Inclusion criteria

Home-dwelling patients with ischemic stroke (n=462): 45 to 80 years
Five stroke units in Norway
Follow-up after 3 and 18 months

Study design

Observational multicenter study with consecutively inclusion between 2015 and 2017

Research questions

1) How do current prescription patterns for lipid-lowering therapy (LLT) and achieved LDL-C reduction differ in subgroups of stroke patients?
2) What is the expected treatment benefit when theoretically up-titrationg LLT according to guidelines?

Methods

Logistic and linear regression analyses
The SMART-REACH model combined with relative effect estimates from clinical trials

Summary and conclusion

Potential for optimization of conventional LLT use exists. Awareness of groups at risk of undertreatment and objective estimates of benefit may yield personalized treatment decisions and reduce residual cholesterol risk

Use of lipid-lowering therapy after ischemic stroke and expected benefit from intensification of treatment

Ischemic stroke

Age
Cognition
Sex
Frailty
Prestroke LLT
Stroke subtype
LDL-C
Ischemic heart disease

92% prescribed LLT
Mean atorvastatin dose 41 mg (SD 21)

At 3 months

1.8 mmol/L

LDL-C (mmol/L)

45 %

LDL-C ≤ 1.8 mmol/ L

62% high-intensity statin
32% non-high-intensity statin
1% ezetimibe monotherapy
2% ezetimibe + statin
3% discontinued

Theoretical up-titration of statin + ezetimibe

1.8 mmol/L

LDL-C (mmol/L)

81 %

LDL-C ≤ 1.8 mmol/ L

Median 5 months (IQR 0 to 12) CVD-free life gained if statin and ezetimibe were up-titrated according to guideline-recommendations