

CARDIAC PARAMETERS AND FORMULAS

Cardiac output (CO) = heart rate \times CVA volume [normal 4 to 8 L/min]

Cardiac index (CI) = CO/BSA [normal 2.8 to 4.2 L/min/m²]

MAP (mean arterial pressure) = [(SBP - DBP)/3] + DBP [normal 80 to 100 mmHg]

SVR (systemic vascular resistance) = (MAP - CVP) \times (80)/CO [normal 800 to 1200 dyne \times sec/cm⁵]

PVR (pulmonary vasc resistance) = (PAM - PCWP) \times (80)/CO [normal 45 to 120 dyne \times sec/cm⁵]

QTc = QT/square root of RR [normal 0.38 to 0.42]

Right atrial pressure (central venous pressure) [normal 0 to 8 mmHg]

Pulmonary artery systolic pressure (PASP) [normal 20 to 30 mmHg]

Pulmonary artery diastolic pressure (PADP) [normal 10 to 15 mmHg]

Pulmonary capillary wedge pressure (PCWP) [normal 8 to 12 mmHg (post-MI ~16 mmHg)]

LIPID CHANGE BY CLASS/AGENT¹

Drug class/agent	LDL-C	HDL-C	TG
Bile acid sequestrants ²	↓15–30%	↑3–5%	↑0–10%
Ezetimibe ³	↓18%	↑1%	↓8%
Fibrates ⁴	↓5–↑20%	↑10–20%	↓20–50%
Niacin ⁵	↓5–25%	↑15–35%	↓20–50%
Omega-3 fatty acids ⁶	↓6%–↑44%	↓5%–↑7%	↓19–44%
PCSK9 inhibitors ⁷	↓40–72%	↑0–10%	↓0–17%
Statins ⁸	↓18–55%	↑5–15%	↓7–30%

LDL-C = low density lipoprotein cholesterol. HDL-C = high density lipoprotein cholesterol. TG = triglycerides.

¹Adapted from prescribing information.

²Cholestyramine (4–16 g), colestipol (5–20 g), colesevelam (2.6–3.8 g).

³Ezetimibe (10 mg). When added to statin therapy, will ↓ LDL-C 25%, ↑ HDL-C 3%, ↓ TG 14% in addition to statin effects.

⁴Fenofibrate (145–200 mg), gemfibrozil (600 mg two times per day).

⁵Extended release niacin (Niaspan 1–2 g), immediate release (crystalline) niacin (1.5–3 g), sustained release niacin (Slo-Niacin 1–2 g).

⁶Epanova (4 g), Lovaza (4 g), Vascepa (4 g)

⁷Alirocumab (75, 150 mg/mL), evolocumab (140 mg/mL).

⁸Atorvastatin (10–80 mg), fluvastatin (20–80 mg), lovastatin (20–80 mg), pravastatin (20–80 mg), rosuvastatin (5–40 mg), simvastatin (20–40 mg).