Goal achievement and cardiovascular outcomes among adults with familial hypercholesterolemia: CASCADE FH® Registry

1900 patients with Familial Hypercholesterolemia
Median age 56 years
Mean age at FH diagnosis 50±18 years
61% female; Untreated LDL-C 249 mg/dL

High rate of cardiovascular disease at enrollment
1196 without diagnosed cardiovascular disease
704 with diagnosed cardiovascular disease

Majority of FH individuals did NOT meet guideline-based LDL cholesterol targets despite 2/3 of patients taking two or more lipid-lowering medications

Adults under specialty FH care were able to further lower LDL-C, but not far enough

Individuals who had prior cardiovascular disease were more likely to meet targets because they were on 3-6 lipid-lowering therapies including PCSK9 inhibitors or were receiving lipoprotein apheresis

Mean LDL-C Results Over Time

Untreated Enrollment Follow-up
0 50 100 150 200 250 300

52% did NOT achieve LDL-C <100 mg/dL
78% did NOT achieve LDL-C <70 mg/dL

FH is high-risk and should be considered a cardiovascular disease risk equivalent

Occurrence of cardiovascular events

Heart disease & stroke event rate per 100 patient-years
0 1 2 3 4 5
Overall No prior events Prior events

2.21 0.82 4.57

Estimated 10-year cardiovascular event rate is high

22% Overall
8% No prior events
46% Prior events

The FH Foundation established and maintains the CASCADE SCreening for Awareness and DEtection of Familial Hypercholesterolemia (CASCADE FH®) Registry. The Registry collects comprehensive longitudinal data to better understand outcomes of familial hypercholesterolemia diagnosis and treatment.

Duell, PB et al. Atherosclerosis, Volume 289, 85 - 93