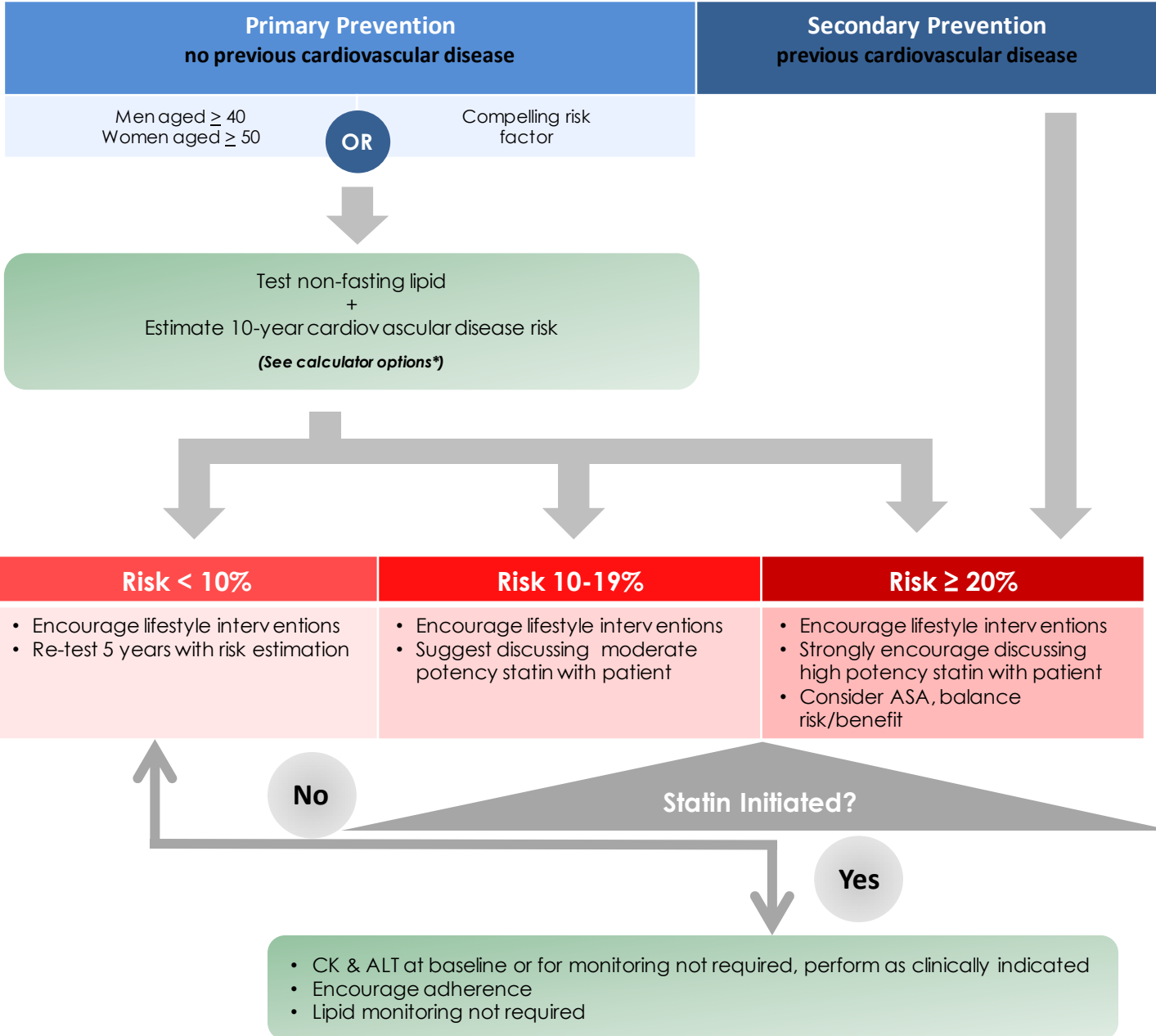


LIPID ALGORITHM

(Excludes those with familial hypercholesterolemia)



If intolerant to high or moderate potency statin, offer moderate or low potency statin, respectively. All steps require clinical judgement and are dependent on patient preference.

*Risk Calculator Options:
 The University of Edinburgh Cardiovascular Risk Calculator: <http://cvrisk.mvm.ed.ac.uk/calculator/calc.asp>
 Best Science Medicine: <http://chd.bestsclencemedicine.com/calc2html#basic>
 QRISK2 2014: <http://www.qrisk.org/> (for chronic kidney disease patients)



Clinicians may initiate lipid testing and risk estimation before age 40 if high clinical suspicion exists (i.e., compelling risk factors such as family history, hypertension, diabetes, or smoking). Regardless, testing before 35 is not recommended for the vast majority of patients and risk estimation tools do not include patients younger than 35. Primary prevention screening beyond age 75 is generally not recommended.

Risk can be calculated using a number of risk calculators but each clinician should use the same one consistently. The Framingham calculator has been validated in a Canadian population and is likely preferred. The following calculator has been created for this guideline:

<http://chd.bestsciencemedicine.com/calc2html#basic>

Lifestyle interventions include: smoking cessation, exercise, and the Mediterranean diet.

Exercise: >150 minutes in >4 sessions of moderate (brisk walking) to vigorous exercise/week.

STATIN DOSING RANGES AND INTENSITY:

Intensity	Statin Options
Low Intensity	Pravastatin 10-20mg; Lovastatin 10-20mg; Simvastatin 5-10mg; Atorvastatin 5mg; Rosuvastatin 2.5mg
Moderate Intensity	Pravastatin 40-80mg; Lovastatin 40-80mg; Simvastatin 20-40mg; Atorvastatin 10-20mg; Rosuvastatin 5-10mg
High Intensity	Atorvastatin 40-80mg; Rosuvastatin 20-40mg

Adapted from: Stone NJ, Robinson J, Lichtenstein AH, Bairey Merz CN, Blum CB, Eckel RH, et al. 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular risk in adults: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. Circulation. 2014 Jun 24;129(25 Suppl 2):S46-8.

BENEFITS OF THERAPIES:

Therapy	Estimating Benefit (relative risk reduction)	Example if baseline risk estimated at 20% over 10 years			
		Absolute Risk Reduction	Number Needed to Treat (NNT)	New Risk Estimate	
Smoking Cessation	Recalculate without smoking	9% [†]	12 [†]	11% [†]	
Mediterranean Diet	30%	6%	17	14%	
Exercise	30%	6%	17	14%	
Statin Intensity	Low	25%	5%	20	15%
	Moderate	30%	6%	17	14%
	High	35%	7%	15	13%
ASA	12%	2%	50	18%	

[†]Example used a 53 year old male smoker with total cholesterol 5, HDL 1.2 and systolic BP 128, estimated risk from Framingham (from <http://cvrisk.mvm.ed.ac.uk/calculator/calc.asp> and <http://bestsciencemedicine.com/chd/calc2.html>) to attain a 20% risk over 10 years.