

Patient Name _____

Date Pathway started _____

NWOCC LDL Management Pathway (March 2005)

Secondary Prevention

Goal LDL <70 mg / dL (Very High Risk)	Goal LDL <100 mg / dL (High Risk)
Established CHD ¹ or CHD Risk Equivalents ² Plus other very high risk factors ³	Established CHD ¹ or CHD Risk Equivalents ² or Framingham 10 year risk >20% But NO other very high risk factors³
TLC ⁸ + Lipitor 40 mg / d If myalgias with Lipitor: <ul style="list-style-type: none"> • Check with MD • Suggest checking CK, TSH, and ESR • Suggest change to Pravachol 40 mg 	TLC ⁸ + Lipitor 20 mg / d If myalgias with Lipitor: <ul style="list-style-type: none"> • Check with MD • Suggest checking CK, TSH, and ESR • Suggest change to Pravachol 40 mg
↓	↓
Lipids 6 weeks	Lipids 6 weeks
↓	↓
LDL >70: change to Vytorin 10/40 mg daily ⁷	LDL >100: increase Lipitor 40 mg / d
↓	↓
Lipids 6 weeks	Lipids 6 weeks
↓	↓
LDL >70; check with MD	LDL >100: change to Vytorin 10/40 mg daily ⁷
↓	↓
	Lipids 6 weeks
↓	↓
	LDL >100: check with MD
When LDL is at goal, recheck lipids every 6 months. If LDL is at goal, but TG are high or LDL is low - - > check with MD about following the TG / HDL pathway.	When LDL is at goal, recheck lipids every 6 months. If LDL is at goal, but TG are high or HDL is low - - > check with MD about following the TG / HDL pathway.

Primary Prevention

Goal LDL <130 mg / dL
No CHD¹ or CHD Risk Equivalents² yet has Risk Factors⁴ (Goal is <100 mg / dL if patient has Framingham risk of 10 – 20%, 2+ risk factors ⁴ and has severe risk factors ⁵) ⁶
TLC ⁸ ; if baseline LDL ≥ 130 mg / dL start → Lipitor 10 mg / d if need ≤ 40% LDL reduction → Lipitor 20 mg / d if need > 40% LDL reduction If myalgias with Lipitor: <ul style="list-style-type: none"> • Check with MD • Suggest checking CK, TSH, and ESR • Suggest change to Pravachol 40 mg
↓
Lipids 6 weeks
↓
LDL > 130: increase Lipitor 40 mg / d
↓
Lipids 6 weeks
↓
LDL > 130: Vytorin 10/40 mg / day ⁷
↓
Lipids 6 weeks
↓
LDL > 130: Cardiologist
When LDL is at goal, recheck lipids every 6 months. If LDL is at goal, but TG are high or HDL is low - - > check with MD about following the TG / HDL pathway.

- 1: **CHD:** History of MI, unstable angina, stable angina, coronary artery procedures (PTCA or CABG), or evidence of clinically significant myocardial ischemia
- 2: **CHD Risk Equivalents:** Diabetes, peripheral arterial disease, abdominal aortic aneurysm, carotid artery disease (TIA or stroke of carotid origin or > 50% obstruction of carotid artery), or 2 plus risk factors with 10-year risk for hard CHD > 20%
- 3: **Very High Risk:** Persons with CHD **PLUS:** 1. Multiple major risk factors (esp. diabetes); or 2. Severe and poorly controlled risk factors (esp. continued cigarette smoking) (see definition below); or 3. Multiple risk factors of the metabolic syndrome (esp. high TG ≥ 200 mg / dL plus non-HDL cholesterol > 130 mg / dL with low HDL < 40 mg / dL); or 4. Patients wit ACS
- 4: **Risk Factors:** Cigarette smoking, hypertension (BP ≥ 140/90 or on anti-hypertensive medication), low HDL (< 40 mg / dL), family history of premature CHD, and age (men ≥ 45 years; wmen ≥ 55 years)
- 5: **Severe Risk Factors:** Continued cigarette smoking, a strongly positive family history of premature atherosclerotic CVD, TG ≥ 200 mg / dL plus elevated non-HDL-C (≥ 160 mg / dL) (see definition below), low HDL (< 40 mg / dL), the metabolic syndrome (see definition below), and / or the presence of emerging risk factors (i.e. hs-CRP > 3 mg / L, or coronary calcium > 75 percentile for a person's age and sex).
- 6: If goal is < 100, follow the column for High Risk patients
- 7: Start Vytorin 10/20 mg / day if on any of the following medications: amiodarone, diltiazem, or verapamil; do NOT use Bytorin if on any of the following: clarithromycin, cyclosporine, erythromycin, > 1 quart / d grapefruit juice, itraconazole, ketoconazole, nefazodone, retonavir, or nelfinavir.

8: TLC – Therapeutic Lifestyle Changes:

- Saturated fat < 7% of total calories
- Polyunsaturated fat up to 10% of total calories
- Monounsaturated fat up to 20% of total calories
- Total fat 25 – 35% of total calories
- Carbohydrates 50 – 60% of total calories (predominantly from food rich in complex carbohydrates including grains, especially whole grains, fruits, and vegetables)
- Fiber 20 – 30 grams daily
- Protein approximately 15% of total calories
- Cholesterol <200 mg daily
- Physical activity 30 minutes most days of the week

Non-HDL cholesterol: Total cholesterol – HDL; goal for non-HDL cholesterol is set at 30 mg / dL higher than that for LDL cholesterol.

Clinical Identification of the Metabolic Syndrome (when ≥ 3 of the following are present:

- Abdominal obesity (waist circumference): men > 40 inches; women > 35 inches
- Triglycerides ≥ 150 mg / dL
- HDL: men < 40 mg / dL; women < 50 mg / dL
- Blood pressure $\geq 130 / \geq 85$ mm Hg
- Fasting glucose ≥ 110 mg / dL

**** Once LDL Goal Achieved, Consider Treatment of: High Triglycerides and / or Low HDL**

Triglycerides ≥ 200 mg / dL and / or HDL < 40 mg / dL
Check baseline: FBS, HbA1C, AST, ALT, uric acid.
Start Niaspan 500 mg HS. Titrate up to 2,000 mg daily.
Start Fish Oil 2,000 mg daily (check INR in one week if on coumadin)
Low Carbohydrate Diet ↓
Recheck lipids 4 months ↓
Triglycerides ≥ 200 mg / dL and / or HDL < 40 mg / dL OR Intolerant to Niaspan ↓
Start / Add Tricor 145 mg daily ↓
Recheck lipids 6 weeks