

Identification of Secondary Prevention Patients

Clinical ASCVD

☐ Acute coronary syndromes	☐ Myocardial infarction	☐ Stroke	☐ Transient ischemic attack
☐ Angina (stable or unstable)	☐ Peripheral artery disease*	☐ Coronary or other arterial revascularization	

*Claudication, critical limb ischemia, or asymptomatic with hemodynamic/imaging evidence (ABI <0.90, significant stenosis on imaging)

Measure LDL-C

Universal Lipid Screening

Children 9-11 Years	Young Adults 17-18 Years	Adults 19+ Years
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Additional Lipid Screening Intervals

4–12 Weeks	After initiating LLT or dose change to assess response & adherence.
6–12 Months	On stable LLT to monitor response & adherence to therapy
Young Children 2+ Years	Children with a family history of (1) hypercholesterolemia or (2) early CVD should have lipids tested as early as 2 years of age.

Assess ASCVD Risk & Set LDL-C Goal

Individuals Living with ASCVD

Healthy behavior counseling
on healthy dietary approaches, attainment & maintenance of a healthy weight & physical activity

Initiate statin therapy

to achieve LDL-C goal & % reduction

Risk assessment

Is the individuals living with clinical ASCVD at “very high-risk” of future ASCVD events?

Major ASCVD Events

☐ ACS (<last 12 months)

☐ MI history (other than ACS above)

☐ Ischemic stroke history

☐ Symptomatic PAD

High-Risk Conditions

☐ Age ≥ 65 years	☐ LDL-C ≥ 100 mg/dL despite maximally tolerated statin + ezetimibe
☐ Smoker (current)	☐ Congestive heart failure history
☐ Diabetes	☐ Prior coronary bypass
☐ Hypertension	☐ Prior percutaneous intervention

2+ Major ASCVD Events or 1 Major ASCVD Event & 2+ High-Risk Conditions?

No

Yes

Clinical ASCVD
Not Very High-Risk

LDL-C Goal
<70 mg/dL*
Optional: 55 mg/dL

Clinical ASCVD
Very High-Risk

LDL-C Goal
<55 mg/dL

Add ezetimibe, PCSK9 inhibitor, and/or bempedoic acid
for further LDL-C lowering & % reduction

Continue LDL-C lowering therapies after meeting LDL-C goal
to maintain LDL-C goal and manage cardiovascular risk

*In select cases of high risk ASCVD patients, the LDL-C goal for treatment is recommended to be <55 mg/dL due to concomitant risk from certain disease states such as familial hypercholesterolemia & stage 3+ CKD.

Manage LDL-C

How Low Can You Go? LDL-C?

Healthy infants are generally born with LDL-C levels between 30–70 mg/dL. Evidence suggests LDL-C levels between 10–40 mg/dL are safe & that there is an incrementally lower risk of ASCVD events with LDL-C levels below 30 mg/dL.

10–40 mg/dL

Healthy Diet & Lifestyle Habits

Guidelines & best practices emphasize the importance of a heart healthy diet and lifestyle habits for the management of LDL-C. The typical reduction in LDL-C from healthy diet and lifestyle is usually limited to 5–15%, a combination of measures can achieve 22–37%.

5–15% ↓ (typical)
22–37% (achievable)

Statin Medicines

Medicine	% LDL-C Reduction*	MACE Benefit
Low-Intensity Statins*	<30%	Yes
Moderate-Intensity Statins** ☐ Atorvastatin 10–20 mg ☐ Rosuvastatin 5–10 mg	30–49%	Yes
High-Intensity Statins ☐ Atorvastatin 40–80 mg ☐ Rosuvastatin 20–40 mg	≥50%	Yes

*Real world evidence suggests that individual response to medication may vary
+Other low-intensity statins: fluvastatin 20–40 mg, pravastatin 10–20 mg, simvastatin 10 mg
++Other moderate intensity statins: fluvastatin XL 8- mg, fluvastatin 40 mg BID, lovastatin 40 mg–80 mg, pitavastatin 1–4 mg, pravastatin 40–80 mg, simvastatin 20–40 mg

Initiating Non-Statins Medicines

Non-statin medicines may be required for individuals who cannot reach their LDL-C goal with diet, lifestyle, and maximally tolerated statin therapy.

Non-Statins Medicines

to add to statin therapy for additional LDL-C lowering

Medicine	% LDL-C Reduction*	MACE Benefit in CVOT
Ezetimibe ☐ Ezetimibe	25%	Yes
Bempedoic acid ☐ Bempedoic acid ☐ Bempedoic acid + ezetimibe	17–18% ⁺ , 21–24% [–] 35–48%	Yes
PCSK9 inhibitor ☐ Alirocumab 75 mg Q2W [^] (mAb) ☐ Alirocumab 150 mg Q2W [^] (mAb) ☐ Enlicotide ☐ Evolocumab 140 mg Q2W [^] (mAB) ☐ Inclisiran (siRNA) ☐ Lerodalcibep	47% 58% 56% 60% 48–52% 48–52%	Yes Yes In Progress Yes In Progress No

*Real world evidence suggests that individual response to medication may vary [^]Every 2 weeks
+Bempedoic acid in combination with statin therapy
–Bempedoic acid in individuals with statin associated side effects

Key Points

- LDL-C must be measured regularly
- LDL-C is managed based on ASCVD risk
- Low LDL-C is generally safe
- Lipid lowering medicines are safe
- Lipid specialists are available for support and referral

Lower (LDL-C) for Longer is Better!

Statin Safety & Tolerability

Statins are safe & generally well-tolerated. Most patients can tolerate some of statin therapy (agent, dose, and/or regimen).

Partial Statin Intolerance

Partial statin intolerance is the ability to tolerate a dose of statin that is lower than that required to reach the LDL-C goal.

Complete Statin Intolerance

Complete statin intolerance is the inability to take any statin dose or regimen. It is estimated that <5% of people are completely statin intolerant.

Consider Referral to a Lipid Specialist

Familial Hypercholesterolemia

- ☐ Homozygous familial hypercholesterolemia
- ☐ Heterozygous familial hypercholesterolemia in individuals who do not achieve LDL-C goal despite max. tolerated statin + non-statin therapy

ASCVD or High-Risk of ASCVD

- ☐ Premature ASCVD (onset age <40 years)
- ☐ Individuals who do not achieve ≥50% LDL-C reduction & LDL-C goals despite maximally tolerated statin + non-statin therapy
- ☐ Individuals with statin-attributed side effects on >2 statins, including the lowest doses with alternate dosing regimens
- ☐ Lp(a) ≥200 nmol/L (or 75 mg/dL)
- ☐ <40 years old with diabetes & dyslipidemia

Complex Medication Regimes with ASCVD or at High-Risk for ASCVD

- ☐ Cancer
- ☐ HIV
- ☐ Prevention of transplant rejection

Individuals considering pregnant, are pregnant, or breastfeeding

- ☐ Familial hypercholesterolemia
- ☐ ASCVD or at high risk of ASCVD requiring lipid-lowering therapy

Patients who may be a candidate for treatment with:

- ☐ Evinacumab
- ☐ Lomitapide
- ☐ Lipoprotein apheresis

Patients with inherited hyperlipidemias who may require genetic testing for diagnosis

Lipid Specialists - Support & Referral

A Lipid Specialist is a clinician with advanced expertise in lipid management, certified by the American Board of Clinical Lipidology. Find a Lipid Specialist at learn.yourlipids.com/find-a-clinician/.



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ACS: acute coronary syndromes; ApoB: apolipoprotein B ; ASCVD: atherosclerotic cardiovascular disease; AU: Agatston Units; CAC: coronary artery calcium; CKD: chronic kidney disease; CVD: cardiovascular disease; CVOT: cardiovascular outcomes trial; HeFH: heterozygous familial hypercholesterolemia; HIV: human immunodeficiency virus; HoFH: homozygous familial hypercholesterolemia; hsCRP: high-sensitivity C-reactive protein; LDL-C: low-density lipoprotein cholesterol; LLT: lipid-lowering therapy; Lp(a): lipoprotein(a); mAb: monoclonal antibody; MACE: major adverse cardiovascular events; MI: myocardial infarction; PAD: peripheral artery disease; PCSK9: proprotein convertase subtilisin/kexin type 9; PREVENT: Predicting Risk of cardiovascular disease EVENTS; RNA: ribonucleic acid; siRNA: small interfering RNA; TG: triglycerides.