up to 0.25 and be staged N0. A NashTest 2 score of 0.254 will round down to 0.25 and be staged N2.

#### STEATOTEST 2 INTERPRETATION

SteatoTest 2 score	Grade	Interpretation
0.00-0.40*	S0	No steatosis (
0.40-0.55*	S1	Mild steatosis (5-33%)
0.55-1.00*	S2	Moderate/severe steatosis (34-100%)

\*Boundary values can apply to 2 stages based on rounding. For example, a SteatoTest 2 score of 0.395 will round up to 0.40 and be staged S0. A SteatoTest 2 score of 0.404 will round down to 0.40 and be staged S1.

#### FIBROTEST INTERPRETATION

FibroTest score	Stage	Interpretation
0.00-0.21*	F0	No fibrosis
0.21-0.27*	F0-F1	No fibrosis
0.27-0.31*	F1	Minimal fibrosis



Nonalcoholic Steatohepatitis (NASH)-FibroTest, Serum and Plasma

0.31-0.48*	F1-F2	Minimal fibrosis
0.48-0.58*	F2	Moderate fibrosis
0.58-0.72*	F3	Advanced fibrosis
0.72-0.74*	F3-F4	Advanced fibrosis
0.74-1.00	F4	Severe fibrosis (Cirrhosis)

\*Boundary values can apply to 2 stages based on rounding. For example, a FibroTest score of 0.305 will round up to 0.31 and be staged F1. A FibroTest score of 0.314 will round down to 0.31 and be staged F1-F2.

ALPHA-2-MACROGLOBULIN < or =18 years: 178-495 mg/dL >18 years: 100-280 mg/dL

ALANINE AMINOTRANSFERASE (ALT) Males <12 months: Not established > or =1 year: 7-55 U/L

Females <12 months: Not established > or =1 year: 7-45 U/L

APOLIPOPROTEIN A1 Males <24 months: Not established 2-17 years Low: <115 mg/dL Borderline low: 115-120 mg/dL Acceptable: >120 mg/dL > or =18 years: > or =120 mg/dL

Females <24 months: Not established 2-17 years Low: <115 mg/dL Borderline low: 115-120 mg/dL Acceptable: >120 mg/dL > or =18 years: > or =140 mg/dL

GAMMA-GLUTAMYLTRANSFERASE (GGT) Males 0-11 months: <178 U/L 12 months-6 years: <21 U/L 7-12 years: <24 U/L 13-17 years: <43 U/L

Females 0-11 months: <178 U/L

> or =18 years: 8-61 U/L



Nonalcoholic Steatohepatitis (NASH)-FibroTest, Serum and Plasma

12 months-6 years: <21 U/L 7-12 years: <24 U/L 13-17 years: <26 U/L > or =18 years: 5-36 U/L

HAPTOGLOBIN: 30-200 mg/dL

BILIRUBIN, TOTAL 0-6 days: Refer to www.bilitool.org for information on age-specific (postnatal hour of life) serum bilirubin values. 7-14 days: 0.0-14.9 mg/dL 15 days to 17 years: 0.0-1.0 mg/dL > or =18 years: 0.0-1.2 mg/dL

ASPARTATE AMINOTRANSFERASE (AST) Males 0-11 months: Not established 1-13 years: 8-60 U/L > or =14 years: 8-48 U/L

Females 0-11 months: Not established 1-13 years: 8-50 U/L > or =14 years: 8-43 U/L

CHOLESTEROL, TOTAL The National Lipid Association and the National Cholesterol Education Program (NCEP) have set the following guidelines for lipids in adults 18 years old and older:

TOTAL CHOLESTEROL Desirable: <200 mg/dL Borderline High: 200-239 mg/dL High: > or =240 mg/dL

TRIGLYCERIDES Normal: <150 mg/dL Borderline High: 150-199 mg/dL High: 200-499 mg/dL Very High: > or =500 mg/dL

The Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents has set the following guidelines for lipids in children 2 to 17 years of age:

TOTAL CHOLESTEROL Acceptable: <170 mg/dL Borderline High: 170-199 mg/dL High: > or =200 mg/dL

TRIGLYCERIDES 2-9 years Acceptable: <75 mg/dL



Nonalcoholic Steatohepatitis (NASH)-FibroTest, Serum and Plasma

Borderline High: 75-99 mg/dL High: > or =100 mg/dL

10-17 years Acceptable: <90 mg/dL Borderline High: 90-129 mg/dL High: > or =130 mg/dL

GLUCOSE FASTING 0-11 months: Not established > or =1 year: 70-100 mg/dL