

FLINT**AD – Alcohol Use Disorders Identification Test
(AUDIT)**

Purpose: To screen for current heavy drinking and/or active alcohol abuse or dependence.

When: Screening visit s.

Administered by: Self-administered. Clinical Coordinator must be available at visits to answer questions and review completed forms.

Respondent: Patient.

Instructions: Flash Card #9, Drink Equivalents, may be used with this form. The Clinical Coordinator should complete section A below and write the patient ID on pages 2-3. The patient should meet with the Clinical Coordinator, be trained in completion of the form, and then should complete pages 2-3. The Clinical Coordinator should review the completed form for missing responses and resolve any problems before the patient leaves the clinical center. Page 1 should be reattached to pages 2-3 and the Clinical Coordinator then should complete section B below.

A. Center, patient, and visit identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Date of visit (*date patient completed the form*):

_____ - _____ - _____
day mon year

5. Visit code: s _____

6. Form & revision: a d 1

7. Study: FLINT 7

B. Administrative information

(To be completed by Clinical Coordinator after survey is completed.)

8. How was the questionnaire completed:

Self-administered by patient (1)
Interview with translator (2)

9. Clinical Coordinator

a. PIN: _____

b. Signature: _____

10. Date form reviewed:

_____ - _____ - _____
day mon year

AD – Alcohol Use Disorders Identification Test (AUDIT)

Instructions: This survey asks for your views about your alcohol use. Please check one for each question below (*items 1-10 are for clinical center use only*).

11. How often do you have a drink containing alcohol?

- | | | | | |
|-------|--------------------|------------------------------|------------------------------|------------------------------|
| Never | Monthly
or less | Two to four
times a month | Two to three
times a week | Four or more
times a week |
| (0) | (1) | (2) | (3) | (4) |
- ↳ **21.**

12. How many drinks containing alcohol do you have on a typical day when you are drinking?

- | | | | | |
|--------|--------|--------|--------|------------|
| 1 or 2 | 3 or 4 | 5 or 6 | 7 to 9 | 10 or more |
| (0) | (1) | (2) | (3) | (4) |

13. How often do you have six or more drinks on one occasion?

- | | | | | |
|-------|----------------------|---------|--------|--------------------------|
| Never | Less than
monthly | Monthly | Weekly | Daily or
almost daily |
| (0) | (1) | (2) | (3) | (4) |

14. How often during the last year have you found that you were not able to stop drinking once you had started?

- | | | | | |
|-------|----------------------|---------|--------|--------------------------|
| Never | Less than
monthly | Monthly | Weekly | Daily or
almost daily |
| (0) | (1) | (2) | (3) | (4) |

15. How often during the last year have you failed to do what was normally expected from you because of drinking?

- | | | | | |
|-------|----------------------|---------|--------|--------------------------|
| Never | Less than
monthly | Monthly | Weekly | Daily or
almost daily |
| (0) | (1) | (2) | (3) | (4) |

16. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
(0)	(1)	(2)	(3)	(4)

17. How often during the last year have you had a feeling of guilt or remorse after drinking?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
(0)	(1)	(2)	(3)	(4)

18. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

Never	Less than monthly	Monthly	Weekly	Daily or almost daily
(0)	(1)	(2)	(3)	(4)

19. Have you or someone else been injured as a result of your drinking?

No	Yes, but not in the last year	Yes, during the last year
(0)	(1)	(2)

20. Has a relative or friend, or a doctor or other health worker been concerned about your drinking or suggested you cut down?

No	Yes, but not in the last year	Yes, during the last year
(0)	(1)	(2)

21. Today's date:

Thank you for completing this questionnaire.

FLINT

BG - Baseline History

Purpose: To collect baseline history information about the patient.

When: Visit s.

Administered by: Clinical Coordinator, reviewed by Study Physician.

Respondent: Patient.

Instructions: Collect information by interview and chart review. If is checked for an item, and the physician agrees with the diagnosis, the patient is ineligible for the FLINT Trial. If is checked for an item, the patient is ineligible and cannot enroll in the FLINT Trial; the form should not be keyed to the data system; but the form should be set aside with forms for other patients who started screening, but were found to be ineligible.

A. Center, visit, and patient identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Visit date (*date this form is initiated*):

_____ day _____ mon _____ year

5. Visit code: s _____

6. Form & revision: b g 1

7. Study: FLINT 7

B. NAFLD history

8. Does the patient have a liver biopsy done that you want evaluated for the FLINT trial (*complete the Liver Biopsy Histology Findings (HF) and Liver Biopsy Materials Documentation (SD) forms for this biopsy*):

(^{Yes} _{*1}) (^{No} ₂)

11. _____

**Randomization must be done within 90 days of liver biopsy.*

9. Date of liver biopsy:

_____ day _____ mon _____ year

10. Last day to randomize based on liver biopsy date (*90 days after biopsy; use date calculator 2 on the NASH CRN home page*):

_____ day _____ mon _____ year

12. _____

11. Will the patient have a biopsy during screening:

(^{Yes} _{*1}) (^{No} ₂)

Elig _____

Complete the Liver Biopsy Histology Findings (HF) and Liver Biopsy Materials Documentation (SD) forms for this biopsy. Blood draw for banking should be done **prior to the biopsy or at least 4 days **after** the biopsy.*

C. Menstrual history and use of effective birth control

12. Is the patient female:

(^{Yes} ₁) (^{No} ₂)

20. _____

13. Characterize the menstrual history in the past 5 years (*check only one*):

Regular periods (₁)

Irregular periods (₂)

Rare periods (₃)

No periods (₄)

14. Is patient post-menopausal:

(^{Yes} ₁) (^{No} ₂)

16. _____

15. What was the patient's age at menopause:

_____ age in years

16. Is the patient female and of childbearing potential:
 (Yes) (1) (No) (2)
 20.

17. Is the patient currently pregnant:
 (Yes) (1) (No) (2)
 Elig

18. Is the patient currently breast feeding:
 (Yes) (1) (No) (2)
 C

**Caution: Patient cannot be breastfeeding at time of randomization.*

19. Is the patient willing to use effective birth control methods during FLINT:
 (Yes) (1) (No) (2)
 Elig

D. Medical history (**C** means Caution; condition is exclusionary if study physician agrees with diagnosis; **Elig** means the patient is ineligible and can not enroll in FLINT)

20. Has the patient ever been diagnosed with any of the following (check all that apply; source of information can be interview and/or chart review)

- a. Diabetes type 1: ()
- b. Diabetes type 2: ()
- c. Chronic hepatitis B: () **Elig**
- d. Hepatitis C: () **Elig**

e. Active autoimmune hepatitis: () **C**

f. Autoimmune cholestatic liver disorder (PBC): () **C**

g. Wilson's disease: () **C**

h. Alpha-1-antitrypsin (A1AT) deficiency: () **C**

i. Glycogen storage disease: ()

j. Iron overload: () **C**

k. Hemochromatosis: () **Elig**

l. Polycystic liver disease: () **C**

m. Biliary diversion: () **Elig**

n. Primary sclerosing cholangitis: () **Elig**

o. Drug induced liver disease: () **Elig**

p. Bile duct obstruction: () **Elig**

q. Gilbert's syndrome: ()

r. Esophageal or gastric varices on endoscopy: () **Elig**

s. Bleeding from varices: () **Elig**

t. Other gastrointestinal bleeding: () **C**

u. Ascites: () **Elig**

v. Edema: ()

w. Hepatic encephalopathy: () **Elig**

x. Portal hypertension: () **Elig**

- y. Hepatorenal syndrome: (1)
- z. Hepatopulmonary syndrome: (1)
- aa. Short bowel syndrome: (1)
- ab. Hemophilia (*bleeding disorder*): (1)
- ac. HIV positive: (1)
- ad. Systemic autoimmune disorder such as rheumatoid arthritis or systemic lupus: (1)
- ae. Endocrine disease (*hormonal abnormality*): (1)
- af. Hepatocellular carcinoma: (1)
- ag. Other malignancy (*cancer*): (1)
- ah. Peripheral neuropathy: (1)
- ai. Seizure disorder or epilepsy: (1)
- aj. Drug allergies: (1)
- ak. Hypothyroidism: (1)
- al. Hypertension: (1)
- am. Cerebrovascular disease: (1)
- an. Chronic cholestasis: (1)
- ao. Hyperlipidemia (*high cholesterol, high triglycerides*): (1)
- ap. Pancreatitis: (1)
- aq. Cholelithiasis: (1)
- ar. Coronary artery disease: (1)
- as. Congestive heart failure: (1)
- at. Elevated uric acid such as gout: (1)
- au. Kidney disease: (1)
- av. Polycystic ovary syndrome: (1)
- aw. Sleep apnea (*not breathing during sleep*): (1)
- ax. Dermatologic disorders: (1)
- ay. Myopathy: (1)
- az. Myositis: (1)

- ba. Major depression: (1)
- bb. Schizophrenia: (1)
- bc. Bipolar disorder: (1)
- bd. Obsessive compulsive disorder: (1)
- be. Severe anxiety or personality disorder: (1)
- bf. Substance abuse: (1)
- bg. Other (*specify*): (1)

_____ specify
bh. None of the above: (1)

21. Has the patient ever had surgery for any of the following (*check all that apply*)

- a. Stapling or banding of the stomach: (1)
- b. Jejunioileal (*or other intestinal*) bypass prior to the diagnosis of NAFLD: (1)
- c. Biliopancreatic diversion: (1)
- d. Other GI or bariatric surgery (*specify*): (1)

_____ specify
e. None of the above: (1)

22. Is the patient currently undergoing evaluation for bariatric surgery:

(Yes) (No)
 (1) (2)

23. Organ, limb, or bone marrow transplant

a. Has the patient ever received a liver transplant:

(Yes) (No)
 (1) (2)

b. Has the patient ever received any other organ, limb, or bone marrow transplant:

(Yes) (No)
 (1) (2)

E. Drugs historically associated with NAFLD

24. Has the patient used any of the following in the past year (*check all that apply*)

- a. Amiodarone (Pacerone): ()
- b. Demeclocycline (Declomycin): ()
- c. Divalproex (Depakote): ()
- d. Doxycycline (Monodox): ()
- e. Methotrexate (Rheumatrex): ()
- f. Minocycline (Dynacin, Minocin): ()
- g. Oxytetracycline (Terramycin): ()
- h. Tetracycline (Achromycin): ()
- i. Valproate sodium (Depacon): ()
- j. Valproic acid (Depakene): ()
- k. Other known hepatotoxin #1 (*specify*): ()

l. Other known hepatotoxin #2 (*specify*): ()

m. Other known hepatotoxin #3 (*specify*): ()

n. None of the above: ()

25. Were any of the items on 24a-m checked:

(^{Yes}) (^{No})

C

**Caution: Use of any of these drugs for more than 2 weeks in the past year is exclusionary.*

26. Has the patient taken any systemic glucocorticoids in the past year (*check all that apply*):

- a. Betamethasone sodium (Celestone): ()
- b. Cortisol: ()
- c. Cortisone: ()
- d. Dexamethasone (Decadron): ()
- e. Hydrocortisone (Hydrocortone): ()
- f. Methylprednisolone (Solu-Medrol): ()
- g. Prednisolone (Prelone): ()
- h. Prednisone: ()
- i. Triamcinolone (Acetocot, Amcort, Aristocort, Kenacort): ()
- j. Other, (*specify*): ()

k. Other, (*specify*): ()

l. None of the above: ()

27. Were any of the items 26a-k checked:

(^{Yes}) (^{No})

C

**Caution: Use of systemic glucocorticoids for more than 2 weeks in the past year is exclusionary.*

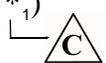
- 28. Has the patient taken any estrogen, progestin, anabolic steroids, hormone replacement therapy, or selective estrogen receptor modulators in the past year (*check all that apply*):
 - a. Boldenone undecylenate (Equipoise): ()
 - b. Conjugated estrogen (Premarin/Prempro): ()
 - c. Diethylstilbestrol and methyltestosterone (Tylosterone): ()
 - d. Esterified estrogen (Estratab, Menest): ()
 - e. Estradiol (Estrace): ()
 - f. Ethinyl estradiol (Estinyl): ()
 - g. Fluoxymesterone (Android-F, Halotestin): ()
 - h. Levonorgestrel (Norplant): ()
 - i. Medroxyprogesterone (Cycrin, Provera): ()
 - j. Megestrol (Megace): ()
 - k. Methandrostenolone (Dianabol): ()
 - l. Methyltestosterone (Android): ()
 - m. Nandrolone (Deca-Durabolin, Durabolin, Hybolin Decanoate, Kabolin): ()
 - n. Norethindrone (Micronor): ()
 - o. Norgestrel (Ovrette): ()
 - p. Oral contraceptives (Alesse, Demulen, Desogen, Estrostep, Genora, Intercon, Levlen, Levlite, Levora, Loestrin, Lo-Ovral, Necon, Nelova, Nordette, Norethin, Norinyl, Ortho Cyclen, Ortho-Novum, Ortho Tri-Cyclen, Ovral, Tri-Levlen, Triphasil, Trivora, Zovia): ()
 - q. Oxandrolone (Oxandrin): ()
 - r. Oxymetholone (Anadrol): ()
 - s. Progesterone (Prometrium): ()
 - t. Raloxifene (Evista): ()
 - u. Stanzolol (Winstrol): ()
 - v. Tamoxifen (Nolvadex): ()
 - w. Testosterone (Depo-Testosterone): ()

- x. Other, (*specify*): ()

- y. Other, (*specify*): ()

- z. None of the above: ()

29. Were any of the items 28a-y checked:

Yes () * () No () ()


**Caution: Use of anabolic steroids, tamoxifen, or estrogens at doses greater than those used for hormone replacement for more than 2 weeks in the past year is exclusionary.*

F. Use of antiNASH drugs and supplements

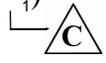
30. Has the patient taken any of these antiNASH drugs in the past 6 months (*check all that apply*)

- a. Betaine (Cystadone): ()
- b. Choline + methionine + betaine + adenosine + pyridoxine (Epocler): ()
- c. Ursodeoxycholic acid (UDCA, Actigall, URSO, Ursodiol): ()
- d. S-adenylmethionine (SAM-e): ()
- e. Milk thistle: ()
- f. Probiotics (*any form*): ()
- g. Other (*specify*): ()

_____ specify

- h. None of the above: ()

31. Were any of the items in 30a-g checked:

Yes () * () No () ()


**Caution: Use of antiNASH drugs in the 90 days prior to liver biopsy through randomization is exclusionary.*

32. Has the patient taken a thiazolidinedione in the past 6 months:

() Yes () No () ()

G. Use of antiobesity drugs

- 33.** Has the patient taken any antiobesity medications in the past 6 months (*check all that apply*):
- a.** Dexfenfluramine hydrochloride (Redux): ()
 - b.** Fenfluramine hydrochloride (Pondimin): ()
 - c.** Methamphetamine hydrochloride (Desoxyn, Gradumet): ()
 - d.** Orlistat (Xenical): ()
 - e.** Phendimetrazine tartrate (Adipost, Bontril): ()
 - f.** Phentermine hydrochloride (Adipex, Fastin, Ionamin, Teramine): ()
 - g.** Sibutramine hydrochloride monohydrate (Meridia): ()
 - h.** Other, (*specify*): ()
-
- i.** Other, (*specify*): ()
-
- j.** None of the above: ()

- 34.** Were any of the items 33a-i checked:
- Yes () No ()
 (* 1) (2)


**Caution: Use of antiobesity medications in the 90 days prior to liver biopsy through randomization is exclusionary.*

H. Use of antidependency drugs

- 35.** Has the patient taken any alcohol abuse, inhaled or injection drugs (dependence or withdrawal) medications in the past 12 months (*check all that apply*):
- a.** Chlordiazepoxide (Librium): ()
 - b.** Clorazepate dipotassium (Tranxene): ()
 - c.** Diazepam (Valium): ()
 - d.** Disulfiram (Antabuse): ()
 - e.** Hydroxyzine pamoate (Vistaril): ()
 - f.** Naltrexone hydrochloride (Revia): ()
 - g.** Other, (*specify*): ()
-
- h.** None of the above: ()

- 36.** Were any of the items 35a-g checked:
- Yes () No ()
 (* 1) (2)


**Caution: Active substance abuse, such as alcohol use or inhaled or injection drugs, in the year prior to screening is exclusionary.*

I. Use of other medications and supplements

37. Has the patient used any antidiabetic medications in the past 6 months:

Yes (1) No (2)

(If yes, check all that apply):

- a.** Metformin (Glucophage, Glucophage XR): (1)
- b.** Gemfibrozil (Gen-Fibro, Lopid): **VOID**
- c.** Acarbose (Precose): (1)
- d.** Acetohexamide (Dymelor): (1)
- e.** Chlorpropamide (Diabinese): (1)
- f.** Glimepiride (Amaryl): (1)
- g.** Glipizide (Glucotrol, Glucotrol XL): (1)
- h.** Glyburide (Micronase, DiaBeta, Glynase): (1)
- i.** Insulin: (1)
- j.** Miglitol (Glycet): (1)
- k.** Nateglinide (Starlix): (1)
- l.** Pioglitazone (Actos): (1)
- m.** Repaglinide (Prandin): (1)
- n.** Rosiglitazone (Avandia): (1)
- o.** Tolazamide (Tolinase): (1)
- p.** Tolbutamide (Orinase): (1)
- q.** Other, *(specify)*: (1)

38. Has the patient taken any cardiovascular/antihypertensive medications in the past 6 months:

Yes (1) No (2)

(If yes, check all that apply):

- a.** Amlodipine besylate (Norvasc): (1)
- b.** Aspirin - 81 mg: (1)
- c.** Atenolol (Tenormin): (1)
- d.** Benazepril (Lotensin): (1)
- e.** Captopril (Capoten): (1)
- f.** Clonidine (Catapres): (1)
- g.** Digoxin (Lanoxin): (1)
- h.** Diltiazem (Cardizem): (1)
- i.** Doxazosin (Cardura): (1)
- j.** Enalapril (Vasotec): (1)
- k.** Felodipine (Plendil): (1)
- l.** Furosemide (Lasix): (1)
- m.** Hydrochlorothiazide (Esidrix, HydroDIURIL): (1)
- n.** Hydrochlorothiazide + triamterene (Dyazide): (1)
- o.** Lisinopril (Prinivil, Zestril): (1)
- p.** Losartan potassium (Cozaar): (1)
- q.** Losartan potassium with hydrochlorothiazide (Hyzaar): (1)
- r.** Metoprolol (Lopressor): (1)
- s.** Nifedipine (Adalat, Procardia): (1)
- t.** Perhexiline maleate: (1)
- u.** Propranolol (Inderal): (1)
- v.** Quinapril (Accupril): (1)
- w.** Terazosin (Hytrin): (1)
- x.** Timolol maleate (Blocadren): (1)
- y.** Valsartan (Diovan): (1)
- z.** Verapamil (Calan): (1)
- aa.** Other, *(specify)*: (1)

ab. Other, *(specify)*: (1)

39. Has the patient taken any antihyperlipidemic medications in the past 6 months:

Yes (1) No (2)
40.

(If yes, check all that apply):

- a.** Atorvastatin (Lipitor): (1)
 - b.** Colestipol hydrochloride (Colestid): (1)
 - c.** Clofibrate (Abitrate, Atromid-S, Claripex, Novofibrate): (1)
 - d.** Gemfibrozil (Gen-Fibro, Lopid): (1)
 - e.** Fenofibrate (Tricor): (1)
 - f.** Fluvastatin sodium (Lescol): (1)
 - g.** Lovastatin (Mevacor): (1)
 - h.** Nicotinic acid (Niaspan): (1)
 - i.** Pravastatin sodium (Pravachol): (1)
 - j.** Rosuvastatin (Crestor): (1)
 - k.** Simvastatin (Zocor): (1)
 - l.** Other, *(specify)*: (1)
-

40. Has the patient taken any vitamins in the past 6 months:

Yes (1) No (2)
41.

(If yes, check all that apply):

- a.** Vitamin B (any type): (1)
 - b.** Vitamin C: (1)
 - c.** Vitamin D: (1)
 - d.** Vitamin E: (1)
 - e.** Multivitamin: (1)
 - f.** Other, *(specify)*: (1)
-

41. Has the patient taken any supplements in the past 6 months:

Yes (1) No (2)
42.

(If yes, check all that apply):

- a.** Alpha-lipoic acid: (1)
- b.** Alpha-tocopherol: (1)
- c.** Beta-carotene: (1)
- d.** Betaine (Cystadane): (1)
- e.** Calcium (any form): (1)
- f.** Carnitine (any form): (1)
- g.** Chondroitin (any form): (1)
- h.** Choline + methionine + betaine + adenosine + pyridoxine (Epocler): (1)
- i.** Cod liver oil: (1)
- j.** Coenzyme Q: (1)
- k.** Dichloroacetate: (1)
- l.** Echinacea: (1)
- m.** Fish oil (any form): (1)
- n.** Flax seed oil: (1)
- o.** Garlic: (1)
- p.** Ginkgo biloba: (1)
- q.** Glucosamine (any form): (1)
- r.** Lecithin: (1)
- s.** Magnesium: (1)
- t.** N-acetyl-cysteine: (1)
- u.** Potassium (any form): (1)
- v.** Saw palmetto: (1)
- w.** Selenium: (1)
- x.** St. John's Wort: (1)
- y.** Taurine: (1)
- z.** Zinc picolinate: (1)
- aa.** Other, *(specify)*: (1)

ab. Other, *(specify)*: (1)

16. Is the patient female and of childbearing potential:
 (Yes) (1) (No) (2)
 20.

17. Is the patient currently pregnant:
 (Yes) (1) (No) (2)
 Elg

18. Is the patient currently breast feeding:
 (Yes) (1) (No) (2)
 C

**Caution: Patient cannot be breastfeeding at time of randomization.*

19. Is the patient willing to use effective birth control methods during FLINT:
 (Yes) (1) (No) (2)
 Elg

D. Medical history (C means Caution; condition is exclusionary if study physician agrees with diagnosis; Elg means the patient is ineligible and can not enroll in FLINT)

20. Has the patient ever been diagnosed with any of the following (check all that apply; source of information can be interview and/or chart review)

- a. Diabetes type 1: ()
- b. Diabetes type 2: ()
- c. Chronic hepatitis B: Elg
- d. Hepatitis C: Elg

e. Active autoimmune hepatitis: C

f. Autoimmune cholestatic liver disorder (PBC): C

g. Wilson's disease: C

h. Alpha-1-antitrypsin (A1AT) deficiency: C

i. Glycogen storage disease: ()

j. Iron overload: C

k. Hemochromatosis: Elg

l. Polycystic liver disease: C

m. Biliary diversion: Elg

n. Primary sclerosing cholangitis: Elg

o. Drug induced liver disease: Elg

p. Bile duct obstruction: Elg

q. Gilbert's syndrome: ()

r. Esophageal or gastric varices on endoscopy: Elg

s. Bleeding from varices: Elg

t. Other gastrointestinal bleeding: C

u. Ascites: Elg

v. Edema: ()

w. Hepatic encephalopathy: Elg

x. Portal hypertension: Elg

- y. Hepatorenal syndrome: (1)
- z. Hepatopulmonary syndrome: (1)
- aa. Short bowel syndrome: (1)
- ab. Hemophilia (*bleeding disorder*): (1)
- ac. HIV positive: (1)
- ad. Systemic autoimmune disorder such as rheumatoid arthritis or systemic lupus: (1)
- ae. Endocrine disease (*hormonal abnormality*): (1)
- af. Hepatocellular carcinoma: (1)
- ag. Other malignancy (*cancer*): (1)
- ah. Peripheral neuropathy: (1)
- ai. Seizure disorder or epilepsy: (1)
- aj. Drug allergies: (1)
- ak. Hypothyroidism: (1)
- al. Hypertension: (1)
- am. Cerebrovascular disease: (1)
- an. Chronic cholestasis: (1)
- ao. Hyperlipidemia (*high cholesterol, high triglycerides*): (1)
- ap. Pancreatitis: (1)
- aq. Cholelithiasis: (1)
- ar. Coronary artery disease: (1)
- as. Congestive heart failure: (1)
- at. Elevated uric acid such as gout: (1)
- au. Kidney disease: (1)
- av. Polycystic ovary syndrome: (1)
- aw. Sleep apnea (*not breathing during sleep*): (1)
- ax. Dermatologic disorders: (1)
- ay. Myopathy: (1)
- az. Myositis: (1)

- ba. Major depression: (1)
- bb. Schizophrenia: (1)
- bc. Bipolar disorder: (1)
- bd. Obsessive compulsive disorder: (1)
- be. Severe anxiety or personality disorder: (1)
- bf. Substance abuse: (1)
- bg. Other (*specify*): (1)

_____ specify
bh. None of the above: (1)

21. Has the patient ever had surgery for any of the following (*check all that apply*)

- a. Stapling or banding of the stomach: (1)
- b. Jejunioleal (*or other intestinal*) bypass prior to the diagnosis of NAFLD: (1)
- c. Biliopancreatic diversion: (1)
- d. Other GI or bariatric surgery (*specify*): (1)

_____ specify
e. None of the above: (1)

22. Is the patient currently undergoing evaluation for bariatric surgery:

(Yes 1) (No 2)

23. Organ, limb, or bone marrow transplant

a. Has the patient ever received a liver transplant:

(Yes 1) (No 2)

b. Has the patient ever received any other organ, limb, or bone marrow transplant:

(Yes 1) (No 2)

E. Drugs historically associated with NAFLD

24. Has the patient used any of the following in the past year (*check all that apply*)

- a. Amiodarone (Pacerone): ()
- b. Demeclocycline (Declomycin): ()
- c. Divalproex (Depakote): ()
- d. Doxycycline (Monodox): ()
- e. Methotrexate (Rheumatrex): ()
- f. Minocycline (Dynacin, Minocin): ()
- g. Oxytetracycline (Terramycin): ()
- h. Tetracycline (Achromycin): ()
- i. Valproate sodium (Depacon): ()
- j. Valproic acid (Depakene): ()
- k. Other known hepatotoxin #1 (*specify*): ()

l. Other known hepatotoxin #2 (*specify*): ()

m. Other known hepatotoxin #3 (*specify*): ()

n. None of the above: ()

25. Were any of the items on 24a-m checked:

(^{Yes}) (^{No})

**Caution: Use of any of these drugs for more than 2 weeks in the past year is exclusionary.*

26. Has the patient taken any systemic glucocorticoids in the past year (*check all that apply*):

- a. Betamethasone sodium (Celestone): ()
- b. Cortisol: ()
- c. Cortisone: ()
- d. Dexamethasone (Decadron): ()
- e. Hydrocortisone (Hydrocortone): ()
- f. Methylprednisolone (Solu-Medrol): ()
- g. Prednisolone (Prelone): ()
- h. Prednisone: ()
- i. Triamcinolone (Acetocot, Amcort, Aristocort, Kenacort): ()
- j. Other, (*specify*): ()

k. Other, (*specify*): ()

l. None of the above: ()

27. Were any of the items 26a-k checked:

(^{Yes}) (^{No})

**Caution: Use of systemic glucocorticoids for more than 2 weeks in the past year is exclusionary.*

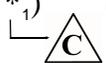
- 28. Has the patient taken any estrogen, progestin, anabolic steroids, hormone replacement therapy, or selective estrogen receptor modulators in the past year (*check all that apply*):
 - a. Boldenone undecylenate (Equipoise): ()
 - b. Conjugated estrogen (Premarin/Prempro): ()
 - c. Diethylstilbestrol and methyltestosterone (Tylosterone): ()
 - d. Esterified estrogen (Estratab, Menest): ()
 - e. Estradiol (Estrace): ()
 - f. Ethinyl estradiol (Estinyl): ()
 - g. Fluoxymesterone (Android-F, Halotestin): ()
 - h. Levonorgestrel (Norplant): ()
 - i. Medroxyprogesterone (Cycrin, Provera): ()
 - j. Megestrol (Megace): ()
 - k. Methandrostenolone (Dianabol): ()
 - l. Methyltestosterone (Android): ()
 - m. Nandrolone (Deca-Durabolin, Durabolin, Hybolin Decanoate, Kabolin): ()
 - n. Norethindrone (Micronor): ()
 - o. Norgestrel (Ovrette): ()
 - p. Oral contraceptives (Alesse, Demulen, Desogen, Estrostep, Genora, Intercon, Levlen, Levlite, Levora, Loestrin, Lo-Ovral, Necon, Nelova, Nordette, Norethin, Norinyl, Ortho Cyclen, Ortho-Novum, Ortho Tri-Cyclen, Ovral, Tri-Levlen, Triphasil, Trivora, Zovia): ()
 - q. Oxandrolone (Oxandrin): ()
 - r. Oxymetholone (Anadrol): ()
 - s. Progesterone (Prometrium): ()
 - t. Raloxifene (Evista): ()
 - u. Stanzolol (Winstrol): ()
 - v. Tamoxifen (Nolvadex): ()
 - w. Testosterone (Depo-Testosterone): ()

- x. Other, (*specify*): ()

- y. Other, (*specify*): ()

- z. None of the above: ()

29. Were any of the items 28a-y checked:

Yes ()
 No ()


**Caution: Use of anabolic steroids, tamoxifen, or estrogens at doses greater than those used for hormone replacement for more than 2 weeks in the past year is exclusionary.*

F. Use of antiNASH drugs and supplements

30. Has the patient taken any of these antiNASH drugs in the past 6 months:

Yes ()
 No ()
31.

(*If yes, check all that apply*):

- a. Betaine (Cystadone): ()
- b. Choline + methionine + betaine + adenosine + pyridoxine (Epocler): ()
- c. Ursodeoxycholic acid (UDCA, Actigall, URSO, Ursodiol): ()
- d. S-adenylmethionine (SAM-e): ()
- e. Milk thistle: ()
- f. Probiotics (*any form*): ()
- g. Other (*specify*): ()

specify

31. Has the patient taken a thiazolidinedione in the past 6 months:

Yes ()
 No ()

G. Use of antiobesity drugs

32. Has the patient taken any antiobesity medications in the past 6 months:

(Yes) (No)
 (1) (2)

33.

(If yes, check all that apply):

- a.** Dexfenfluramine hydrochloride (Redux): (1)
- b.** Fenfluramine hydrochloride (Pondimin): (1)
- c.** Methamphetamine hydrochloride (Desoxyn, Gradumet): (1)
- d.** Orlistat (Xenical): (1)
- e.** Phendimetrazine tartrate (Adipost, Bontril): (1)
- f.** Phentermine hydrochloride (Adipex, Fastin, Ionamin, Teramine): (1)
- g.** Sibutramine hydrochloride monohydrate (Meridia): (1)
- h.** Other, *(specify)*: (1)

- i.** Other, *(specify)*: (1)

H. Use of antidependency drugs

33. Has the patient taken any alcohol abuse, inhaled or injection drugs (dependence or withdrawal) medications in the past 12 months *(check all that apply)*:

- a.** Chlordiazepoxide (Librium): (1)
- b.** Clorazepate dipotassium (Tranxene): (1)
- c.** Diazepam (Valium): (1)
- d.** Disulfiram (Antabuse): (1)
- e.** Hydroxyzine pamoate (Vistaril): (1)
- f.** Naltrexone hydrochloride (Revia): (1)
- g.** Other, *(specify)*: (1)

- h.** None of the above: (1)

34. Were any of the items 33a-g checked:

(Yes) (No)
 (* 1) (2)

36.

**Caution: Active substance abuse, such as alcohol use or inhaled or injection drugs, in the year prior to screening is exclusionary.*

I. Use of other medications and supplements

35. Has the patient used any antidiabetic medications in the past 6 months:

(Yes) (No)
 (1) (2)

36.

(If yes, check all that apply):

- a.** Metformin (Glucophage, Glucophage XR): (1)
- b.** Acarbose (Precose): (1)
- c.** Acetohexamide (Dymelor): (1)
- d.** Chlorpropamide (Diabinese): (1)
- e.** Glimepiride (Amaryl): (1)
- f.** Glipizide (Glucotrol, Glucotrol XL): (1)
- g.** Glyburide (Micronase, DiaBeta, Glynase): (1)
- h.** Insulin: (1)
- i.** Miglitol (Glycet): (1)
- j.** Nateglinide (Starlix): (1)
- k.** Pioglitazone (Actos): (1)
- l.** Repaglinide (Prandin): (1)
- m.** Rosiglitazone (Avandia): (1)
- n.** Tolazamide (Tolinase): (1)
- o.** Tolbutamide (Orinase): (1)
- p.** Other, *(specify)*: (1)

36. Has the patient taken any cardiovascular/antihypertensive medications in the past 6 months:

(Yes) (No)
(1) (2)

37.

(If yes, check all that apply):

- a.** Amlodipine besylate (Norvasc): (1)
- b.** Aspirin - 81 mg: (1)
- c.** Atenolol (Tenormin): (1)
- d.** Benazepril (Lotensin): (1)
- e.** Captopril (Capoten): (1)
- f.** Clonidine (Catapres): (1)
- g.** Digoxin (Lanoxin): (1)
- h.** Diltiazem (Cardizem): (1)
- i.** Doxazosin (Cardura): (1)
- j.** Enalapril (Vasotec): (1)
- k.** Felodipine (Plendil): (1)
- l.** Furosemide (Lasix): (1)
- m.** Hydrochlorothiazide (Esidrix, HydroDIURIL): (1)
- n.** Hydrochlorothiazide + triamterene (Dyazide): (1)
- o.** Lisinopril (Prinivil, Zestril): (1)
- p.** Losartan potassium (Cozaar): (1)
- q.** Losartan potassium with hydrochlorothiazide (Hyzaar): (1)
- r.** Metoprolol (Lopressor): (1)
- s.** Nifedipine (Adalat, Procardia): (1)
- t.** Perhexiline maleate: (1)
- u.** Propranolol (Inderal): (1)
- v.** Quinapril (Accupril): (1)
- w.** Terazosin (Hytrin): (1)
- x.** Timolol maleate (Blocadren): (1)
- y.** Valsartan (Diovan): (1)
- z.** Verapamil (Calan): (1)
- aa.** Other, *(specify)*: (1)

ab. Other, *(specify)*: (1)

37. Has the patient taken any antihyperlipidemic medications in the past 6 months:

(Yes) (No)
(1) (2)

38.

(If yes, check all that apply):

- a.** Atorvastatin (Lipitor): (1)
- b.** Colestipol hydrochloride (Colestid): (1)
- c.** Clofibrate (Abitrate, Atromid-S, Claripex, Novofibrate): (1)
- d.** Gemfibrozil (Gen-Fibro, Lopid): (1)
- e.** Fenofibrate (Tricor): (1)
- f.** Fluvastatin sodium (Lescol): (1)
- g.** Lovastatin (Mevacor): (1)
- h.** Nicotinic acid (Niaspan): (1)
- i.** Pravastatin sodium (Pravachol): (1)
- j.** Rosuvastatin (Crestor): (1)
- k.** Simvastatin (Zocor): (1)
- l.** Other, *(specify)*: (1)

38. Has the patient taken any vitamins in the past 6 months:

(Yes) (No)
(1) (2)

39.

(If yes, check all that apply):

- a.** Vitamin B (any type): (1)
- b.** Vitamin C: (1)
- c.** Vitamin D: (1)
- d.** Vitamin E: (1)
- e.** Multivitamin: (1)
- f.** Other, *(specify)*: (1)

39. Has the patient taken any supplements in the past 6 months:

(Yes) (No)
 (1) (2)

40.

(If yes, check all that apply):

- a.** Alpha-lipoic acid: (1)
 - b.** Alpha-tocopherol: (1)
 - c.** Beta-carotene: (1)
 - d.** Betaine (Cystadane): (1)
 - e.** Calcium (any form): (1)
 - f.** Carnitine (any form): (1)
 - g.** Chondroitin (any form): (1)
 - h.** Choline + methionine + betaine + adenosine + pyridoxine (Epocler): (1)
 - i.** Cod liver oil: (1)
 - j.** Coenzyme Q: (1)
 - k.** Dichloroacetate: (1)
 - l.** Echinacea: (1)
 - m.** Fish oil (any form): (1)
 - n.** Flax seed oil: (1)
 - o.** Garlic: (1)
 - p.** Ginkgo biloba: (1)
 - q.** Glucosamine (any form): (1)
 - r.** Lecithin: (1)
 - s.** Magnesium: (1)
 - t.** N-acetyl-cysteine: (1)
 - u.** Potassium (any form): (1)
 - v.** Saw palmetto: (1)
 - w.** Selenium: (1)
 - x.** St. John's Wort: (1)
 - y.** Taurine: (1)
 - z.** Zinc picolinate: (1)
 - aa.** Other, (*specify*): (1)
-
- ab.** Other, (*specify*): (1)
-

40. Has patient taken any of the following medications or other supplements/medications in the past 6 months:

(Yes) (No)
 (1) (2)

41.

(If yes, record all other supplements/medications):

- a.** Isotretinoin (Accutane): (1)
 - b.** Levothyroxine (Levoxyl, Synthroid): (1)
 - c.** Liothyronine (Cytomel): (1)
 - d.** Penicillamine (Cuprimine, Depen): (1)
 - e.** Trientine hydrochloride (Syprine): (1)
 - f.** Other, (*specify*): (1)
-
- g.** Other, (*specify*): (1)
-
- h.** Other, (*specify*): (1)
-
- i.** Other, (*specify*): (1)
-
- j.** Other, (*specify*): (1)
-
- k.** Other, (*specify*): (1)
-

J. Administrative information

41. Study Physician PIN: _____

42. Study Physician signature:

43. Clinical Coordinator PIN: _____

44. Clinical Coordinator signature:

45. Date form reviewed:
____ - ____ - ____
day mon year

13. Other information related to consent for genetic research that clinic staff feel needs to be keyed to the study database (e.g., if your genetic consent had other options that are not covered by the 3 categories of use of samples specified above):

18. Attach form copy of tube label:

FLINT Form CG
Pt: ccc- 9999, xyz
Gender
Age, yrs.: XX

19. Phlebotomist:

_____ print name

14. In your judgment, has the patient consented to collection of blood for DNA banking (this question is asked in recognition that not all IRBs will have approved consent statements that include language that can be mapped into the questions in items 10 through 12; a response of "No" to this question (item 14) means that blood should NOT be collected for sending to the Genetics Repository and if already collected, should be destroyed by the Genetics Repository):

Yes (1) No (2)

20.

D. Administrative information

20. Study Physician PIN: _____

21. Study Physician signature: _____

22. Clinical Coordinator PIN: _____

23. Clinical Coordinator signature: _____

C. Specimen for Genetics Repository

Attach ID labels to two 10mL EDTA tubes and fill each with blood; invert each tube gently 6 times to mix blood with additives; keep tubes at room temperature until the same day shipment to the NIDDK Genetics Repository.

15. Was blood collected today for the NIDDK Genetics Repository:

Yes (1)

16.

No, (specify): (2)

_____ specify

20.

16. Date and time of blood draw

a. Date:

_____ day _____ mon _____ year

b. Time:

_____ hour : _____ minute (1) (2)
am pm

17. Number of 10 mL EDTA tubes: _____

24. Date form reviewed:

_____ day _____ mon _____ year

Central Histology Review

Purpose: Record results of the NASH CRN Pathology Committee review of liver biopsy slides archived at the Histology Review Center.

When: Quarterly after the start of patient enrollment or more often as determined by the Pathology Committee.

By whom: Data Coordinating Center staff.

Instructions: Upon review of the liver biopsy slides by the NASH CRN Pathology Committee, the designated Data Coordinating Center staff member should complete the CR form. The CR form will be keyed by the Data Coordinating Center personnel.

A. Clinic, patient and visit identification

- _____ 1. Center ID
- _____ 2. Patient ID
- _____ 3. Patient code
- ___ / ___ / ___ 4. Date of central reading
- _____ 5. Visit code
- c r 2 6. Form and revision
- _____ 7. Study: **6**=Database 2; **7**=FLINT
- ___ / ___ / ___ 8. Date of biopsy

B. Slide sequence number

- _____ 9. Sequence number for
... a. H & E stained slide
- _____ ... b. Masson's trichrome stained slide
- _____ ... c. Iron stained slide

C. Adequacy of biopsy

- _____ 10. Biopsy length (mm)
- _____ 11. Tissue adequate: **0**=No → Request original slides from submitting clinic; **1**=Yes
- _____ 12. Followup with clinic (*Specify*):

D. Histology

H & E stain

13. Steatosis (assume macro, e.g., large and small droplet)

- _____ ... a. Grade: **0**<5%; **1**=5-33%; **2**=34-66%; **3**>66%
- _____ ... b. Location: **0**=Zone 3 (*central*); **1**=Zone 1 (*periportal*); **2**=Azonal; **3**=Panacinar
- _____ ... c. Type of macrovesicular steatosis: **0**=Predominantly large droplet; **1**=Mixed large and small droplet;
2=Predominantly small droplet
- _____ ... d. Microvesicular steatosis, contiguous patches: **0**=Absent; **1**=Present

14. Inflammation

- ... a. Amount of lobular inflammation: combines mononuclear, fat granulomas, and pmn foci:
0=0; 1=<2 under 20x mag; 2=2-4 under 20 mag; 3=>4 under 20 mag
- ... b. Microgranulomas seen: **0=No; 1=Yes**
- ... c. Large lipogranulomas seen: **0=No; 1=Yes**
- ... d. Amount of portal, chronic inflammation: **0=None; 1=Mild; 2=More than mild**

15. Liver cell injury

- ... a. Ballooning: **0=None → GOTO Item 15d; 1=Few; 2=Many**
- ... b. Severe ballooning present: **0=No; 1=Yes**
- ... c. Classical balloon cells present: **0=No; 1=Yes**
- ... d. Acidophil bodies: **0=Rare/absent; 1=Many**
- ... e. Pigmented macrophages (*Kupffer cells*): **0=Rare/absent; 1=Many**
- ... f. Megamitochondria: **0=Rare/absent; 1=Many**

16. Mallory-Denk bodies: **0=Rare/absent; 1=Many**

17. Glycogen nuclei: **0=Rare/absent; 1=Present in patches**

18. Glycogenosis of hepatocytes: **0=Not present; 1=Focal, involving less than 50% of the hepatocytes; 2=Diffuse, involving greater than or equal to 50% of the hepatocytes**

19. Masson's trichrome stain

- ... a. Fibrosis stage: **0=None → GOTO Item 20; 1a=Mild, zone 3 perisinusoidal (requires trichrome); 1b=Moderate, zone 3, perisinusoidal (does not require trichrome); 1c=Portal/periportal only; 2=Zone 3 and periportal, any combination; 3=Bridging; 4=Cirrhosis**
- ... b. Perisinusoidal fibrosis grade: **0=No perisinusoidal fibrosis present; 1=Perisinusoidal fibrosis present that requires a Masson stain to identify; 2=Perisinusoidal fibrosis present that is visible on the H&E stain**
- ... c. Predominant location of fibrosis: **0=More predominance around or between portal areas; 1=No portal or central predominance; 2=More predominance around/between central veins**

20. Iron stain

- ... a. Hepatocellular iron grade: **0=Absent or barely discernible, 40x → GOTO item 20c; 1=Barely discernible granules, 20x; 2=Discrete granules resolved, 10x; 3=Discrete granules resolved, 4x; 4=Masses visible by naked eye**
- ... b. Hepatocellular iron distribution: **0=Periportal; 1=Periportal and midzonal; 2=Panacinar; 3=Zone 3 or azonal**
- ... c. Nonhepatocellular iron grade: **0=None → GOTO item 21; 1=Mild; 2=More than mild**
- ... d. Nonhepatocellular iron distribution: **0=Large vessel endothelium only; 1=Portal/fibrosis bands only, but more than just in large vessel endothelium; 2=Intraparenchymal only; 3=Both portal and intraparenchymal**

21. Is this steatohepatitis? **99=Not NAFLD; 0=NAFLD, not NASH; 1a=Suspicious/borderline/indeterminate: Zone 3 pattern; 1b=Suspicious/borderline/indeterminate: Zone 1, periportal pattern; 2=Yes, definite**

22. Is cirrhosis present? **0=No → GOTO item 25; 1=Yes**

23. Is this cryptogenic cirrhosis: **0=No → GOTO item 25; 1=Yes**

24. Features suggestive of steatohepatitis etiology for cryptogenic cirrhosis:

- ... a. Mallory-Denk bodies (*rule out cholate stasis*): **0=Absent; 1=Present**
- ... b. Perisinusoidal fibrosis away from septa: **0=Absent; 1=Present**
- ... c. Hepatocyte ballooning: **0=Absent; 1=Present**
- ... d. Megamitochondria: **0=Absent; 1=Present**
- ... e. Other notable findings: **0=Absent; 1=Present; Specify: _____**

25. Other comments: _____

FLINT**Cardiovascular Risk Factors**

Purpose: To determine a patient's need for referral for cholesterol management based on the Adult Treatment Panel III (ATP III) cholesterol guidelines.

When: Visits s, f24, f48, f72, and f96.

Administered by: Clinic coordinator by interview with patient and medical chart review.

Instructions: Collect information by interview, chart review, and by transcribing data from the FLINT Physical Examination (PE), Laboratory Results (LR), and Baseline (BG) or Follow-up (HI) Medical History forms. The anthropometric, blood pressure, and laboratory values reported on this form should be those collected at the same visit.

Important: Key the CV form only after you have keyed the BG/HI, LR, and PE forms.

A. Center, patient, and visit identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Date of visit:

 day mon year

5. Visit code: _____

6. Form & revision: c v 1

7. Study: FLINT 7

B. Smoking history

8. Is this the first time a smoking history has been obtained in FLINT on a CV form:

(Yes) (No)
 (1) (2)

14.

9. Have you ever smoked tobacco cigarettes:

Never (1)

In the past, but not anymore (2)

Currently smokes cigarettes (* 3)

**The patient smoked at least one cigarette in past month.*

15.

10. Do you/did you smoke cigarettes regularly:

(Yes) (No)
 (1) (* 2)

15.

**Less than 2 packs of cigarettes in a lifetime or less than 1 cigarette a day for one year.*

11. How old were you when you first started regular cigarette smoking:

_____ years

12. How old were you when you (last) stopped smoking cigarettes (code as "n" if the patient did not stop smoking):

_____ years

13. On the average of the entire time that you smoked cigarettes, how many cigarettes did you smoke per day:

_____ cigarettes/day

C. Framingham Risk Assessment

14. Are you a current cigarette smoker:

(Yes) (No)
 (1) (2)

15. Gender

Male (1)

Female (2)

16. Age:

_____ years

If lipid panel was not obtained, skip to item 27.

17. Total cholesterol (from LR form):

_____ mg/dL

If the patient has total cholesterol greater than 300 mg/dL, an IE form should be completed.

18. HDL cholesterol (from LR form):

_____ mg/dL

19. LDL cholesterol (from LR form)*:

_____ mg/dL

*Enter "GT" if LDL cannot be calculated due to high triglycerides.

20. Systolic blood pressure (from PE form):

_____ mmHg

21. Diastolic blood pressure (from PE form):

_____ mmHg

22. Are you currently being treated for high blood pressure with medicine prescribed by your doctor:

Yes (1) No (2)

23. Has anyone in your immediate family (blood-related parent, brother, sister, or child) been diagnosed with early heart disease (before age 55 years for male relatives and before 65 years for female relatives):

Yes (1) No (2)

24. Framingham point scores (use the ATP III At-a-Glance Quick Desk Reference [NIH Publication No. 01-3305] on page 5 to record gender-specific scores based on the patients risk factors. Circle "+" or "-" as appropriate. Key "+#" or "-#"; if 0 for an item with +/-, key "+0" or "+00".)

a. Age score (based on item 16): +/- _____ points

b. Total cholesterol score (based on items 16 and 17): _____ points

c. Smoking score (based on items 9 or 14, and 16): _____ points

d. HDL score (based on item 18): +/- _____ points

e. Systolic blood pressure score (based on items 20 and 22): _____ points

25. Point total (Add items 24a-e): +/- _____ points

26. Framingham risk of heart attack or dying of coronary heart disease in the next 10 years (using the ATP-III at-a-glance publication on page 5, use the point total [item 25] to convert into gender-specific 10 year risk):

_____ %

If 10 year risk < 1, record "00". If 10 year risk ≥ 30, record "30".

D. ATP III guidelines

27. Have you been diagnosed with type 1 or type 2 diabetes:

Yes (1) No (2)

28. Have you been diagnosed with clinical atherosclerotic disease that confers high risk for coronary heart disease (CHD) events (CHD risk equivalent):

Yes (1) No (2)

29. _____

(If yes, check all that apply)

- a. Clinical CHD: (1)
- b. Symptomatic carotid artery disease: (1)
- c. Peripheral arterial disease: (1)
- d. Abdominal aortic aneurysm: (1)

29. Was “Yes” checked for either item 27 or 28 or was LDL unknown (“GT” in item 19 or lipid panel not obtained):

Yes (1) No (2)
 31.

30. Is 10-year Framingham heart attack risk estimate 22% (item 26) or more:

Yes (1) No (2)
 33.

31. Is LDL cholesterol (item 19) less than 100 mg/dL or was LDL unknown (“GT” in item 19 or lipid panel not obtained):

Yes (1) No (2)
 40.

32. Is LDL cholesterol (item 19) 130 mg/dL or more:

Yes (* 1) No († 2)
 40. **40.**

**Refer for cholesterol management with LDL-lowering drug therapy (see FLINT SOP V).*

†Refer for cholesterol management with drug therapy optional, initiate LDL-lowering therapeutic lifestyle changes (see FLINT SOP V).

33. Coronary heart disease (CHD) risk factors: Do you have any of the following:

- a.** Current cigarette smoking (see item 9 or 14): (1)
- b.** SBP ≥ 140 mmHg or DBP ≥ 90 mmHg or on antihypertensive medication (based on items 20, 21, and 22): (1)
- c.** HDL cholesterol less than 40 mg/dL (based on item 18): (1)
- d.** Family history of premature CHD (see item 23): (1)
- e.** Age in men ≥ 45 years or age in women ≥ 55 years (based on items 15 and 16): (1)
- f.** HDL cholesterol 60 mg/dL or more (based on item 18): (1)

34. Total number of CHD risk factors (add number of “yes” in items 33a-e and subtract 1 if item 33f is “yes”; code as “0” if only 33f is “Yes”): _____

35. Are there 2 or more CHD risk factors (item 34):

Yes (1) No (2)
 38.

36. Is LDL cholesterol less than 130 mg/dL:

Yes (1) No (2)
 40.

37. Is 10-year Framingham heart attack risk estimate between 10 and 20%, inclusive or LDL cholesterol 160 mg/dL or more:

Yes (* 1) No († 2)

40.

*Refer for cholesterol management with LDL-lowering drug therapy (see FLINT SOP V).

†Refer for cholesterol management with drug therapy optional, initiate LDL-lowering therapeutic lifestyle changes (see FLINT SOP V).

38. Is LDL cholesterol 190 mg/dL or more:

Yes (* 1) No (2)

40.

*Refer for cholesterol management with LDL-lowering drug therapy (see FLINT SOP V).

39. Is LDL cholesterol between 160 and 189 mg/dL, inclusive:

Yes († 1) No (2)

†Refer for cholesterol management with drug therapy optional, initiate LDL-lowering therapeutic lifestyle changes (see FLINT SOP V).

E. Other cardiovascular events

40. Has the patient ever been diagnosed with or treated for any of the following (check all that apply)

- a. Myocardial infarction: (1)
- b. Angina: (1)
- c. Stroke: (1)
- d. Cerebrovascular disease: (1)
- e. Coronary artery disease: (1)
- f. Congestive heart failure: (1)
- g. Peripheral vascular disease: (1)
- h. Other cardiovascular disease (specify): (1)

_____ specify

- i. None of the above: (1)

F. Administrative information

41. Study Physician PIN: _____

42. Study Physician signature: _____

43. Clinical Coordinator PIN: _____

44. Clinical Coordinator signature: _____

45. Date form reviewed: _____
 day mon year

Men

Estimate of 10-Year Risk for Men

(Framingham Point Scores)

Age	Points
20-34	-9
35-39	-4
40-44	0
45-49	3
50-54	6
55-59	8
60-64	10
65-69	11
70-74	12
75-79	13

Total Cholesterol	Points				
	Age 20-39	Age 40-49	Age 50-59	Age 60-69	Age 70-79
<160	0	0	0	0	0
160-199	4	3	2	1	0
200-239	7	5	3	1	0
240-279	9	6	4	2	1
≥280	11	8	5	3	1

	Points				
	Age 20-39	Age 40-49	Age 50-59	Age 60-69	Age 70-79
Nonsmoker	0	0	0	0	0
Smoker	8	5	3	1	1

HDL (mg/dL)	Points
≥60	-1
50-59	0
40-49	1
<40	2

Systolic BP (mmHg)	If Untreated	If Treated
<120	0	0
120-129	0	1
130-139	1	2
140-159	1	2
≥160	2	3

Point Total	10-Year Risk %
<0	< 1
0	1
1	1
2	1
3	1
4	1
5	2
6	2
7	3
8	4
9	5
10	6
11	8
12	10
13	12
14	16
15	20
16	25
≥17	≥ 30

10-Year risk _____%

Women

Estimate of 10-Year Risk for Women

(Framingham Point Scores)

Age	Points
20-34	-7
35-39	-3
40-44	0
45-49	3
50-54	6
55-59	8
60-64	10
65-69	12
70-74	14
75-79	16

Total Cholesterol	Points				
	Age 20-39	Age 40-49	Age 50-59	Age 60-69	Age 70-79
<160	0	0	0	0	0
160-199	4	3	2	1	1
200-239	8	6	4	2	1
240-279	11	8	5	3	2
≥280	13	10	7	4	2

	Points				
	Age 20-39	Age 40-49	Age 50-59	Age 60-69	Age 70-79
Nonsmoker	0	0	0	0	0
Smoker	9	7	4	2	1

HDL (mg/dL)	Points
≥60	-1
50-59	0
40-49	1
<40	2

Systolic BP (mmHg)	If Untreated	If Treated
<120	0	0
120-129	1	3
130-139	2	4
140-159	3	5
≥160	4	6

Point Total	10-Year Risk %
< 9	< 1
9	1
10	1
11	1
12	1
13	2
14	2
15	3
16	4
17	5
18	6
19	8
20	11
21	14
22	17
23	22
24	27
≥25	≥ 30

10-Year risk _____%

FLINT**DR - Death Report**

Purpose: To record the report of a patient's death.

When: As soon as clinic is notified of a patient's death.

Administered by: Study Physician and Clinical Coordinator.

Instructions: Complete this form whenever the clinical center is informed of a patient's death. If the death is considered associated or possibly associated with participation in the FLINT study, complete a Serious Adverse Event (SR) form and follow the directions on Form SR for reporting a serious adverse event in FLINT.

A. Center, patient, and visit identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Date form is initiated (*date of notice*):

_____ day _____ mon _____ year

5. Visit code: n _____

6. Form & revision: d r 1

7. Study: FLINT 7

10. Place of death:

_____ city/state/country

_____ city/state/country

11. Cause of death

(*Study Physician: use whatever knowledge you have and your best medical judgment to best characterize the cause of death; check only one*):

Heart disease (1)

Stroke (2)

Liver disease (3)

Malignancy (4)

Other (*specify*): (5)

_____ specify

_____ specify

Unknown (6)

B. Death information

8. Date of death:

_____ day _____ mon _____ year

9. Source of death report (*check all that apply*):

a. Patient's family: (1)

b. Friend: (1)

c. Health care provider or NASH CRN staff: (1)

d. Newspaper: (1)

e. Funeral parlor/home: (1)

f. Medical record: (1)

g. Medical examiner: (1)

h. Coroner: (1)

i. Other (*specify*): (1)

_____ other source

_____ other source

C. Administrative information

12. Study Physician PIN: _____

13. Study Physician signature: _____

14. Clinical Coordinator PIN: _____

15. Clinical Coordinator signature: _____

16. Date form reviewed:

_____ day _____ mon _____ year

FLINT**HI - Follow-up Medical History**

Purpose: To record follow-up medical history information about the patient.

When: Visits f02, f04, f12, f24, f36, f48, f60, f72, f96.

Administered by: Clinical Coordinator, reviewed by Study Physician.

Respondent: Patient.

Instructions: Collect information by interview and chart review.

A. Center, visit, and patient identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Visit date (*date this form is initiated*):

_____ - _____ - _____
 day mon year

5. Visit code: f _____

6. Form & revision: h i 1

7. Study: FLINT 7

B. Interval identification

8. Date of last Follow-up Medical History form (*if this is visit f02 then date of s*):

_____ - _____ - _____
 day mon year

9. Visit code of last Follow-up Medical History form (*if this is visit f02 then s*):

C. NAFLD evaluation

10. Has the participant had a liver biopsy since the last visit:

Yes (* 1) No (2)

**Complete the Liver Biopsy Materials Documentation (SD) form.*

D. Alcohol consumption (AUDIT-C) since the last visit

11. Since the last visit, how often have you had a drink containing alcohol:

Never (0)

Monthly or less (1)

Two to four times a month (2)

Two to three times a week (3)

Four or more times a week (4)

12. Since the last visit, how many drinks containing alcohol have you had on a typical day when you are drinking:

1 or 2 (0)

3 or 4 (1)

5 or 6 (2)

7 to 9 (3)

10 or more (4)

13. Since the last visit, how often have you had six or more drinks on one occasion:

Never (0)

Less than monthly (1)

Monthly (2)

Weekly (3)

Daily or almost daily (4)

14. _____

E. Recent medical history

14. Has the patient been diagnosed with any of the following since the last visit (*check all that apply; source of information can be interview and/or chart review*)

- | | | | |
|--|------------------------------|---|------------------------------|
| a. Diabetes type 1: | (<input type="checkbox"/>) | aa. Short bowel syndrome: | (<input type="checkbox"/>) |
| b. Diabetes type 2: | (<input type="checkbox"/>) | ab. Hemophilia (<i>bleeding disorder</i>): | (<input type="checkbox"/>) |
| c. Chronic hepatitis B: | (<input type="checkbox"/>) | ac. HIV positive: | (<input type="checkbox"/>) |
| d. Hepatitis C: | (<input type="checkbox"/>) | ad. Systemic autoimmune disorder such as rheumatoid arthritis or systemic lupus: | (<input type="checkbox"/>) |
| e. Active autoimmune hepatitis: | (<input type="checkbox"/>) | ae. Endocrine disease (<i>hormonal abnormality</i>): | (<input type="checkbox"/>) |
| f. Autoimmune cholestatic liver disorder (PBC): | (<input type="checkbox"/>) | af. Hepatocellular carcinoma: | (<input type="checkbox"/>) |
| g. Wilson's disease: | (<input type="checkbox"/>) | ag. Other malignancy (<i>cancer</i>): | (<input type="checkbox"/>) |
| h. Alpha-1-antitrypsin (A1AT) deficiency: | (<input type="checkbox"/>) | ah. Peripheral neuropathy: | (<input type="checkbox"/>) |
| i. Glycogen storage disease: | (<input type="checkbox"/>) | ai. Seizure disorder or epilepsy: | (<input type="checkbox"/>) |
| j. Iron overload: | (<input type="checkbox"/>) | aj. Drug allergies: | (<input type="checkbox"/>) |
| k. Hemochromatosis: | (<input type="checkbox"/>) | ak. Hypothyroidism: | (<input type="checkbox"/>) |
| l. Polycystic liver disease: | (<input type="checkbox"/>) | al. Hypertension: | (<input type="checkbox"/>) |
| m. Biliary diversion: | (<input type="checkbox"/>) | am. Cerebrovascular disease: | (<input type="checkbox"/>) |
| n. Primary sclerosing cholangitis: | (<input type="checkbox"/>) | an. Chronic cholestasis: | (<input type="checkbox"/>) |
| o. Drug induced liver disease: | (<input type="checkbox"/>) | ao. Hyperlipidemia (<i>high cholesterol, high triglycerides</i>): | (<input type="checkbox"/>) |
| p. Bile duct obstruction: | (<input type="checkbox"/>) | ap. Pancreatitis: | (<input type="checkbox"/>) |
| q. Gilbert's syndrome: | (<input type="checkbox"/>) | aq. Cholelithiasis: | (<input type="checkbox"/>) |
| r. Esophageal or gastric varices on endoscopy: | (<input type="checkbox"/>) | ar. Coronary artery disease: | (<input type="checkbox"/>) |
| s. Bleeding from varices: | (<input type="checkbox"/>) | as. Congestive heart failure: | (<input type="checkbox"/>) |
| t. Other gastrointestinal bleeding: | (<input type="checkbox"/>) | at. Elevated uric acid such as gout: | (<input type="checkbox"/>) |
| u. Ascites: | (<input type="checkbox"/>) | au. Kidney disease: | (<input type="checkbox"/>) |
| v. Edema: | (<input type="checkbox"/>) | av. Polycystic ovary syndrome: | (<input type="checkbox"/>) |
| w. Hepatic encephalopathy: | (<input type="checkbox"/>) | aw. Sleep apnea (<i>not breathing during sleep</i>): | (<input type="checkbox"/>) |
| x. Portal hypertension: | (<input type="checkbox"/>) | ax. Dermatologic disorders: | (<input type="checkbox"/>) |
| y. Hepatorenal syndrome: | (<input type="checkbox"/>) | ay. Myopathy: | (<input type="checkbox"/>) |
| z. Hepatopulmonary syndrome: | (<input type="checkbox"/>) | az. Myositis: | (<input type="checkbox"/>) |
| | | ba. Major depression: | (<input type="checkbox"/>) |
| | | bb. Schizophrenia: | (<input type="checkbox"/>) |
| | | bc. Bipolar disorder: | (<input type="checkbox"/>) |
| | | bd. Obsessive compulsive disorder: | (<input type="checkbox"/>) |
| | | be. Severe anxiety or personality disorder: | (<input type="checkbox"/>) |
| | | bf. Substance abuse: | (<input type="checkbox"/>) |
| | | bg. Other (<i>specify</i>): | (<input type="checkbox"/>) |
| | | _____ specify | |
| | | bh. None of the above: | (<input type="checkbox"/>) |

- 15.** Since the last visit, has the patient had surgery for any of the following (check all that apply)
- a. Stapling or banding of the stomach: (1)
 - b. Jejunioileal (or other intestinal) bypass: (1)
 - c. Biliopancreatic diversion: (1)
 - d. Other GI or bariatric surgery (specify): (1)
-
- e. None: (1)

- 16.** Is the patient currently undergoing evaluation for bariatric surgery:
- (Yes) (No)
(1) (2)

- 17.** Since the last visit, has the patient received:
- a. Liver transplant: (Yes) (No)
(1) (2)
 - b. Any other organ, limb, or bone marrow transplant: (Yes) (No)
(1) (2)

- 18.** Since the last visit, has the patient been hospitalized (complete an Interim Event Report (IE) form if thought to be associated with FLINT study drugs and this event has not already been reported on an IE form):
- (Yes) (No)
(1) (2)
- 19.**

If Yes, specify reason:

_____ specify reason

- 19.** Since the last visit, has the patient had any serious health problem not already reported (complete an Interim Event Report (IE) form if thought to be associated with FLINT study drugs and this event has not already been reported on an IE form):
- (Yes) (No)
(1) (2)
- 20.**

If Yes, specify:

_____ specify

F. Drugs historically associated with NAFLD

- 20.** Has the patient used any of the following since last visit:
- (Yes) (No)
(1) (2)
- 21.**

(If yes, check all that apply):

- a. Amiodarone (Cordarone, Pacerone): (1)
- b. Demeclocycline (Declomycin): (1)
- c. Divalproex (Depakote): (1)
- d. Doxycycline (Monodox): (1)
- e. Methotrexate (Rheumatrex): (1)
- f. Minocycline (Dynacin, Minocin): (1)
- g. Oxytetracycline (Terramycin): (1)
- h. Tetracycline (Achromycin): (1)
- i. Valproate sodium (Depacon): (1)
- j. Valproic acid (Depakene): (1)
- k. Other known hepatotoxin #1 (specify): (1)

- l. Other known hepatotoxin #2 (specify): (1)

- m. Other known hepatotoxin #3 (specify): (1)

- 21.** Has the patient taken any systemic glucocorticoids since last visit:
- (Yes) (No)
(1) (2)
- 22.**

(If yes, check all that apply):

- a. Betamethasone sodium (Celestone): (1)
- b. Cortisol: (1)
- c. Cortisone: (1)
- d. Dexamethasone (Decadron): (1)
- e. Hydrocortisone (Hydrocortone): (1)
- f. Methylprednisolone (Solu-Medrol): (1)
- g. Prednisolone (Prelone): (1)
- h. Prednisone: (1)
- i. Triamcinolone (Acetocot, Amcort, Aristocort, Kenacort): (1)
- j. Other, (specify): (1)

- k. Other, (specify): (1)

22. Has the patient taken any estrogen, progestin, anabolic steroids, hormone replacement therapy, or selective estrogen receptor modulators since last visit:

Yes No
 (1) (2)
 23.

(If yes, check all that apply):

- a. Boldenone undecylenate (Equipose): (1)
- b. Conjugated estrogen (Premarin/Prempro): (1)
- c. Diethylstilbestrol and methyltestosterone (Tylosterone): (1)
- d. Esterified estrogen (Estratab, Menest): (1)
- e. Estradiol (Estrace): (1)
- f. Ethinyl estradiol (Estinyl): (1)
- g. Fluoxymesterone (Android-F, Halotestin): (1)
- h. Levonorgestrel (Norplant): (1)
- i. Medroxyprogesterone (Cycrin, Provera): (1)
- j. Megestrol (Megace): (1)
- k. Methandrostenolone (Dianabol): (1)
- l. Methyltestosterone (Android): (1)
- m. Nandrolone (Deca-Durabolin, Durabolin, Hybolin Decanoate, Kabolin): (1)
- n. Norethindrone (Micronor): (1)
- o. Norgestrel (Ovrette): (1)
- p. Oral contraceptives (Alesse, Demulen, Desogen, Estrostep, Genora, Intercon, Levlen, Levlite, Levora, Loestrin, Lo-Ovral, Necon, Nelova, Nordette, Norethin, Norinyl, Ortho Cyclen, Ortho-Novum, Ortho Tri-Cyclen, Ovral, Tri-Levlen, Triphasil, Trivora, Zovia): (1)
- q. Oxandrolone (Oxandrin): (1)
- r. Oxymetholone (Anadrol): (1)
- s. Progesterone (Prometrium): (1)
- t. Raloxifene (Evista): (1)
- u. Stanzolol (Winstrol): (1)
- v. Tamoxifen (Nolvadex): (1)
- w. Testosterone (Depo-Testosterone): (1)
- x. Other, (specify): (1)
-
- y. Other, (specify): (1)

G. Use of antiNASH drugs and supplements

23. Has the patient taken any of these antiNASH drugs since last visit:

Yes No
 (1) (2)
 24.

(If yes, check all that apply):

- a. Betaine (Cystadone): (1)
- b. Choline + methionine + betaine + adenosine + pyridoxine (Epocler): (1)
- c. Ursodeoxycholic acid (UDCA, Actigall, URSO, Ursodiol): (1)
- d. S-adenylmethionine (SAM-e): (1)
- e. Milk thistle: (1)
- f. Probiotics (any form): (1)
- g. Other (specify): (1)

_____ specify _____

24. Has the patient taken a thiazolidinedione since last visit:

Yes No
 (1) (2)

H. Use of antiobesity drugs

25. Has the patient taken any antiobesity medications since last visit:

Yes No
 (1) (2)
 26.

(If yes, check all that apply):

- a. Dexfenfluramine hydrochloride (Redux): (1)
- b. Fenfluramine hydrochloride (Pondimin): (1)
- c. Methamphetamine hydrochloride (Desoxyn, Gradumet): (1)
- d. Orlistat (Xenical): (1)
- e. Phendimetrazine tartrate (Adipost, Bontril): (1)
- f. Phentermine hydrochloride (Adipex, Fastin, Ionamin, Teramine): (1)
- g. Sibutramine hydrochloride monohydrate (Meridia): (1)
- h. Other, (specify): (1)
-
- i. Other, (specify): (1)

I. Use of antidependency drugs

26. Has the patient taken any alcohol abuse, inhaled or injection drugs (dependence or withdrawal) medications since last visit:

Yes No
(1) (2)

27.

(If yes, check all that apply):

- a. Chlordiazepoxide (Librium): (1)
 b. Clorazepate dipotassium (Tranxene): (1)
 c. Diazepam (Valium): (1)
 d. Disulfiram (Antabuse): (1)
 e. Hydroxyzine pamoate (Vistaril): (1)
 f. Naltrexone hydrochloride (Revia): (1)
 g. Other, (specify): (1)
-

J. Use of other medications and supplements

27. Has the patient used any antidiabetic medications since last visit:

Yes No
(1) (2)

28.

(If yes, check all that apply):

- a. Metformin (Glucophage, Glucophage XR): (1)
 b. Gemfibrozil (Gen-Fibro, Lopid): **VOID**
 c. Acarbose (Precose): (1)
 d. Acetohexamide (Dymelor): (1)
 e. Chlorpropamide (Diabinese): (1)
 f. Glimepiride (Amaryl): (1)
 g. Glipizide (Glucotrol, Glucotrol XL): (1)
 h. Glyburide (Micronase, DiaBeta, Glynase): (1)
 i. Insulin: (1)
 j. Miglitol (Glycet): (1)
 k. Nateglinide (Starlix): (1)
 l. Pioglitazone (Actos): (1)
 m. Repaglinide (Prandin): (1)
 n. Rosiglitazone (Avandia): (1)
 o. Tolazamide (Tolinase): (1)
 p. Tolbutamide (Orinase): (1)
 q. Other, (specify): (1)
-

28. Has the patient taken any cardiovascular/antihypertensive medications since last visit:

Yes No
(1) (2)

29.

(If yes, check all that apply):

- a. Amlodipine besylate (Norvasc): (1)
 b. Aspirin - 81 mg: (1)
 c. Atenolol (Tenormin): (1)
 d. Benazepril (Lotensin): (1)
 e. Captopril (Capoten): (1)
 f. Clonidine (Catapres): (1)
 g. Digoxin (Lanoxin): (1)
 h. Diltiazem (Cardizem): (1)
 i. Doxazosin (Cardura): (1)
 j. Enalapril (Vasotec): (1)
 k. Felodipine (Plendil): (1)
 l. Furosemide (Lasix): (1)
 m. Hydrochlorothiazide (Esidrix, HydroDIURIL): (1)
 n. Hydrochlorothiazide + triamterene (Dyazide): (1)
 o. Lisinopril (Prinivil, Zestril): (1)
 p. Losartan potassium (Cozaar): (1)
 q. Losartan potassium with hydrochlorothiazide (Hyzaar): (1)
 r. Metoprolol (Lopressor): (1)
 s. Nifedipine (Adalat, Procardia): (1)
 t. Perhexiline maleate: (1)
 u. Propranolol (Inderal): (1)
 v. Quinapril (Accupril): (1)
 w. Terazosin (Hytrin): (1)
 x. Timolol maleate (Blocadren): (1)
 y. Valsartan (Diovan): (1)
 z. Verapamil (Calan): (1)
 aa. Other, (specify): (1)
-
- ab. Other, (specify): (1)
-

29. Has the patient taken any antihyperlipidemic medications since last visit:

Yes No
 (1) (2)
30.

(If yes, check all that apply):

- a. Atorvastatin (Lipitor): (1)
 - b. Colestipol hydrochloride (Colestid): (1)
 - c. Clofibrate (Abitrate, Atromid-S, Claripex, Novofibrate): (1)
 - d. Gemfibrozil (Gen-Fibro, Lopid): (1)
 - e. Fenofibrate (Tricor): (1)
 - f. Fluvastatin sodium (Lescol): (1)
 - g. Lovastatin (Mevacor): (1)
 - h. Nicotinic acid (Niaspan): (1)
 - i. Pravastatin sodium (Pravachol): (1)
 - j. Rosuvastatin (Crestor): (1)
 - k. Simvastatin (Zocor): (1)
 - l. Other, (*specify*): (1)
-

30. Has the patient taken any vitamins since last visit:

Yes No
 (1) (2)
31.

(If yes, check all that apply):

- a. Vitamin B (any type): (1)
 - b. Vitamin C: (1)
 - c. Vitamin D: (1)
 - d. Vitamin E: (1)
 - e. Multivitamin: (1)
 - f. Other, (*specify*): (1)
-

31. Has the patient taken any supplements since last visit:

Yes No
 (1) (2)
32.

(If yes, check all that apply):

- a. Alpha-lipoic acid: (1)
- b. Alpha-tocopherol: (1)
- c. Beta-carotene: (1)
- d. Betaine (Cystadane): (1)
- e. Calcium (any form): (1)
- f. Carnitine (any form): (1)
- g. Chondroitin (any form): (1)
- h. Choline + methionine + betaine + adenosine + pyridoxine (Epocler): (1)
- i. Cod liver oil: (1)
- j. Coenzyme Q: (1)
- k. Dichloroacetate: (1)
- l. Echinacea: (1)
- m. Fish oil (any form): (1)
- n. Flax seed oil: (1)
- o. Garlic: (1)
- p. Ginkgo biloba: (1)
- q. Glucosamine (any form): (1)
- r. Lecithin: (1)
- s. Magnesium: (1)
- t. N-acetyl-cysteine: (1)
- u. Potassium (any form): (1)
- v. Saw palmetto: (1)
- w. Selenium: (1)
- x. St. John's Wort: (1)
- y. Taurine: (1)
- z. Zinc picolinate: (1)
- aa. Other, (*specify*): (1)

ab. Other, (*specify*): (1)

32. Has patient taken any of the following medications or other supplements/medications since last visit:

Yes
No
(1)
(2)

33.

(If yes, record all other supplements/medications):

- a.** Isotretinoin (Accutane): (1)
- b.** Levothyroxine (Levoxyl, Synthroid): (1)
- c.** Liothyronine (Cytomel): (1)
- d.** Penicillamine (Cuprimine, Depen): (1)
- e.** Trientine hydrochloride (Syprine): (1)
- f.** Other, *(specify)*: (1)

g. Other, *(specify)*: (1)

h. Other, *(specify)*: (1)

i. Other, *(specify)*: (1)

j. Other, *(specify)*: (1)

k. Other, *(specify)*: (1)

K. Administrative information

33. Study Physician PIN: _____

34. Study Physician signature:

35. Clinical Coordinator PIN: _____

36. Clinical Coordinator signature:

37. Date form reviewed:
 _____ - _____ - _____
day
mon
year

FLINT**HI - Follow-up Medical History**

Purpose: To record follow-up medical history information about the patient.

When: Visits f02, f04, f12, f24, f36, f48, f60, f72, f96.

Administered by: Clinical Coordinator, reviewed by Study Physician.

Respondent: Patient.

Instructions: Collect information by interview and chart review.

A. Center, visit, and patient identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Visit date (*date this form is initiated*):

_____ - _____ - _____
 day mon year

5. Visit code: f _____

6. Form & revision: h i 2

7. Study: FLINT 7

B. Interval identification

8. Date of last Follow-up Medical History form (*if this is visit f02 then date of s*):

_____ - _____ - _____
 day mon year

9. Visit code of last Follow-up Medical History form (*if this is visit f02 then s*):

_____ - _____ - _____

C. NAFLD evaluation

10. Has the participant had a liver biopsy since the last visit:

Yes (* 1) No (2)

**Complete the Liver Biopsy Materials Documentation (SD) form.*

D. Alcohol consumption (AUDIT-C) since the last visit

11. Since the last visit, how often have you had a drink containing alcohol:

Never (0)

14. 1

Monthly or less (1)

Two to four times a month (2)

Two to three times a week (3)

Four or more times a week (4)

12. Since the last visit, how many drinks containing alcohol have you had on a typical day when you are drinking:

1 or 2 (0)

3 or 4 (1)

5 or 6 (2)

7 to 9 (3)

10 or more (4)

13. Since the last visit, how often have you had six or more drinks on one occasion:

Never (0)

Less than monthly (1)

Monthly (2)

Weekly (3)

Daily or almost daily (4)

E. Recent medical history

14. Has the patient been diagnosed with any of the following since the last visit (*check all that apply; source of information can be interview and/or chart review*)

- | | | | |
|--|------------------------------|---|------------------------------|
| a. Diabetes type 1: | (<input type="checkbox"/>) | aa. Short bowel syndrome: | (<input type="checkbox"/>) |
| b. Diabetes type 2: | (<input type="checkbox"/>) | ab. Hemophilia (<i>bleeding disorder</i>): | (<input type="checkbox"/>) |
| c. Chronic hepatitis B: | (<input type="checkbox"/>) | ac. HIV positive: | (<input type="checkbox"/>) |
| d. Hepatitis C: | (<input type="checkbox"/>) | ad. Systemic autoimmune disorder such as rheumatoid arthritis or systemic lupus: | (<input type="checkbox"/>) |
| e. Active autoimmune hepatitis: | (<input type="checkbox"/>) | ae. Endocrine disease (<i>hormonal abnormality</i>): | (<input type="checkbox"/>) |
| f. Autoimmune cholestatic liver disorder (PBC): | (<input type="checkbox"/>) | af. Hepatocellular carcinoma: | (<input type="checkbox"/>) |
| g. Wilson's disease: | (<input type="checkbox"/>) | ag. Other malignancy (<i>cancer</i>): | (<input type="checkbox"/>) |
| h. Alpha-1-antitrypsin (A1AT) deficiency: | (<input type="checkbox"/>) | ah. Peripheral neuropathy: | (<input type="checkbox"/>) |
| i. Glycogen storage disease: | (<input type="checkbox"/>) | ai. Seizure disorder or epilepsy: | (<input type="checkbox"/>) |
| j. Iron overload: | (<input type="checkbox"/>) | aj. Drug allergies: | (<input type="checkbox"/>) |
| k. Hemochromatosis: | (<input type="checkbox"/>) | ak. Hypothyroidism: | (<input type="checkbox"/>) |
| l. Polycystic liver disease: | (<input type="checkbox"/>) | al. Hypertension: | (<input type="checkbox"/>) |
| m. Biliary diversion: | (<input type="checkbox"/>) | am. Cerebrovascular disease: | (<input type="checkbox"/>) |
| n. Primary sclerosing cholangitis: | (<input type="checkbox"/>) | an. Chronic cholestasis: | (<input type="checkbox"/>) |
| o. Drug induced liver disease: | (<input type="checkbox"/>) | ao. Hyperlipidemia (<i>high cholesterol, high triglycerides</i>): | (<input type="checkbox"/>) |
| p. Bile duct obstruction: | (<input type="checkbox"/>) | ap. Pancreatitis: | (<input type="checkbox"/>) |
| q. Gilbert's syndrome: | (<input type="checkbox"/>) | aq. Cholelithiasis: | (<input type="checkbox"/>) |
| r. Esophageal or gastric varices on endoscopy: | (<input type="checkbox"/>) | ar. Coronary artery disease: | (<input type="checkbox"/>) |
| s. Bleeding from varices: | (<input type="checkbox"/>) | as. Congestive heart failure: | (<input type="checkbox"/>) |
| t. Other gastrointestinal bleeding: | (<input type="checkbox"/>) | at. Elevated uric acid such as gout: | (<input type="checkbox"/>) |
| u. Ascites: | (<input type="checkbox"/>) | au. Kidney disease: | (<input type="checkbox"/>) |
| v. Edema: | (<input type="checkbox"/>) | av. Polycystic ovary syndrome: | (<input type="checkbox"/>) |
| w. Hepatic encephalopathy: | (<input type="checkbox"/>) | aw. Sleep apnea (<i>not breathing during sleep</i>): | (<input type="checkbox"/>) |
| x. Portal hypertension: | (<input type="checkbox"/>) | ax. Dermatologic disorders: | (<input type="checkbox"/>) |
| y. Hepatorenal syndrome: | (<input type="checkbox"/>) | ay. Myopathy: | (<input type="checkbox"/>) |
| z. Hepatopulmonary syndrome: | (<input type="checkbox"/>) | az. Myositis: | (<input type="checkbox"/>) |
| | | ba. Major depression: | (<input type="checkbox"/>) |
| | | bb. Schizophrenia: | (<input type="checkbox"/>) |
| | | bc. Bipolar disorder: | (<input type="checkbox"/>) |
| | | bd. Obsessive compulsive disorder: | (<input type="checkbox"/>) |
| | | be. Severe anxiety or personality disorder: | (<input type="checkbox"/>) |
| | | bf. Substance abuse: | (<input type="checkbox"/>) |
| | | bg. Other (<i>specify</i>): | (<input type="checkbox"/>) |
| | | _____ specify | |
| | | bh. None of the above: | (<input type="checkbox"/>) |

- 15.** Since the last visit, has the patient had surgery for any of the following (check all that apply)
- a. Stapling or banding of the stomach: (1)
 - b. Jejunioileal (or other intestinal) bypass: (1)
 - c. Biliopancreatic diversion: (1)
 - d. Other GI or bariatric surgery (specify): (1)
-
- e. None: (1)

- 16.** Is the patient currently undergoing evaluation for bariatric surgery:
- Yes (1) No (2)

- 17.** Since the last visit, has the patient received:
- a. Liver transplant: Yes (1) No (2)
 - b. Any other organ, limb, or bone marrow transplant: Yes (1) No (2)

- 18.** Since the last visit, has the patient had ER visits or hospitalizations:
- Yes (* 1) No (2)
- 19.**

* Complete an Interim Event Report (IE) form
If Yes, specify reason and list dates:

If none for items 18a or 18b, enter "00".

- a. Number of hospitalizations: _____
of hospitalizations
- b. Number of Emergency Room visits: _____
of visits

- 19.** Since the last visit, has the patient had any serious health problem or adverse events not already reported:
- Yes (* 1) No (2)
- 20.**

* Complete an Interim Event Report (IE) form
If Yes, specify and list dates:

F. Drugs historically associated with NAFLD

- 20.** Has the patient used any of the following since last visit:
- Yes (1) No (2)
- 21.**

(If yes, check all that apply):

- a. Amiodarone (Cordarone, Pacerone): (1)
 - b. Demeclocycline (Declomycin): (1)
 - c. Divalproex (Depakote): (1)
 - d. Doxycycline (Monodox): (1)
 - e. Methotrexate (Rheumatrex): (1)
 - f. Minocycline (Dynacin, Minocin): (1)
 - g. Oxytetracycline (Terramycin): (1)
 - h. Tetracycline (Achromycin): (1)
 - i. Valproate sodium (Depacon): (1)
 - j. Valproic acid (Depakene): (1)
 - k. Other known hepatotoxin #1 (specify): (1)
-
- l. Other known hepatotoxin #2 (specify): (1)
-

- m. Other known hepatotoxin #3 (specify): (1)
-

- 21.** Has the patient taken any systemic glucocorticoids since last visit:
- Yes (1) No (2)
- 22.**

(If yes, check all that apply):

- a. Betamethasone sodium (Celestone): (1)
 - b. Cortisol: (1)
 - c. Cortisone: (1)
 - d. Dexamethasone (Decadron): (1)
 - e. Hydrocortisone (Hydrocortone): (1)
 - f. Methylprednisolone (Solu-Medrol): (1)
 - g. Prednisolone (Prelone): (1)
 - h. Prednisone: (1)
 - i. Triamcinolone (Acetocot, Amcort, Aristocort, Kenacort): (1)
 - j. Other, (specify): (1)
-
- k. Other, (specify): (1)
-

22. Has the patient taken any estrogen, progestin, anabolic steroids, hormone replacement therapy, or selective estrogen receptor modulators since last visit:

Yes (1) No (2)
 23.

(If yes, check all that apply):

- a. Boldenone undecylenate (Equipose): (1)
- b. Conjugated estrogen (Premarin/Prempro): (1)
- c. Diethylstilbestrol and methyltestosterone (Tylosterone): (1)
- d. Esterified estrogen (Estratab, Menest): (1)
- e. Estradiol (Estrace): (1)
- f. Ethinyl estradiol (Estinyl): (1)
- g. Fluoxymesterone (Android-F, Halotestin): (1)
- h. Levonorgestrel (Norplant): (1)
- i. Medroxyprogesterone (Cycrin, Provera): (1)
- j. Megestrol (Megace): (1)
- k. Methandrostenolone (Dianabol): (1)
- l. Methyltestosterone (Android): (1)
- m. Nandrolone (Deca-Durabolin, Durabolin, Hybolin Decanoate, Kabolin): (1)
- n. Norethindrone (Micronor): (1)
- o. Norgestrel (Ovrette): (1)
- p. Oral contraceptives (Alesse, Demulen, Desogen, Estrostep, Genora, Intercon, Levlen, Levlite, Levora, Loestrin, Lo-Ovral, Necon, Nelova, Nordette, Norethin, Norinyl, Ortho Cyclen, Ortho-Novum, Ortho Tri-Cyclen, Ovral, Tri-Levlen, Triphasil, Trivora, Zovia): (1)
- q. Oxandrolone (Oxandrin): (1)
- r. Oxymetholone (Anadrol): (1)
- s. Progesterone (Prometrium): (1)
- t. Raloxifene (Evista): (1)
- u. Stanzolol (Winstrol): (1)
- v. Tamoxifen (Nolvadex): (1)
- w. Testosterone (Depo-Testosterone): (1)
- x. Other, (specify): (1)
- y. Other, (specify): (1)

G. Use of antiNASH drugs and supplements

23. Has the patient taken any of these antiNASH drugs since last visit:

Yes (1) No (2)
 24.

(If yes, check all that apply):

- a. Betaine (Cystadone): (1)
- b. Choline + methionine + betaine + adenosine + pyridoxine (Epocler): (1)
- c. Ursodeoxycholic acid (UDCA, Actigall, URSO, Ursodiol): (1)
- d. S-adenylmethionine (SAM-e): (1)
- e. Milk thistle: (1)
- f. Probiotics (any form): (1)
- g. Other (specify): (1)

_____ specify _____

24. Has the patient taken a thiazolidinedione since last visit:

Yes (1) No (2)

H. Use of antiobesity drugs

25. Has the patient taken any antiobesity medications since last visit:

Yes (1) No (2)
 26.

(If yes, check all that apply):

- a. Dexfenfluramine hydrochloride (Redux): (1)
- b. Fenfluramine hydrochloride (Pondimin): (1)
- c. Methamphetamine hydrochloride (Desoxyn, Gradumet): (1)
- d. Orlistat (Xenical): (1)
- e. Phendimetrazine tartrate (Adipost, Bontril): (1)
- f. Phentermine hydrochloride (Adipex, Fastin, Ionamin, Teramine): (1)
- g. Sibutramine hydrochloride monohydrate (Meridia): (1)
- h. Other, (specify): (1)
- i. Other, (specify): (1)

I. Use of antidependency drugs

26. Has the patient taken any alcohol abuse, inhaled or injection drugs (dependence or withdrawal) medications since last visit:

Yes No
(1) (2)

27.

(If yes, check all that apply):

- a. Chlordiazepoxide (Librium): (1)
 b. Clorazepate dipotassium (Tranxene): (1)
 c. Diazepam (Valium): (1)
 d. Disulfiram (Antabuse): (1)
 e. Hydroxyzine pamoate (Vistaril): (1)
 f. Naltrexone hydrochloride (Revia): (1)
 g. Other, (specify): (1)
-

J. Use of other medications and supplements

27. Has the patient used any antidiabetic medications since last visit:

Yes No
(1) (2)

28.

(If yes, check all that apply):

- a. Metformin (Glucophage, Glucophage XR): (1)
 b. Gemfibrozil (Gen-Fibro, Lopid): **VOID**
 c. Acarbose (Precose): (1)
 d. Acetohexamide (Dymelor): (1)
 e. Chlorpropamide (Diabinese): (1)
 f. Glimpiride (Amaryl): (1)
 g. Glipizide (Glucotrol, Glucotrol XL): (1)
 h. Glyburide (Micronase, DiaBeta, Glynase): (1)
 i. Insulin: (1)
 j. Miglitol (Glycet): (1)
 k. Nateglinide (Starlix): (1)
 l. Pioglitazone (Actos): (1)
 m. Repaglinide (Prandin): (1)
 n. Rosiglitazone (Avandia): (1)
 o. Tolazamide (Tolinase): (1)
 p. Tolbutamide (Orinase): (1)
 q. Other, (specify): (1)
-

28. Has the patient taken any cardiovascular/antihypertensive medications since last visit:

Yes No
(1) (2)

29.

(If yes, check all that apply):

- a. Amlodipine besylate (Norvasc): (1)
 b. Aspirin - 81 mg: (1)
 c. Atenolol (Tenormin): (1)
 d. Benazepril (Lotensin): (1)
 e. Captopril (Capoten): (1)
 f. Clonidine (Catapres): (1)
 g. Digoxin (Lanoxin): (1)
 h. Diltiazem (Cardizem): (1)
 i. Doxazosin (Cardura): (1)
 j. Enalapril (Vasotec): (1)
 k. Felodipine (Plendil): (1)
 l. Furosemide (Lasix): (1)
 m. Hydrochlorothiazide (Esidrix, HydroDIURIL): (1)
 n. Hydrochlorothiazide + triamterene (Dyazide): (1)
 o. Lisinopril (Prinivil, Zestril): (1)
 p. Losartan potassium (Cozaar): (1)
 q. Losartan potassium with hydrochlorothiazide (Hyzaar): (1)
 r. Metoprolol (Lopressor): (1)
 s. Nifedipine (Adalat, Procardia): (1)
 t. Perhexiline maleate: (1)
 u. Propranolol (Inderal): (1)
 v. Quinapril (Accupril): (1)
 w. Terazosin (Hytrin): (1)
 x. Timolol maleate (Blocadren): (1)
 y. Valsartan (Diovan): (1)
 z. Verapamil (Calan): (1)
 aa. Other, (specify): (1)
-

- ab. Other, (specify): (1)
-

29. Has the patient taken any antihyperlipidemic medications since last visit:

Yes No
 (1) (2)
30.

(If yes, check all that apply):

- a. Atorvastatin (Lipitor): (1)
 - b. Colestipol hydrochloride (Colestid): (1)
 - c. Clofibrate (Abitrate, Atromid-S, Claripex, Novofibrate): (1)
 - d. Gemfibrozil (Gen-Fibro, Lopid): (1)
 - e. Fenofibrate (Tricor): (1)
 - f. Fluvastatin sodium (Lescol): (1)
 - g. Lovastatin (Mevacor): (1)
 - h. Nicotinic acid (Niaspan): (1)
 - i. Pravastatin sodium (Pravachol): (1)
 - j. Rosuvastatin (Crestor): (1)
 - k. Simvastatin (Zocor): (1)
 - l. Other, (*specify*): (1)
-

30. Has the patient taken any vitamins since last visit:

Yes No
 (1) (2)
31.

(If yes, check all that apply):

- a. Vitamin B (any type): (1)
 - b. Vitamin C: (1)
 - c. Vitamin D: (1)
 - d. Vitamin E: (1)
 - e. Multivitamin: (1)
 - f. Other, (*specify*): (1)
-

31. Has the patient taken any supplements since last visit:

Yes No
 (1) (2)
32.

(If yes, check all that apply):

- a. Alpha-lipoic acid: (1)
- b. Alpha-tocopherol: (1)
- c. Beta-carotene: (1)
- d. Betaine (Cystadane): (1)
- e. Calcium (any form): (1)
- f. Carnitine (any form): (1)
- g. Chondroitin (any form): (1)
- h. Choline + methionine + betaine + adenosine + pyridoxine (Epocler): (1)
- i. Cod liver oil: (1)
- j. Coenzyme Q: (1)
- k. Dichloroacetate: (1)
- l. Echinacea: (1)
- m. Fish oil (any form): (1)
- n. Flax seed oil: (1)
- o. Garlic: (1)
- p. Ginkgo biloba: (1)
- q. Glucosamine (any form): (1)
- r. Lecithin: (1)
- s. Magnesium: (1)
- t. N-acetyl-cysteine: (1)
- u. Potassium (any form): (1)
- v. Saw palmetto: (1)
- w. Selenium: (1)
- x. St. John's Wort: (1)
- y. Taurine: (1)
- z. Zinc picolinate: (1)
- aa. Other, (*specify*): (1)

ab. Other, (*specify*): (1)

32. Has patient taken any of the following medications or other supplements/medications since last visit:

Yes
No
(1)
(2)

33.

(If yes, record all other supplements/medications):

- a.** Isotretinoin (Accutane): (1)
- b.** Levothyroxine (Levoxyl, Synthroid): (1)
- c.** Liothyronine (Cytomel): (1)
- d.** Penicillamine (Cuprimine, Depen): (1)
- e.** Trientine hydrochloride (Syprine): (1)
- f.** Other, *(specify)*: (1)

- g.** Other, *(specify)*: (1)

- h.** Other, *(specify)*: (1)

- i.** Other, *(specify)*: (1)

- j.** Other, *(specify)*: (1)

- k.** Other, *(specify)*: (1)

K. Administrative information

33. Study Physician PIN: _____

34. Study Physician signature:

35. Clinical Coordinator PIN: _____

36. Clinical Coordinator signature:

37. Date form reviewed:
_____ day _____ mon _____ year

FLINT**LD – Lifetime Drinking History
(Skinner)**

Purpose: To obtain quantitative indices of the patient's alcohol consumption patterns from the onset of regular drinking.

When: Visits. If more than one LD form is needed, use visit code "n" on the second LD form.

Administered by: Clinical Coordinator.

Respondent: FLINT Patients, without help from spouse or family.

Instructions: In addition to actual consumption levels (quantity), attention is focused upon the frequency of use, variability in consumption, types of beverages, life events that mark a change in drinking pattern, solitary versus social drinking, and time of day when alcohol is consumed. Flash Card #9, Drink Equivalents, may be used with this interview.

The interviewer begins by recording the patient's alcohol consumption behavior during the first year that he/she drank on a regular basis (at least one drink per month). Then, the patient is asked to think of when his/her drinking behavior changed in any appreciable way. In a chronological fashion, the interviewer traces the patient's alcohol consumption behavior from the age of first regular drinking to the present. Flash Card #10, Patterns of Alcohol Intake, provides sample language for the interviewer. Each LD form allows for describing six drinking phases. Use a second LD form (visit code "n") if needed to describe additional drinking phases. If this is the second LD form, skip sections B and C and start with item 20.

The interview takes approximately 20 minutes to complete. It is best given after a reasonable degree of rapport has been established, whereby the patient will feel more at ease and talk openly. Other considerable probing and cross-referencing of facts is necessary to help in accurate recall. All information should be recorded under the appropriate heading on the LD form.

A. Center, patient, and visit identification

1. Center ID: _____
2. Patient ID: _____
3. Patient code: _____
4. Date of visit (*date patient completed the form*):
 _____ - _____ - _____
 day mon year
5. Visit code: S _____
6. Form & revision: 1 d 1
7. Study: FLINT 7

B. Lifetime alcohol consumption

8. Over the course of your lifetime have you ever had at least one drink of alcohol, beer, liquor, wine, or wine coolers, per month during a 12-month time period, or at least three drinks per day for at least three consecutive days (over a regular period of time):

Yes No
 (1) (2)
 81. ←

C. First phase

Read as written: “Now, I am going to ask you about your drinking pattern during the first year that you began to have at least one drink per month until your drinking behavior was different in a significant way from this time.”

9. How old were you when you began regular drinking:

a. Years: _____ yrs

b. Months: _____ mos

10. How old were you at the end of first stage:

a. Years: _____ yrs

b. Months: _____ mos

11. During the first stage, how many drinks would you have on average per occasion (*drinking day*):

_____ # drinks

12. How many days per month would you generally drink at this level:

_____ # days

13. What is the most or maximum number of drinks you would have in any one day:

_____ # drinks

(Note: This is the maximum number that the patient actually would drink, not an estimate of his/her potential capacity.)

14. What type of beverage would you usually consume in an average month (*record the relative percentages of beer, liquor or wine; this section should add up to 100%*):

Beer _____ %

Liquor _____ %

Wine _____ %

15. How would you rate your usual style of drinking during an average month (*check the appropriate category*):

- Abstinent (1)
- Occasional (*less than 15 days*) (2)
- Weekend mainly (3)
- Binge (*at least 3 days heavy drinking*) (4)
- Frequent (*15 days or more per month*) (5)

16. Did any important event or events occur during this period that altered your usual drinking habits:

Yes No
(1) (2)

18. ←

17. What was your perception of this event? Would you say that it had a positive (desirable), negative (undesirable), or neutral (no) effect on your life (*for each event that influenced the patient’s drinking pattern, check “1” for positive effect or “2” for negative effect or “3” for neutral or no effect*):

	Positive	Negative	Neutral
a. Marital/family . . .	(1)	(2)	(3)
b. Work	(1)	(2)	(3)
c. School	(1)	(2)	(3)
d. Medical	(1)	(2)	(3)
e. Residence	(1)	(2)	(3)
f. Legal/jail	(1)	(2)	(3)
g. Financial	(1)	(2)	(3)
h. Peer group	(1)	(2)	(3)
i. Drug abuse	(1)	(2)	(3)
j. Treatment	(1)	(2)	(3)
k. Death	(1)	(2)	(3)
l. Emotional	(1)	(2)	(3)

18. What percentage of time would you drink alone, and what percentage of the time with at least one other person (*record the relative percentages of “Alone” and “With others”; this section should add up to 100%*):

Alone _____ %

With others _____ %

19. During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning (*record the relative percentages of morning, afternoon and evening; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Morning	_____	_____	_____	%
Afternoon	_____	_____	_____	%
Evening	_____	_____	_____	%

D. Subsequent phase

20. **Read as written:** "We have just discussed your drinking habits at the point when you first began to drink regularly. Now I want you to think to when your drinking behavior was different in a significant way from this time. This could be the next 6 months or perhaps 2 or 5 years later. Can you think of any events in your life that changed and may have altered your drinking habits":

Yes	No
(1)	(2)

81. ←

21. How old were you at the beginning of this phase:

a. Years: _____ yrs

b. Months: _____ mos

22. How old were you at the end of this phase:

a. Years: _____ yrs

b. Months: _____ mos

23. During this phase, how many drinks would you have on average per occasion (*drinking day*):

_____ # drinks

24. How many days per month would you generally drink at this level (*write "m" if not drinking*):

_____ # days

25. What is the most or maximum number of drinks you would have in any one day:

_____ # drinks

(*Note: This is the maximum number that the patient actually would drink, not an estimate of his/her potential capacity.*)

26. What type of beverage would you usually consume in an average month (*record the relative percentages of beer, liquor or wine; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Beer	_____	_____	_____	%
Liquor	_____	_____	_____	%
Wine	_____	_____	_____	%

27. How would you rate your usual style of drinking during an average month (*check the appropriate category*):

Abstinent	(1)
Occasional (<i>less than 15 days</i>)	(2)
Weekend mainly	(3)
Binge (<i>at least 3 days heavy drinking</i>)	(4)
Frequent (<i>15 days or more per month</i>)	(5)

28. Did any important event or events occur during this period that altered your usual drinking habits:

Yes	No
(1)	(2)

30. ←

29. What was your perception of this event? Would you say that it had a positive (desirable), negative (undesirable), or neutral (no) effect on your life (*for each event that influenced the patient's drinking pattern, check "1" for positive effect or "2" for negative effect or "3" for neutral or no effect*):

	Positive	Negative	Neutral
a. Marital/family ..	(1)	(2)	(3)
b. Work	(1)	(2)	(3)
c. School	(1)	(2)	(3)
d. Medical	(1)	(2)	(3)
e. Residence	(1)	(2)	(3)
f. Legal/jail	(1)	(2)	(3)
g. Financial	(1)	(2)	(3)
h. Peer group	(1)	(2)	(3)
i. Drug abuse	(1)	(2)	(3)
j. Treatment	(1)	(2)	(3)
k. Death	(1)	(2)	(3)
l. Emotional	(1)	(2)	(3)

30. What percentage of time would you drink alone, and what percentage of the time with at least one other person (*record the relative percentages of "Alone" and "With others"; this section should add up to 100%; if not drinking, percentages should be "000"*):

Alone _____ % _____

With others _____ % _____

31. During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning (*record the relative percentages of morning, afternoon and evening; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Morning _____ % _____

Afternoon _____ % _____

Evening _____ % _____

E. Next subsequent phase

32. **Read as written:** "We have just discussed your drinking habits when you first began to drink regularly and at a subsequent phase. Now I want you to think to when your drinking behavior was different in a significant way from the previous phase. This could be the next 6 months or perhaps 2 or 5 years later. Can you think of any events in your life that changed and may have altered your drinking habits":

Yes (1) No (2)

81. ←

33. How old were you at the beginning of the phase:

a. Years: _____ yrs

b. Months: _____ mos

34. How old were you at the end of this phase:

a. Years: _____ yrs

b. Months: _____ mos

35. During this phase, how many drinks would you have on average per occasion (*drinking day*):

_____ # drinks

36. How many days per month would you generally drink at this level (*write "m" if not drinking*):

_____ # days

37. What is the most or maximum number of drinks you would have in any one day:

_____ # drinks

(*Note: This is the maximum number that the patient actually would drink, not an estimate of his/her potential capacity.*)

38. What type of beverage would you usually consume in an average month (*record the relative percentages of beer, liquor or wine; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Beer _____ % _____

Liquor _____ % _____

Wine _____ % _____

39. How would you rate your usual style of drinking during an average month (*check the appropriate category*):

- Abstinent (1)
- Occasional (*less than 15 days*) (2)
- Weekend mainly (3)
- Binge (*at least 3 days heavy drinking*) (4)
- Frequent (*15 days or more per month*) (5)

40. Did any important event or events occur during this period that altered your usual drinking habits:

Yes (1) No (2)

42. ←

41. What was your perception of this event? Would you say that it had a positive (desirable), negative (undesirable), or neutral (no) effect on your life (for each event that influenced the patient's drinking pattern, check "1" for positive effect or "2" for negative effect or "3" for neutral or no effect):

	Positive	Negative	Neutral
a. Marital/family ..	(1)	(2)	(3)
b. Work	(1)	(2)	(3)
c. School	(1)	(2)	(3)
d. Medical	(1)	(2)	(3)
e. Residence	(1)	(2)	(3)
f. Legal/jail	(1)	(2)	(3)
g. Financial	(1)	(2)	(3)
h. Peer group	(1)	(2)	(3)
i. Drug abuse	(1)	(2)	(3)
j. Treatment	(1)	(2)	(3)
k. Death	(1)	(2)	(3)
l. Emotional	(1)	(2)	(3)

42. What percentage of time would you drink alone, and what percentage of the time with at least one other person (record the relative percentages of "Alone" and "With others"; this section should add up to 100%; if not drinking, percentages should be "000"):

Alone _____ %

With others _____ %

43. During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning (record the relative percentages of morning, afternoon and evening; this section should add up to 100%; if not drinking, percentages should all be "000"):

Morning _____ %

Afternoon _____ %

Evening _____ %

F. Next subsequent phase

44. **Read as written:** "We have just discussed your drinking habits when you first began to drink regularly and at subsequent phases. Now I want you to think to when your drinking behavior was different in a significant way from the previous phase. This could be the next 6 months or perhaps 2 or 5 years later. Can you think of any events in your life that changed and may have altered your drinking habits?":

Yes (1) No (2)

81. ←

45. How old were you at the beginning of the phase:

a. Years: _____ yrs

b. Months: _____ mos

46. How old were you at the end of this phase:

a. Years: _____ yrs

b. Months: _____ mos

47. During this phase, how many drinks would you have on average per occasion (drinking day):

_____ # drinks

48. How many days per month would you generally drink at this level (write "m" if not drinking):

_____ # days

49. What is the most or maximum number of drinks you would have in any one day:

_____ # drinks

(Note: This is the maximum number that the patient actually would drink, not an estimate of his/her potential capacity.)

50. What type of beverage would you usually consume in an average month (*record the relative percentages of beer, liquor or wine; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Beer _____ % _____

Liquor _____ % _____

Wine _____ % _____

51. How would you rate your usual style of drinking during an average month (*check the appropriate category*):

- Abstinent (1)
- Occasional (*less than 15 days*) (2)
- Weekend mainly (3)
- Binge (*at least 3 days heavy drinking*) (4)
- Frequent (*15 days or more per month*) (5)

52. Did any important event or events occur during this period that altered your usual drinking habits:

Yes No
(1) (2)

54. ←

53. What was your perception of this event? Would you say that it had a positive (desirable), negative (undesirable), or neutral (no) effect on your life (*for each event that influenced the patient's drinking pattern, check "1" for positive effect or "2" for negative effect or "3" for neutral or no effect*):

	Positive	Negative	Neutral
a. Marital/family	(1)	(2)	(3)
b. Work	(1)	(2)	(3)
c. School	(1)	(2)	(3)
d. Medical	(1)	(2)	(3)
e. Residence	(1)	(2)	(3)
f. Legal/jail	(1)	(2)	(3)
g. Financial	(1)	(2)	(3)
h. Peer group	(1)	(2)	(3)
i. Drug abuse	(1)	(2)	(3)
j. Treatment	(1)	(2)	(3)
k. Death	(1)	(2)	(3)
l. Emotional	(1)	(2)	(3)

54. What percentage of time would you drink alone, and what percentage of the time with at least one other person (*record the relative percentages of "Alone" and "With others"; this section should add up to 100%; if not drinking, percentages should be "000"*):

Alone _____ % _____

With others _____ % _____

55. During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning (*record the relative percentages of morning, afternoon and evening; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Morning _____ % _____

Afternoon _____ % _____

Evening _____ % _____

G. Next subsequent phase

56. **Read as written:** "We have just discussed your drinking habits when you first began to drink regularly and at subsequent phases. Now I want you to think to when your drinking behavior was different in a significant way from the previous phase. This could be the next 6 months or perhaps 2 or 5 years later. Can you think of any events in your life that changed and may have altered your drinking habits":

Yes No
(1) (2)

81. ←

57. How old were you at the beginning of the phase:

a. Years: _____ yrs

b. Months: _____ mos

58. How old were you at the end of this phase:

a. Years: _____ yrs

b. Months: _____ mos

59. During this phase, how many drinks would you have on average per occasion (*drinking day*):

_____ # drinks

60. How many days per month would you generally drink at this level (*write "m" if not drinking*):

_____ # days

61. What is the most or maximum number of drinks you would have in any one day:

_____ # drinks

(Note: This is the maximum number that the patient actually would drink, not an estimate of his/her potential capacity.)

62. What type of beverage would you usually consume in an average month (*record the relative percentages of beer, liquor or wine; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Beer _____ %

Liquor _____ %

Wine _____ %

63. How would you rate your usual style of drinking during an average month (*check the appropriate category*):

- Abstinent (1)
- Occasional (*less than 15 days*) (2)
- Weekend mainly (3)
- Binge (*at least 3 days heavy drinking*) (4)
- Frequent (*15 days or more per month*) (5)

64. Did any important event or events occur during this period that altered your usual drinking habits:

Yes No
(1) (2)



65. What was your perception of this event? Would you say that it had a positive (desirable), negative (undesirable), or neutral (no) effect on your life (*for each event that influenced the patient's drinking pattern, check "1" for positive effect or "2" for negative effect or "3" for neutral or no effect*):

	Positive	Negative	Neutral
a. Marital/family ..	(1)	(2)	(3)
b. Work	(1)	(2)	(3)
c. School	(1)	(2)	(3)
d. Medical	(1)	(2)	(3)
e. Residence	(1)	(2)	(3)
f. Legal/jail	(1)	(2)	(3)
g. Financial	(1)	(2)	(3)
h. Peer group	(1)	(2)	(3)
i. Drug abuse	(1)	(2)	(3)
j. Treatment	(1)	(2)	(3)
k. Death	(1)	(2)	(3)
l. Emotional	(1)	(2)	(3)

66. What percentage of time would you drink alone, and what percentage of the time with at least one other person (*record the relative percentages of "Alone" and "With others"; this section should add up to 100%; if not drinking, percentages should be "000"*):

Alone _____ %

With others _____ %

67. During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning (*record the relative percentages of morning, afternoon and evening; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Morning _____ %

Afternoon _____ %

Evening _____ %

H. Next subsequent phase

68. Read as written: “We have just discussed your drinking habits when you first began to drink regularly and at subsequent phases. Now I want you to think to when your drinking behavior was different in a significant way from the previous phase. This could be the next 6 months or perhaps 2 or 5 years later. Can you think of any events in your life that changed and may have altered your drinking habits”:

Yes No
(1) (2)

81. ←

69. How old were you at the beginning of the phase:

a. Years: _____ yrs

b. Months: _____ mos

70. How old were you at the end of this phase:

a. Years: _____ yrs

b. Months: _____ mos

71. During this phase, how many drinks would you have on average per occasion (*drinking day*):

_____ # drinks

72. How many days per month would you generally drink at this level (*write “m” if not drinking*):

_____ # days

73. What is the most or maximum number of drinks you would have in any one day:

_____ # drinks

(Note: This is the maximum number that the patient actually would drink, not an estimate of his/her potential capacity.)

74. What type of beverage would you usually consume in an average month (*record the relative percentages of beer, liquor or wine; this section should add up to 100%; if not drinking, percentages should all be “000”*):

Beer _____ % _____

Liquor _____ % _____

Wine _____ % _____

75. How would you rate your usual style of drinking during an average month (*check the appropriate category*):

- Abstinent (1)
- Occasional (*less than 15 days*) (2)
- Weekend mainly (3)
- Binge (*at least 3 days heavy drinking*) (4)
- Frequent (*15 days or more per month*) (5)

76. Did any important event or events occur during this period that altered your usual drinking habits:

Yes No
(1) (2)

78. ←

77. What was your perception of this event? Would you say that it had a positive (desirable), negative (undesirable), or neutral (no) effect on your life (*for each event that influenced the patient’s drinking pattern, check “1” for positive effect or “2” for negative effect or “3” for neutral or no effect*):

	Positive	Negative	Neutral
a. Marital/family	(1)	(2)	(3)
b. Work	(1)	(2)	(3)
c. School	(1)	(2)	(3)
d. Medical	(1)	(2)	(3)
e. Residence	(1)	(2)	(3)
f. Legal/jail	(1)	(2)	(3)
g. Financial	(1)	(2)	(3)
h. Peer group	(1)	(2)	(3)
i. Drug abuse	(1)	(2)	(3)
j. Treatment	(1)	(2)	(3)
k. Death	(1)	(2)	(3)
l. Emotional	(1)	(2)	(3)

78. What percentage of time would you drink alone, and what percentage of the time with at least one other person (*record the relative percentages of "Alone" and "With others"; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Alone _____ % _____

With others _____ % _____

79. During what time of the day would you do most of your drinking? Could you give me the percentage of time during the evening, afternoon and morning (*record the relative percentages of morning, afternoon and evening; this section should add up to 100%; if not drinking, percentages should all be "000"*):

Morning _____ % _____

Afternoon _____ % _____

Evening _____ % _____

I. Number of phases

80. Are there any additional subsequent phases:

Yes No
(* 1) (2)

** If yes, complete a second LD form.
Skip sections B and C on second form.*

J. Administrative information

81. Clinical Coordinator PIN: _____

82. Clinical Coordinator signature:

83. Date form reviewed:
_____-_____-_____
day mon year

FLINT

LR - Laboratory Results - Tests Done at Screening and Followup Visits

Purpose: To record archival and current laboratory test results for tests done during both screening and followup.

When: Visits s, f12, f24, f36, f48, f60, f72, and f96.

Administered by: Study Physician and Clinical Coordinator.

Instructions: Laboratory test results may be obtained from chart review. Complete tests as needed (repeat tests if archival test is not within the required time window). The window for each test is specified next to the date of blood draw. Use a calculator if you need to convert units to match the units specified on this form. Call the DCC if you have any questions about conversions or how to record a value. Attach copies of the laboratory reports to this form. If is checked for any item, then the form should not be keyed.

A. Center, patient, and visit identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Date of visit:
 _____ day _____ mon _____ year

5. Visit code: _____

6. Form & revision: 1 r 1

7. Study: FLINT 7

B. Hematology

Required at visits s, f24, f48, f72, and f96.

8. Is hematology testing required at this visit:
 Yes () No ()
 15.

9. Date of blood draw for complete blood count:
 _____ day _____ mon _____ year

Date must be within the required time window; within 90 days of liver biopsy or in the time window for the followup visit (check the patient's FLINT visit time window guide).

10. Hemoglobin: _____ g/dL

11. Hematocrit: _____ %

12. Mean corpuscular volume (MCV): _____ fL

13. White blood cell count (WBC): _____
 10³ cells/ μ L or 10⁹ cells/L

14. Platelet count: _____
 cells/mm³
If platelets < 100,000 cells/mm³ (mm³ = μ L) at screening, patient is ineligible.

C. Chemistries

Required at visits s, f24, f48, f72, and f96.

15. Is metabolic panel required at this visit:
 Yes () No ()
 28.

16. Date of blood draw for chemistries:
 _____ day _____ mon _____ year

Date must be within the required time window; within 90 days of liver biopsy or in the time window for the followup visit (check the patient's FLINT visit time window guide).

17. Sodium: _____ mEq/L

18. Potassium: _____ mEq/L

19. Chloride: _____ mEq/L

20. Bicarbonate: _____ mEq/L

21. Calcium: _____ mg/dL

22. Phosphate: _____ mg/dL

23. Blood urea nitrogen (BUN): _____ mg/dL

24. Creatinine (if serum creatinine ≥ 2.0 mg/dL, patient is ineligible): _____ mg/dL

25. Uric acid: _____ mg/dL

26. Albumin (if albumin < 3.2 g/dL, patient is ineligible): _____ g/dL

27. Total protein: _____ g/dL

D. Prothrombin time and INR

Required at visits s and f72.

28. Are the prothrombin time and INR required at this visit:
 (Yes) (1) (No) (2)
 [32.]

29. Date of blood draw for prothrombin time and INR:
 _____ day _____ mon _____ year

Date must be in the required time window; within 90 days of liver biopsy or in the time window for the followup visit (check the patient's FLINT visit time window guide).

30. Prothrombin time (PT): _____ sec

31. International normalized ratio (INR) (if INR > 1.3 , patient is ineligible): _____

E. Hemoglobin A1c

Required at visits s, f24, f48, f72, and f96.

32. Is HbA1c required at this visit:
 (Yes) (1) (No) (2)
 [35.]

33. Date of blood draw for HbA1c:
 _____ day _____ mon _____ year

Date must be within the required time window; within 60 days of randomization or in the time window for the follow-up visit (check the patient's FLINT visit time window guide).

34. HbA1c (if HbA1c is $\geq 9.5\%$ within 60 days of randomization, patient is ineligible): _____ %

F. Liver panel

Required at all visits.

35. Date of blood draw for liver panel:
 _____ day _____ mon _____ year

Date must be within the required time window; within 90 days of liver biopsy or in the time window for the follow-up visit (check the patient's FLINT visit time window guide).

36. Bilirubin (total): _____ mg/dL

37. Bilirubin (conjugated or direct) (if direct bilirubin > 1.3 mg/dL, patient is ineligible): _____ mg/dL

38. Aspartate aminotransferase (AST) _____ U/L

a. Upper limit of normal: _____ U/L

39. Alanine aminotransferase (ALT)
(if ALT > 300 U/L at screening, patient is ineligible)

_____ U/L _____

a. Upper limit of normal: _____ U/L _____

40. Alkaline phosphatase

_____ U/L _____

a. Upper limit of normal: _____ U/L _____

41. Gamma glutamyl transferase (GGT):

_____ U/L _____

G. Fasting lipid profile

Required at all visits

Fasting is defined as nothing by mouth except water for greater than or equal to 12 hours prior to blood draw.

42. Was participant fasting for at least 8 hours prior to blood draw:

(Yes) (No*)

**12 hour fasting is preferred, but will accept non-fasting lipid values.*

43. Date of blood draw for fasting lipid profile:

_____ day _____ mon _____ year

Date must be within the required time window; within 90 days of liver biopsy or in the time window for the followup visit (check the patient's FLINT visit time window guide).

a. Triglycerides: _____ mg/dL _____

b. Total cholesterol: _____ mg/dL _____

c. HDL cholesterol level: _____ mg/dL _____

d. LDL cholesterol level*: _____ mg/dL _____

**Enter "GT" if LDL cannot be calculated due to high triglycerides.*

H. Fasting glucose and insulin/oral glucose tolerance test

Fasting glucose and insulin are required at all visits; the 2 hour OGTT is required at visits s and f72 for nondiabetics.

The 2 hour oral glucose tolerance test will be performed in the morning after a 12-hour overnight fasting. Blood samples will be obtained for measurements of serum glucose and insulin at baseline and 2 hours (120 minutes) after oral administration of a flavored glucose solution in a dose of 2 g/kg (75 g maximum).

44. Was participant fasting for at least 8 hours:

(Yes) (No*)

**Patient must be fasting; 12 hour fasting is preferred. Fasting glucose and insulin must be obtained at visit s.*

45. Date of blood draw for fasting glucose and insulin/OGTT:

_____ day _____ mon _____ year

Date must be within 90 days of liver biopsy or in the time window for the followup visit (check the patient's FLINT visit time window guide).

46. Result of baseline fasting glucose/insulin levels

a. Serum glucose: _____ mg/dL _____

b. Serum insulin: _____ μU/mL _____

47. Is glucose tolerance test (OGTT) required at this visit (the 2 hour OGTT is required at visits s and f72 for nondiabetics):

Yes ()

No ()

No, patient is diabetic ()

48. OGTT results at 2 hours

a. Serum glucose: _____ mg/dL _____

b. Serum insulin: _____ μU/mL _____

I. Pregnancy test

Required at all study visits, if applicable.

49. Is pregnancy test applicable:

(Yes) (No)
(1) (2)
52.

50. Date of urine collection (or blood draw):

____ day ____ mon ____ year

Date must be the same day as date of visit.

51. Pregnancy test result (if pregnancy test is positive at screening visit, patient is ineligible):

Positive (1)
Negative (2)

J. Eligibility check

52. Is this the screening visit:

(Yes) (No)
(1) (2)
54.

53. Was the patient found to be ineligible based on platelet count (item 14), creatinine (item 24), albumin (item 26), INR (item 31), HbA1c (item 34), direct bilirubin (item 37), ALT (item 39) or pregnancy test (item 51) or based on missing tests:

(Yes) (No)
(1) (2)
 ~~Elig~~

K. Administrative information

54. Study Physician PIN: _____

55. Study Physician signature: _____

56. Clinical Coordinator PIN: _____

57. Clinical Coordinator signature: _____

58. Date form reviewed:

____ day ____ mon ____ year

- e. Hepatitis C antibody (anti-HCV)
(indicate result as negative if EIA is positive but RIBA is negative or if RIBA is indeterminate but HCV RNA is negative):
 Positive (1)
 Negative (2)

C. Iron

9. Date of blood draw for iron overload screening:
 _____ day _____ mon _____ year
Repeat if date is greater than 1 year prior to screening.
- a. Iron: _____ $\mu\text{g/dL}$
- b. Total iron binding capacity: _____ $\mu\text{g/dL}$
- c. Ferritin: _____ ng/mL

10. Is hepatic iron index available:
 Yes (1) No (2)
 12.
11. Hepatic iron index: _____ $\mu\text{Mol/g/year}$

D. HFE gene analysis

12. Does the patient have an abnormality in an iron overload screening test, a family history of iron overload or hemochromatosis, or histological iron of greater than 3+:
 Yes (1) No (2)
 15.

13. Date of blood draw for HFE gene analysis:
 _____ day _____ mon _____ year

14. Type of abnormality (*WT = wild type; check only one*):
 None (0)
 C282Y/H63D heterozygote mutation (1)
 C282Y/C282Y homozygote mutation (2)
 C282Y/WT heterozygote mutation (3)
 H63D/WT heterozygote mutation (4)
 H63D/H63D homozygote mutation (5)

E. Ceruloplasmin

15. Is patient 40 years old or younger:
 Yes (1) No (2)
 18.

16. Date of blood draw for ceruloplasmin:
(required only if patient is 40 years old or younger):
 _____ day _____ mon _____ year
Repeat if date is greater than 5 years prior to screening.

17. Ceruloplasmin _____ mg/dL
- a. Upper limit of normal: _____ mg/dL
- b. Lower limit of normal: _____ mg/dL
- c. Is ceruloplasmin < LLN:
 Yes (* 1) No (2)
 C

**Check liver biopsy histology findings for Wilson's disease.*

F. Alpha-1 antitrypsin

18. Date of blood draw for alpha-1 antitrypsin (A1AT):

____ - ____ - ____
 day mon year

Repeat if date is greater than 5 years prior to screening.

19. Alpha-1 antitrypsin (A1AT) _____ mg/dL

a. Upper limit of normal: _____ mg/dL

b. Lower limit of normal: _____ mg/dL

20. A1AT phenotype:

- a.** Pi Z heterozygote:
 - Yes (1)
 - No (2)
 - Unknown (3)
- b.** Pi ZZ homozygote:
 - Yes (1)
 - No (2)
 - Unknown (3)

21. A1AT deficiency as a contributor to liver disease (*physician judgment*):

(Yes) (No)
 (1) (2)
 Elig

G. Autoantibody studies

22. Date of blood draw for antinuclear antibody tests:

____ - ____ - ____
 day mon year

Repeat if date is greater than 5 years prior to screening.

23. Antinuclear antibody (ANA):

- Positive (*)₁
- Negative ()₂

24. _____

**If positive ANA value, complete either a or b depending on laboratory results:*

a. Titer (*record only the denominator*):

1/ _____

b. Units: _____ • _____

24. Date of blood draw for antismooth muscle antibody tests:

____ - ____ - ____
 day mon year

Repeat if date is greater than 5 years prior to screening.

25. Antismooth muscle antibody (ASMA):

- Positive (*)₁
- Negative ()₂

26. _____

**If positive ASMA value, complete either a or b depending on laboratory results:*

a. Titer (*record only the denominator*):

1/ _____

b. Units: _____ • _____

26. Date of blood draw for antimitochondrial antibody tests:

____ - ____ - ____
 day mon year

Repeat if date is greater than 5 years prior to screening.

27. Antimitochondrial antibody (AMA):

- Positive (*)₁
- Negative ()₂

28. _____

**If positive AMA value, complete either a or b depending on laboratory results:*

a. Titer (*record only the denominator*):

1/ _____

b. Units: _____ • _____

H. Administrative information

28. Study Physician PIN: — — —

29. Study Physician signature:

30. Clinical Coordinator PIN: — — —

31. Clinical Coordinator signature:

32. Date form reviewed:
 — — — — —
 day mon year

FLINT**PE - Physical Examination**

Purpose: Record detailed physical exam findings.

When: Visits s, f24, f48, f72, and f96.

Administered by: Study Physician and Clinical Coordinator.

Respondent: Patient.

Instructions: Details of the protocol for height, weight, waist, and hip measurements are found in the FLINT SOP, Part I. In brief: Height, weight, waist, and hips all should be measured with the patient standing and wearing light clothing. Shoes should be removed for height and weight measures. Measure the waist around the abdomen horizontally at the midpoint between the highest point of the iliac crest and the lowest part of the costal margin in the mid axillary line. Repeat waist measurements until you have two measurements within 4 in (10.2 cm) of each other. Measure the hips at the fullest part. Repeat hip measurements until you have two measurements within 4 in (10.2 cm) of each other.

A. Center, patient, and visit identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Visit date: _____
 _____ day mon year

5. Visit code: _____

6. Form & revision: p e 1

7. Study: FLINT 7

B. Measurements**8. Height (*shoes off*)**

a. 1st measurement: _____

b. 2nd measurement: _____

c. Units:
 Inches (1)
 Centimeters (2)

9. Weight (*shoes off*)

a. Weight, 1st measurement: _____

b. Weight, 2nd measurement: _____

c. Units:
 Pounds (1)
 Kilograms (2)

10. Waist (*standing, at midpoint between highest point of iliac crest and lowest part of costal margin; repeat waist measurements until you have two measurements within 4 in (10.2 cm) of each other*)

a. Circumference, 1st measurement: _____

b. Circumference, 2nd measurement: _____

c. Units:
 Inches (1)
 Centimeters (2)

11. Hip (*standing, at fullest part of the hips; repeat hip measurements until you have two measurements within 4 in (10.2 cm) of each other*)

a. Circumference, 1st measurement: _____

b. Circumference, 2nd measurement: _____

c. Units:
 Inches (1)
 Centimeters (2)

12. Temperature (oral)

- a. Degrees: _____ • _____
- b. Scale: _____
- Fahrenheit (1)
- Centigrade (2)

13. Blood pressure

- a. Systolic: _____ mmHg
- b. Diastolic: _____ mmHg

14. Resting radial pulse:

_____ beats/minute

15. Respiratory rate:

_____ breaths/minute

19. Focused liver signs (check all that apply)

- a. None: (1)
- b. Jaundice: (1)
- c. Palmar erythema: (1)
- d. Contractures: (1)
- e. Pedal edema: (1)
- f. Spider angiomata: (1)
- g. Asterixis: (1)
- h. Hepatic encephalopathy: (1)
- i. Wasting: (1)
- j. Feter: (1)
- k. Pruritus: (1)
- l. Other, (specify): (1)

_____ specify

C. Examination findings

16. Chest and lungs:

- Normal (1)
- Abnormal **17.** _____ (2)
- _____ specify abnormality

17. Heart:

- Normal (1)
- Abnormal **18.** _____ (2)
- _____ specify abnormality

18. Abdomen abnormalities present (check all that apply):

- a. None: (1)
- b. Ascites: (1)
- c. Obese: (1)
- d. Splenomegaly: (1)
- e. Hepatomegaly: (1)

If Yes, span at right midclavicular line:

_____ • _____ cm

D. Administrative information

20. Study Physician PIN: _____

21. Study Physician signature: _____

22. Clinical Coordinator PIN: _____

23. Clinical Coordinator signature: _____

24. Date form reviewed: _____ day _____ mon _____ year

Purpose: To record dispensing and return of study drug.

When: Visits rz, f12, f24, f36, f48, f60, and f72. Use visit code “n” if study drug is dispensed or returned at a time other than study visits or if a second form is needed at a visit to document returned study drug.

Administered by: Clinical Coordinator, reviewed by Study Physician.

Instructions: This form documents dispensing of study drug, return of unused study drug, and return of empty study drug bottles. A three month supply (3 bottles) of study drug is dispensed at the rz, f12, f24, f36, f48 and f60 visits. The patient should be instructed to take one capsule daily.

The patient should be queried about return of empty study drug bottles at all study visits. Each time a patient returns used study drug bottles to the clinical center, the clinical coordinator should count and record the remaining number of capsules in the study drug bottles. This form allows recording of the return of up to four bottles. If more than four bottles are returned at a time, complete a second form (using visit code “n”) to record the information for the remaining bottles.

A. Center, patient, and visit identification

1. Center ID: _____

2. Patient ID: _____

3. Patient code: _____

4. Date of visit: _____

_____ day _____ mon _____ year

5. Visit code: _____

6. Form & revision: r d 1

7. Study: FLINT 7

10. Reason for not dispensing study drug (check all that apply)

- a. Not a scheduled study drug dispensing visit: ()
- b. Study physician-directed treatment interruption/termination: ()
- c. Unwillingness of the patient to take study drug: ()
- d. Other (*specify*): ()

_____ specify

16. ←

11. How many bottles were dispensed: _____
(1-3)

B. Study drug dispensing

8. Is this a second form for returning additional drug bottles at this visit:

Yes No
(*) ()

16. ←

* Key first form before this form.

9. Will study drug be dispensed today:

Yes No
() ()

11. ←

Bottle tear-off label

12.

Affix label here

13.

Affix label here

14.

Affix label here

15. How was the study drug dispensed to the patient (*check only one*) :

- In person (1)
- Mail (2)
- Other (*specify*) (3)

_____ specify

C. Study drug return

16. Were any bottles returned at this visit:

- Yes ()
- No (2)

23. ←

17. Number of bottles returned (*if more than 4 bottles are returned, complete a second RD form*):

_____ (1-4)

	a. Bottle No.	b. Number of capsules returned
18.	_____	_____ (00-40)
19.	_____	_____ (00-40)
20.	_____	_____ (00-40)
21.	_____	_____ (00-40)

D. Remaining bottles

22. Are any additional bottles being returned:

- Yes (* 1)
- No (2)

**If yes, complete a second RD form using visit code "n."*

E. Administrative information

23. Study Physician PIN: _____

24. Study Physician signature: _____

25. Clinical Coordinator PIN: _____

26. Clinical Coordinator signature: _____

27. Date form reviewed:
_____ day - _____ mon - _____ year

14. In what country was the patient born (*check only one*):

- Continental US (includes Alaska) or Hawaii (1)
 - Other, (*specify*): (2)
- _____ specify

15. Highest educational level achieved by patient (*show the patient Flash Card #3 and ask the respondent to pick the category that describes the patient best; check only one*):

- Never attended school (0)
- Kindergarten, pre kindergarten, or younger (1)
- Grades 1 to 5 (2)
- Grades 6-8 (3)
- Grades 9-11 (4)
- Completed high school (5)
- Some college or post high school education or training (6)
- Bachelor's degree or higher (7)

16. Is the patient currently employed:

Yes (1) No (2)

19.

17. What is the patient's current occupation:

_____ specify occupation

18. About how many hours does the patient work each week: _____ # hours

19. Which of the following categories best characterizes the patient's occupational history (*show the patient/parent Flash Card #4 and ask the respondent to pick the category that describes the patient best; check only one*):

- Never employed (0)
- Laborer (1)
- Clerical (2)
- Professional (3)
- Homemaker (4)
- Other, (*specify*): (5)

_____ specify

20. Marital status of the patient (*show the patient Flash Card #5 and ask the respondent to pick the category that describes the patient best; check only one*):

- Single, never married (1)
- Married or living in marriage-like relationship (2)
- Separated, divorced, or annulled (3)
- Widowed (4)

21. Combined annual income before taxes of all members of patient's household (*show the patient/parent Flash Card #6 and ask the respondent to pick the category that describes the patient's combined household income best; check only one*):

- Less than \$15,000 (1)
- \$15,000 - \$29,999 (2)
- \$30,000 - \$49,999 (3)
- \$50,000 or more (4)

D. Previous registration in a NASH CRN study

22. Has the patient ever been assigned an ID number in a NASH CRN study:

Yes (1) No (2)

26.

23. In which NASH CRN studies has the patient previously been registered (*check all that apply*):

- a. NAFLD Database: (1)
- b. PIVENS: (1)
- c. TONIC: (1)
- d. NAFLD Adult Database 2: (1)
- e. NAFLD Pediatric Database 2: (1)
- f. Other, (*specify*): (1)

_____ specify

24. ID Number previously assigned to patient (*record patient ID in item 2*): _____

25. Code previously assigned to patient (*record patient code in item 3*): _____

27.

E. ID assignment

(If a STOP condition was checked in section B or C, the patient is ineligible and a Patient ID should not be assigned. If the patient was previously registered in a NASH CRN study, a new ID number should not be assigned.)

- 26. Place ID label below and record Patient ID in item 2 and patient code in item 3.

CCCC #####, zzz

F. Administrative information

- 27. Clinical Coordinator PIN: ____ _

- 28. Clinical Coordinator signature:

- 29. Date form reviewed:
____ - ____ - ____
 day mon year