

## Technical comment on: Rachamin et al. Statin treatment and LDL target value achievement in Swiss general practice – a retrospective observational study

Romanens Michel<sup>a</sup>, Schober Edward A.<sup>b</sup>, Adams Ansgar<sup>c</sup>, Balint Sandor<sup>d</sup>, Warmuth Walter<sup>e</sup>

<sup>a</sup> Vascular Risk Foundation, Olten, Switzerland

<sup>b</sup> Fairfond Stiftung für Fairness im Gesundheitswesen, Olten, Switzerland

<sup>c</sup> BAD Gesundheitsvorsorge und Sicherheitstechnik GmbH, Bonn, Germany

<sup>d</sup> Privatpraxis, Binningen, Switzerland

<sup>e</sup> Gesundheitsforen Leipzig, Germany

We congratulate the authors on drawing attention to the potential problem of insufficient identification of individuals at risk for cardiovascular disease, and the insufficient dosage of lipid modifying agents to achieve low-density lipoprotein (LDL) treatment goals in primary and secondary prevention among patients treated by general practitioners [1]. The findings of this study underscore the importance of statins in controlling the atherosclerosis pandemic. The design of the study does not allow the allocation of responsibility to or away from the general practitioners, as the time frame was very small compared with the average duration of treatment in general practices (and previous side effects or lack of consent in patients may have been established long before the observed time span).

As new guidelines have been issued in 2019 [2], it would be interesting to see what effect the following changes would have. Cardiovascular risk categories (table 4 in the guideline) can be based on clinical variables and based upon these, low and intermediate risk can be separated by the presence of “young patients (with type 1 diabetes mellitus <35 years; with type 2 diabetes <50 years) with diabetes duration <10 years, without other risk factors.” Since most patients in primary care are low risk according to SCORE risk categories (<1% in 10 years atherosclerotic cardiovascular disease [ASCVD] mortality), such differentiation may be important.

Also, by not calculating the numeric Systematic Coronary Risk Evaluation (SCORE) values as a basis of the risk categories, a signal to perform risk assessments only on the basis of clinical judgement is sent out. Calculation of a numerical risk SCORE is rapidly performed [3] and should be used where risk categorisation is not possible.

Further, there are no data on smokers and the paper does not discuss the impact of smoking on risk assessment and LDL goals, despite being a highly prevalent risk factor [4].

Finally, the financing of the study by the Swiss Medical Board (SMB) may have influenced the decision to avoid using SCORE risk categories: based upon the cost of non-generic statins, the SMB recommended refraining from statin use in individuals with a SCORE risk <10%, later corrected to <7.5%. The SMB calculated costs of CHF 210,000 per quality-adjusted life year in those at <1% risk of ASCVD mortality in 5 years and arbitrarily increased the treatment threshold to <7.5% instead of the mathematically correct <2% in 10 years [5]. Consequently, the SMB stated in its statin report [6]: “The prescription of statins in primary prevention is not indicated when the risk of a fatal cardiovascular event is less than 7.5% (according to the ESC score).” The authors should discuss the highly probable influence of the conclusions of the SMB, that prescribing statins below a SCORE risk of 7.5% violates the WZW criteria (WZW: effectiveness, appropriateness, cost-efficiency), and that doctors who prescribe statins in this situation could be subject to legal action [6]. Since the SMB statin report has not been withdrawn as of 19 June 2020, it is very likely that it continues to be a major cause of the underuse of statins in Switzerland. Also, the role of popular media in forming public opinion without adequate facts – also on the basis of this quite pervasive statin report – should be discussed by the authors further.

### Disclosure statement

No financial support and no conflict of interest relevant to this article was reported.

### References

- 1 Rachamin Y, Meier R, Rosemann T, Langenegger S, Markun S. Statin treatment and LDL target value achievement in Swiss general practice - a retrospective observational study. Swiss Med Wkly. 2020;150(2122):w20244. doi: <http://dx.doi.org/10.4414/smw.2020.20244>. PubMed.
- 2 Mach F, Baigent C, Catapano AL, Koskinas KC, Casula M, Badimon L, et al.; ESC Scientific Document Group. 2019 ESC/EAS Guidelines for the management of dyslipidaemias: lipid modification to reduce cardio-

### Correspondence:

Michel Romanens, MD,  
Vascular Risk Foundation,  
Ziegelfeldstr. 1, CH-4600  
Olten, [info\[at\]kardiolab.ch](mailto:info[at]kardiolab.ch)

- vascular risk. *Eur Heart J.* 2020;41(1):111–88. doi: <http://dx.doi.org/10.1093/eurheartj/ehz455>. PubMed.
- 3 Conroy RM, Pyörälä K, Fitzgerald AP, Sans S, Menotti A, De Backer G, et al.; SCORE project group. Estimation of ten-year risk of fatal cardiovascular disease in Europe: the SCORE project. *Eur Heart J.* 2003;24(11):987–1003. doi: [http://dx.doi.org/10.1016/S0195-668X\(03\)00114-3](http://dx.doi.org/10.1016/S0195-668X(03)00114-3). PubMed.
  - 4 Romanens M, Szucs T, Sudano I, Adams A. Agreement of PROCAM and SCORE to assess cardiovascular risk in two different low risk European populations. *Prev Med Rep.* 2019;13:113–7. doi: <http://dx.doi.org/10.1016/j.pmedr.2018.11.019>. PubMed.
  - 5 Romanens M, Sudano I, Szucs T, Adams A. Medical costs per QALY of statins based on Swiss Medical Board assumptions. *Cardiovasc Med.* 2017;17(4):96–100. doi: <http://dx.doi.org/10.4414/cvm.2017.0047>.
  - 6 Felder S, Jüni P, Meier CA, et al. SMB Statin Recommendation [Internet]. 2014. Available from: [https://www.swissmedicalboard.ch/fileadmin/public/news/2013/bericht\\_smb\\_statine\\_primaerpraevension\\_lang\\_2013.pdf](https://www.swissmedicalboard.ch/fileadmin/public/news/2013/bericht_smb_statine_primaerpraevension_lang_2013.pdf)