Twitter Thread by Marion Holman





1/10 When examining Statins, it should be noted that they have been shown to damage Mitochondria. Article – https://t.co/NIJbj3mULI. Mitochondrial damage can account for all of the relevant adverse effects of Statins – muscle weakness and damage, loss of memory/cognitive function

2/10 Diabetes, depletion of glutathione, etc. An interesting feature of mitochondrial injury is that a threshold of damage must be reached before a disease state results (as described in this article – https://t.co/emql16QIO9).

3/10 So, if your study period isn't long enough, Statins truly will have the same number of adverse effects as sugar pills because in a short period of time, the subjects have not crossed their tolerance threshold for mitochondrial damage and no disease state (or adverse events)

4/10 have manifested. It is only with prolonged exposure to mitochondrial damaging chemicals, like Statins, that adverse effects manifest.

If you don't design your study of mitochondrial damaging drugs to take into account how mitochondria react to assaults -

5/10 with an initial adaptive response followed by a toxic response (as the Peroxynitrite cycle is induced), your results don't actually say anything notable. If you design your study to take into account the tolerance threshold feature of mitochondria,

6/10 and the odd delayed response to toxic stimuli that they often display, you will likely find that Statins are significantly more dangerous than sugar pills.

I certainly understand that many research scientists don't have the time or funding to do long-term studies.

7/10 But don't worry – the long-term studies are being done – they're just being done on the population at large. (guinea pigs!) Hence the reason that it is so important to listen to patients who experience adverse effects of drugs over a long period of time.

8/10 Unfortunately, Mitochonrial damage is very difficult to fix & stopping treatment with the Statins does not necessarily stop the mitochondria from continuing to produce damaging ROS (like peroxynitrite) that continue to do damage long after the drug is metabolised.

9/10 ROS produced in damaged mitochondria are associated with every chronic disease there is. You, and all the other MDs out there may want to consider that chronic disease may be the result of Statins that are tossed about like candy because they have no adverse effects in

10/10 the short term, and the long-term effects are dismissed because patient reports are "anecdotal." ■