

1 **Title:**

2 **Editorial misrepresents the medical literature on statin adverse events**

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Editorial misrepresents the medical literature on statin adverse events

Dr. Ann Marie Navar expressed concerns regarding “fake medical news” as the reason patients are exhibiting hesitancy about utilizing statins¹. She related anti-vaccination sentiment to anti-statin concerns, by stating “fake medical news and fearmongering also plague the cardiovascular world through relentless attacks on statins.” Navar’s implication that “fake medical news” on statin adverse effects is found only at “wellness web sites” disregarded verified medical research. As an example, in 2018, the FDA reported adverse statin effects include “memory loss, diabetes and muscle pain” (<https://fda.news/2016-05-06-fda-mandates-new-safety-warnings-for-statin-drugs-due-to-risks-of-memory-loss-diabetes-and-muscle-pain.html/>). Adverse statin effects have been published in the peer-reviewed medical literature, with studies demonstrating an association of statin use with muscle pain, fatigue, autoimmune myopathy, cognitive symptoms, musculoskeletal disorders, type 2 diabetes, interstitial cystitis, cancer, central motor disorders such as ALS, and susceptibility to herpes zoster (see ² for review).

Navar also referred to statin adverse effects as a “nocebo effect”, which means that reported adverse effects are just imagined by patients. However, she disregarded well-established statin adverse effects which have been determined with physiological indicators, such the statin dose-dependent increase in new onset type 2 diabetes³ or biopsy-confirmed skeletal muscle injury⁴.

Navar also wrote that “antistatin campaigns suggest that pharmaceutical profits, rather than cardiovascular prevention, drive (statin) use ... despite statins being available as generics”. Navar implied that statins as generics yield so little revenue that pharmaceutical companies are motivated more by patient care outcomes than profits. However, neither Astra Zeneca nor Pfizer can be considered altruistic as Lipitor and Crestor each generated about \$2 billion in revenue in 2018. Moreover, as “Efforts to restore public trust and ... transparency in research” are her goals, we suggest she should report the amount of research support and consulting fees she has received from the 9 pharmaceutical companies that support her and her research programs.

In summary, Dr. Navar’s editorial was a disservice to the goal of a transparent discussion of benefits versus hazards of statin treatment because she misrepresented the legitimacy of the peer-reviewed medical literature on statin adverse events.

1. Navar AM. JAMA Cardiol. doi:10.1001/jamacardio.2019.1972
2. Diamond, D.M., et al., PLoS ONE. <https://doi.org/10.1371/journal.pone.0205138>
3. Cederberg, A. et al., Diabetologia, 2015 58(5):1109-17
4. Markus G., et al., CMAJ 2009;181(1-2):E11-E18

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