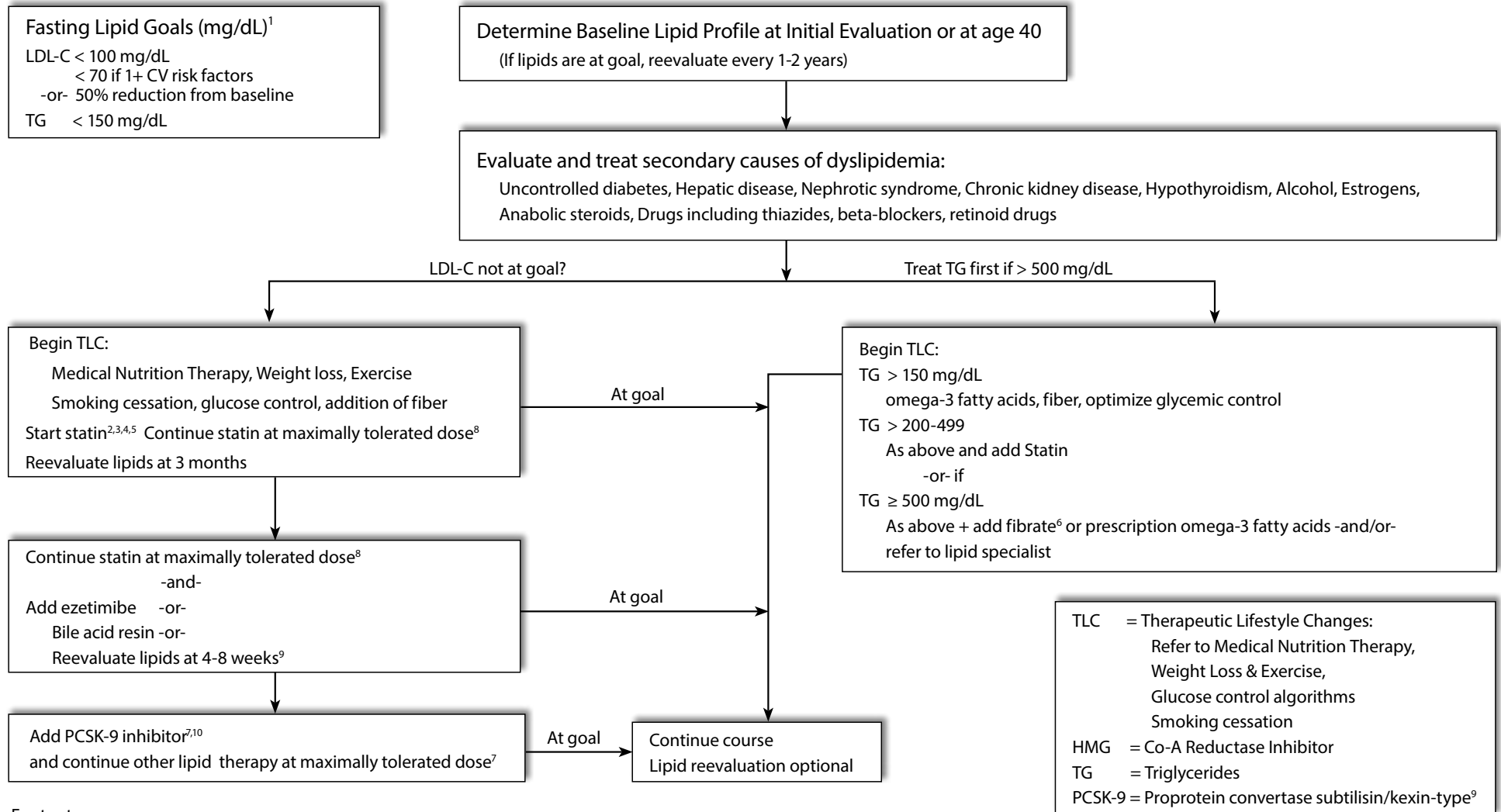


# Lipid Algorithm For Type 1 and Type 2 Diabetes Mellitus in Adults



## Footnotes:

<sup>1</sup> Add 30 mg/dL to each LDL-C value for Non-HDL-C goals<sup>2</sup> Exceptions: No statin therapy if < 40 yrs age and no cardiovascular disease and no risk factors  
 Moderate dose statin if age 40-75 and no CVD and no risk factors  
 Risk Factors: LDL ≥ 100 mg/dL, HTN, smoking, overweight/obesity<sup>3</sup> Consider moderate dose statin if < 40 with risk factors or > 75 with or without risk factors<sup>4</sup> Alternate day dosing of a statin may be as effective as daily use<sup>5</sup> Statin + niacin not recommended<sup>6</sup> Fenofibrate, but not gemfibrozil, may be added to atorvastatin<sup>7</sup> PCSK-9 inhibitors are indicated only for patients with atherosclerotic cardiovascular disease or familial hypercholesterolemia<sup>8</sup> Sanofi and Amgen package inserts<sup>9</sup> Sanofi package insert<sup>10</sup> PCSK-9 Alirocumab can be up-titrated

### HMG CO-A REDUCTASE INHIBITORS AND PCSK-9 INHIBITORS EQUIVALENCY IN PATIENTS WITH HYPERCHOLESTEROLEMIA

FLUVASTATIN \$	PRAVASTATIN \$	LOVASTATIN \$	PITAVASTATIN \$\$\$	SIMVASTATIN \$	ATORVASTATIN \$	ROSUVASTATIN \$\$	EZETIMIBE/ SIMVASTATIN \$\$	EZETIMIBE/ ATORVASTATIN \$\$	PCSK-9 ALIROCUMAB SQ 75 or 150mg q2 wk  EVOLOCUMAB SQ 140mg q2 or 420mg q4 wk  \$\$\$\$\$	APPROXIMATE % LDL ↓
20 mg	10 mg	10mg	—	—	—	—	—	—	—	15–20
40 mg	20 mg	20mg	—	5–10mg	—	—	—	—	—	21–29
80-XLmg	40-80mg	40mg	1-2mg	20mg	10mg	—	—	—	—	30–38
—	—	80mg	4mg	40mg	20mg	5-10mg	10/10mg	10/10mg	—	39–48
—	—	—	—	80mg	40mg	20mg	10/20mg	10/20mg	—	49–54
—	—	—	—	—	—	40mg	10/40mg	10/40mg	—	55-59
—	—	—	—	—	—	—	—	10/80mg	—	~60
—	—	—	—	—	—	—	—	—	75,150mg  140 or 420mg	60-70%

## REFERENCES

- Sabatine MS, Giugliano RP, Wiviott SD, et.al. Efficacy and Safety of Evolocumab in Reducing Lipids and Cardiovascular Events. *N Engl J Med* 2015;372:1500-1509
- Robinson JG, Farnier M, Krempf M, et al. Efficacy and safety of aliracumab in reducing lipids and cardiovascular events. *N Engl J Med* 2015;372:1489-1499
- Handelsman Y, Bloomgarden Z T, et. al. American Association OF Clinical Endocrinologists and American College of Endocrinology – Clinical practice guidelines for developing a diabetes mellitus comprehensive care plan – 2015. *AACE/ACE Diabetes Guidelines, Endocr Pract.* 2015;21(Suppl 1)
- ADA Standards of Medical Care in diabetes. *Diabetes Care* 2015;38(suppl1):S51-54
- Blom DJ, Hala T, Bolognese M, et.al - the DESCARTES Investigators. A 52-Week Placebo-Controlled Trial of Evolocumab in Hyperlipidemia; *N Engl J Med* 2014;370:1809-19.
- Stone N J, Rhobinson J G, et.al. 2013 ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults *Circulation*. 2014; 129:S2-S4. American Diabetes Association. Standards of medical care in diabetes--2014. *Diabetes Care.* 2014;37 Suppl 1: S14-S80. [EL 4; NE]
- Saku K, Zhang B, Noda K. Randomized Head-to-Head Comparison of Pitavastatin, Atorvastatin, and Rosuvastatin for Safety and Efficacy (Quantity and Quality of LDL). *Circ J.* 2011 Apr 15. [Epub ahead of print] PMID: 21498906
- Ridker PM, Danielson E, Fonseca FA, et al. Rosuvastatin to prevent vascular events in men and women with elevated C-reactive protein. *N Engl J Med.* 2008;359:2195- 2207.
- Ahmed S, Cannon CP, Murphy SA, Braunwald E. Acute coronary syndromes and diabetes: Is intensive lipid lowering beneficial? Results of the PROVE IT-TIMI 22 trial. *Eur Heart J.* 2006;27:2323-2329.
- Keech A, Simes RJ, Barter P, et.al. Effects of long-term fenofibrate therapy on cardiovascular events in 9795 people with type 2 diabetes mellitus (the FIELD study): randomised controlled trial. *Lancet.* 2005 Nov 26;366(9500):1849-61.
- Colhoun HM, Betteridge DJ, Durrington PN, et al. Primary prevention of cardiovascular disease with atorvastatin in type 2 diabetes in the Collaborative Atorvastatin Diabetes Study (CARDS): multicentre randomised placebo-controlled trial. *Lancet.* 2004;364:685-696
- Athyros VG, Papageorgiou AA, Symeonidis AN, et al. Early benefit from structured care with atorvastatin in patients with coronary heart disease and diabetes mellitus. *Angiology.* 2003;54:679-690.
- Maeda K, Noguchi Y, Fukui T. The effects of cessation from cigarette smoking on the lipid and lipoprotein profiles: a meta-analysis. *Prev Med.* 2003 Oct;37(4):283-90.