

Appendix 4. PHARMACOTHERAPY

Recommended Doses of Statins (mg/day) required to reach targets

Starting level of LDL-C (mmol/L)	% change needed	Fluvastatin	Pravastatin	Simvastatin	Atorvastatin	Rosuvastatin
3	15	20	10	5	10	
3.5	25	40	20	10	10	1
4	35	80	40	20	10	2.5
4.5	45	Combination therapy needed	80	40	20	5
5	50			80	40	10
≥6	60	Combination therapy needed			80	20

NOTE: Doubling the statin dose usually gives a further 6-10% reduction of LDL-C

Adapted from: New Zealand Guidelines Group. Assessment and Management of Cardiovascular Risk.2003. AND New Zealand Cardiovascular Guidelines Handbook: Developed for Primary Care Practitioners. 2005. Available at: www.nzgg.org Accessed August 2007.

Statins - daily doses and cost comparisons

Drug*	Brand Name (formulation)	Tablet strength range and Approximate cost per dose\$		Examples of Interacting Substances
Atorvastatin	Lipitor® (tablets)	10–80 mg	\$1.70 to \$2.30	Grapefruit, macrolides (erythromycin, clarithromycin NOT azithromycin)
Fluvastatin	Lescol® (capsules)	20–80 mg	\$0.80 to \$2.30	Glyburide, warfarin
Lovastatin	Mevacor®, generic (tablets)	20–80 mg	\$1.20 to \$4.30	Grapefruit, macrolides (erythromycin, clarithromycin NOT azithromycin)
Pravastatin	Pravacol®, generic (tablets)	10–40 mg	\$1.00 to \$1.45	Least potential for drug interactions
Simvastatin	Zocor®, generic (tablets)	10–80 mg	\$1.30 to \$1.65	Grapefruit, macrolides (erythromycin, clarithromycin NOT azithromycin)
Rosuvastatin	Crestor® (tablets)	5–40 mg	\$0.75 to \$2.10	Cyclosporin, warfarin, gemfibrozil

*Suggested that lower dose in persons of South and East Asian origin be used; \$ = Cdn funds.

Adapted from: McPherson R, Frohlich J, Fodor G, Genest J. Canadian Cardiovascular Society position statement - Recommendations for the diagnosis and treatment of dyslipidemia and prevention of cardiovascular disease. *Can J Cardiol* 2006; 22(11):913-927 AND Therapeutics Letter. Evidence-based Drug Therapy Statins benefit for secondary prevention confirmed. What is the optimal dosing strategy? 2003. Issue 49. Available at www.ti.ubc.ca Accessed August 2007 AND Ontario Drug Benefit Formulary, available at www.health.gov.on.ca (See Health Care Providers, Drug Programs) Accessed August 2007 AND www.rxlist.com/cgi/generic/ www.hc-sc.gc.ca> Drugs & Health Products > Advisories, Warnings & Recalls

Other available lipid-lowering medications

Drug	Brand Name	Dose range Estimated cost range per dose\$	Main effects	Other considerations
Bile acid and/or cholesterol absorption inhibitors				
Cholestyramine	Questran®, Questran® Light/Generic	2 g - 24 g \$1.30 to \$19.90	Lower LDL-C	<ul style="list-style-type: none"> GI intolerance, worsens with increased doses May elevate Triglycerides
Colestipol	Colestid®	5 g - 30 g \$0.85		
Ezetimibe	Ezetrol	10 mg \$1.70		
Fibrates*				
Bezafibrate	Bezalip®	400 mg \$0.90 - \$1.60	<ul style="list-style-type: none"> Lower Triglycerides (TG) Variable effect on LDL-C Highly variable effect on HDL-C (more effective on raising HDL-C when baseline TG is high) 	<ul style="list-style-type: none"> May also increase creatinine and homocysteine levels Do not use gemfibrozil in combination with a statin due to increased risk of myopathy and rhabdomyolysis
Fenofibrate	Lipidil Micro®, Lipidil Supra®, Lipidil EZ® and generic	100 - 200 mg \$0.40 - \$1.10		
Gemfibrozil†	Lopid®	600 - 1200 mg \$0.55		
Niacins‡				
Nicotinic Acid	Generic crystalline niacin	1 g - 3 g	<ul style="list-style-type: none"> Raise HDL-C Lower Triglycerides Lower LDL-C 	<ul style="list-style-type: none"> Can cause dose-related deterioration of glycemic control Extended-release niacin has similar efficacy and better tolerability than immediate-release niacin Long-acting niacin should not be used due to increased hepatotoxicity and decreased efficacy
	Niaspan® extended-release niacin	0.5 g - 2 g \$0.02		

*In patients with renal insufficiency (creatinine clearance between 20mL and 100 mL.min) fibrates should be initiated at the lowest available dose and increased only after re-evaluation of renal function and lipid parameters; †Do not use gemfibrozil in combination with a statin; ‡In patients with diabetes or glucose intolerance, initiate therapy at 500mg/day to 1000mg/day and monitor glycemic control. \$ = Cdn funds

Adapted from: McPherson R, Frohlich J, Fodor G, Genest J. Canadian Cardiovascular Society position statement -- Recommendations for the diagnosis and treatment of dyslipidemia and prevention of cardiovascular disease. *Can J Cardiol* 2006; 22(11):913-927 AND Canadian Diabetes Association Clinical Practice Guidelines Expert Committee. Dyslipidemia in Adults with Diabetes. *Can J Diabetes* 2006;30(3):230-24 AND Ontario Drug Benefit Formulary, available at www.health.gov.on.ca (See Health Care Providers, Drug Programs) Accessed August 2007. © The Foundation for Medical Practice Education, www.fmpe.org August 2007