North York
Family Health Team

# MEDICAL DIRECTIVE

## LIPID LOWERING THERAPY – NON-DIABETES (NYFHT-005B)

### DEFINITION

Assessment of lipid control for patients managed with oral lipid lowering medications (Appendix 1) for the titration and renewal of these therapies. Lipid control is monitored by the lipid profile, including total cholesterol (TC), low-density lipoprotein (LDL), high-density lipoprotein (HDL), triglyceride (TG), and the ratio of TC/HDL. Treatment targets may vary depending on patient risk factors and concomitant medical conditions. most patients (Appendix 2).

### PHYSICIAN'S ORDERS

- Renew or titrate lipid lowering medications (Appendix 1)
- Order required laboratory monitoring (Appendix 3)

### PERSONS AUTHORIZED TO CARRY OUT THIS DIRECTIVE

- Clinical Pharmacist working in the NYFHT

### SITUATIONAL CIRCUMSTANCES REQUIRED

- Adult patients (>/= 18 years old)
- Current treatment with lipid lowering medication
- Referral to Clinical Pharmacist by physician
- Absence of specific medication contraindication (Appendix 4)
- Target LDL (or other lipid profile marker) indicated in chart (Appendix 2)

### RISKS AND PREDICTABLE OUTCOMES

**Risk**

- Medication related adverse effects (Appendix 5)

**Predictable Outcome**

- Improved lipid control and overall cardiac risk profile
- Improved patient satisfaction and disease awareness
- Improved patient access to care
- Improved medication adherence

### CONTRAINDICATIONS TO THE IMPLEMENTATION OF THE DIRECTIVE

- Evidence of myopathy (symptoms of muscle pain or CK > 5 x ULN)
- Evidence of liver injury (AST, ALT > 3 times ULN)
- Specific contraindication to lipid lowering medication (Appendix 4)

**SCHEDULE FOR REVIEW OF MEDICAL DIRECTIVE**

- Every 2 years (minimum) or at the discretion of the members of the NYFHT

**REFERENCES**

Genest J, McPherson R, Frohlich J et al. 2009 Canadian Cardiovascular Society/Canadian guidelines for the diagnosis and treatment of dyslipidemia and prevention of cardiovascular disease in the adult – 2009 recommendations. Can J Cardiol 2009;25(10):567-579.

**DEVELOPMENT OF MEDICAL DIRECTIVES**

Dr. K. Wintemute, Medical Director
Dr. J. Hunchuck, Pharmacist

**DATE**

June 14, 2010

## APPENDIX 1 – LIPID LOWERING MEDICATION

| Drug Name | Usual Starting Dose | Titration Schedule | Maximum Titration | Maximum Dose |
|---|---|---|---|---|
| **HMG-CoA Reductase Inhibitors (Statins)** | | | | |
| Atorvastatin (Lipitor®) | 10 mg daily | 10 mg daily x 6 weeks<br>20 mg daily x 6 weeks<br>40 mg daily x 6 weeks<br>80 mg daily | 10 – 40 mg per dose per 6 weeks | 80 mg daily |
| Rosuvastatin (Crestor®) | 5 – 10 mg daily | 5 mg daily x 6 weeks<br>10 mg daily x 6 weeks<br>20 mg daily x 6 weeks<br>40 mg daily | 5 – 20 mg per dose per 6 weeks | 40 mg daily |
| Simvastatin (Zocor®) | 5 – 20 mg daily | 5 mg daily x 6 weeks<br>10 mg daily x 6 weeks<br>20 mg daily x 6 weeks<br>40 mg daily x 6 weeks<br>80 mg daily | 5 – 40 mg per dose per 6 weeks | 80 mg daily |
| Pravastatin (Pravachol®) | 10 mg daily | 10 mg daily x 6 weeks<br>20 mg daily x 6 weeks<br>40 mg daily x 6 weeks<br>80 mg daily | 10 – 40 mg per dose per 6 weeks | 80 mg daily |
| Lovastatin (Mevacor®) | 10 mg daily | 10 mg daily x 6 weeks<br>20 mg daily x 6 weeks<br>40 mg daily x 6 weeks<br>80 mg daily | 10 – 40 mg per dose per 6 weeks | 80 mg daily |
| Fluvastatin (Lescol®) | 10 mg daily | 10 mg daily x 6 weeks<br>20 mg daily x 6 weeks<br>40 mg daily x 6 weeks<br>80 mg daily | 10 – 40 mg per dose per 6 weeks | 80 mg daily |
| **Fenofibric Acid Derivatives (Fibrates)** | | | | |
| Fenofibrate (Lipidil Micro®, Lipidil Supra®, Lipidil EZ®) | 200 mg daily<br>160 mg daily<br>145 mg daily | No titration<br>(Dose reduction in renal dysfunction) | NA | 200 mg daily<br>160 mg daily<br>145 mg daily |
| **Cholesterol Absorption Inhibitors** | | | | |
| Ezetimibe (Ezetrol®) | 10 mg daily | No titration | NA | 10 mg daily |

## APPENDIX 2 – TREATMENT TARGETS

| Cardiac Risk | Initiate Treatment | Treatment Targets |
|---|---|---|
| Low<br>(FRS < 10%) | LDL > 5.0 mmol/L | > 50% reduction in LDL |
| Moderate<br>(FRS 10-19%) | LDL > 3.5 mmol/L or<br>TC/HDL > 5.0 | LDL < 2.0 mmol/L or<br>> 50% reduction in LDL |
| High<br>(FRS > 20%) | All patients with CAD, PVD, atherosclerosis, most DM | LDL < 2.0 mmol/L |

## APPENDIX 3 – REGULAR LABORATORY MONITORING

| Drug Class | Laboratory Monitoring | Frequency |
|---|---|---|
| Statins | AST/ALT* | • 6 weeks after initiation or dosage change<br>• Every 6 – 12 months once at target |
| | LDL (lipid profile) | |
| Fibrates | AST/ALT* | |
| | Serum Creatinine/eGFR | |
| | LDL (lipid profile) | |
| Cholesterol Absorption Inhibitors | LDL (lipid profile) | |

*For increase in AST or ALT of 1 – 3 x ULN the dose should not be increased further and the results should be repeated within 2 weeks, additionally if these increased values were subsequent to a dose increase the medication should be held or returned to the previous dose pending repeat bloodwork

## APPENDIX 4 – MEDICATION CONTRAINDICATIONS

| Drug Class | Contraindication |
|---|---|
| Statins | • Allergy to statins<br>• AST or ALT > 3 x ULN<br>• Myalgias or CK > 5 x ULN |
| Fibrates | • Allergy to fibrates<br>• AST or ALT > 3 x ULN<br>• Myalgias or CK > 5 x ULN<br>• eGFR < 30 mL/min |
| Cholesterol Absorption Inhibitors | • Allergy to cholesterol absorption inhibitors |

## APPENDIX 5 – MEDICATION ADVERSE EFFECTS

| Drug Class | Adverse Effects |
|---|---|
| Statins | • Elevations in liver enzymes<br>• Myalgias |
| Fibrates | • Elevations in liver enzymes<br>• Myalgias<br>• Renal dysfunction |
| Cholesterol Absorption Inhibitors | • GI intolerance |

## LIPID LOWERING THERAPY – NON-DIABETES (NYFHT-005B)

| Name of Physician(s) | Signature | Date |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

## LIPID LOWERING THERAPY – NON-DIABETES (NYFHT-005B)

| Name of Physician(s) | Signature | Date |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |