



Inflammatie en residueel cardiovasculair risico... een nieuwe bestemming

Dr. Nordin Hanssen



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Endocrinologist/vascular medicine spec.

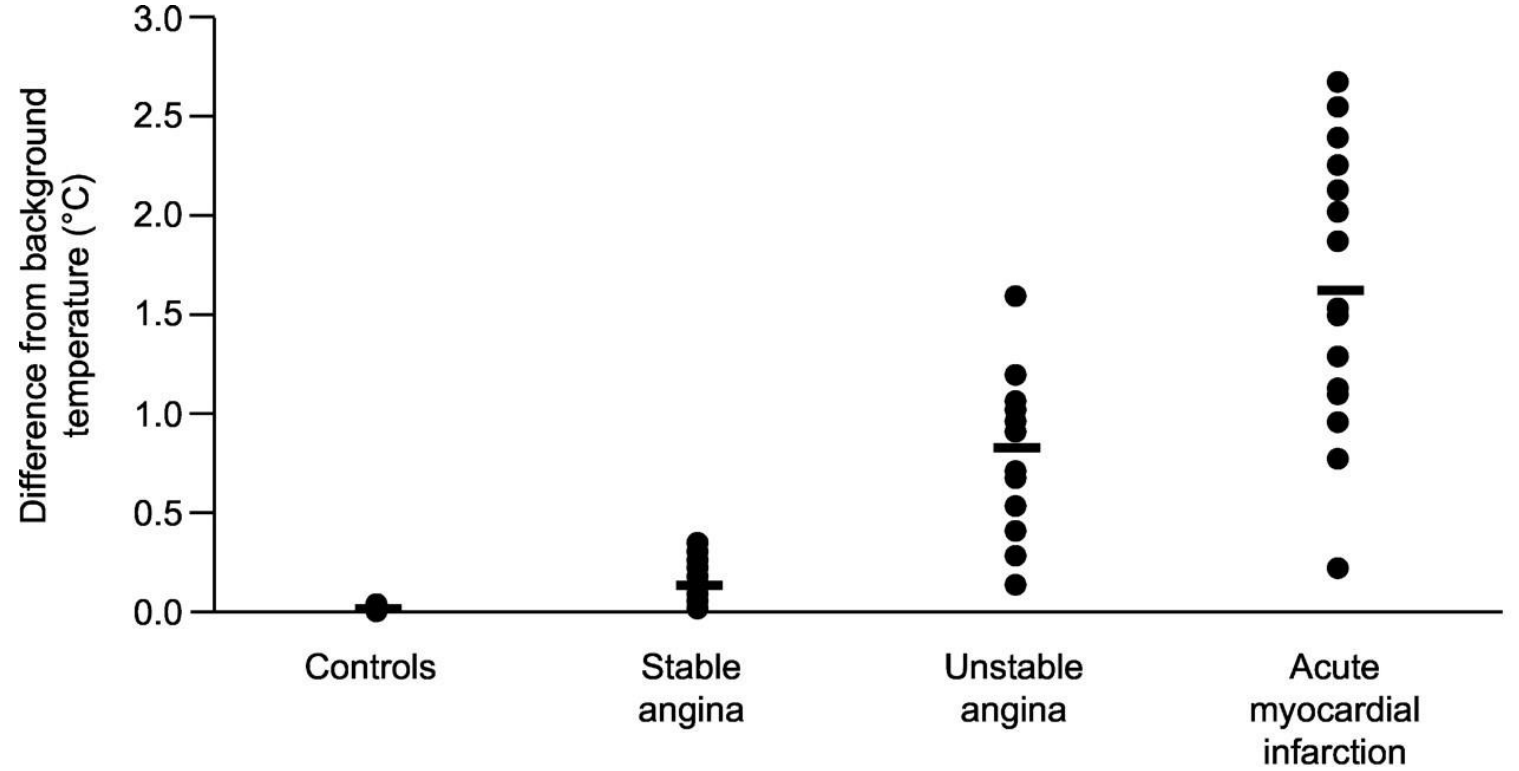
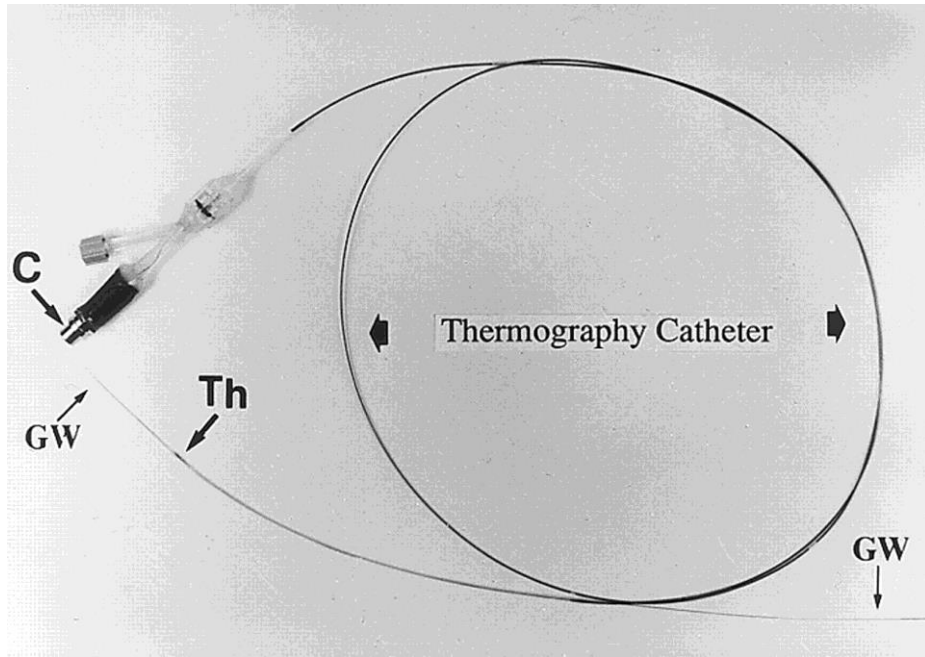
Amsterdam UMC, Diabeter Centrum Amsterdam



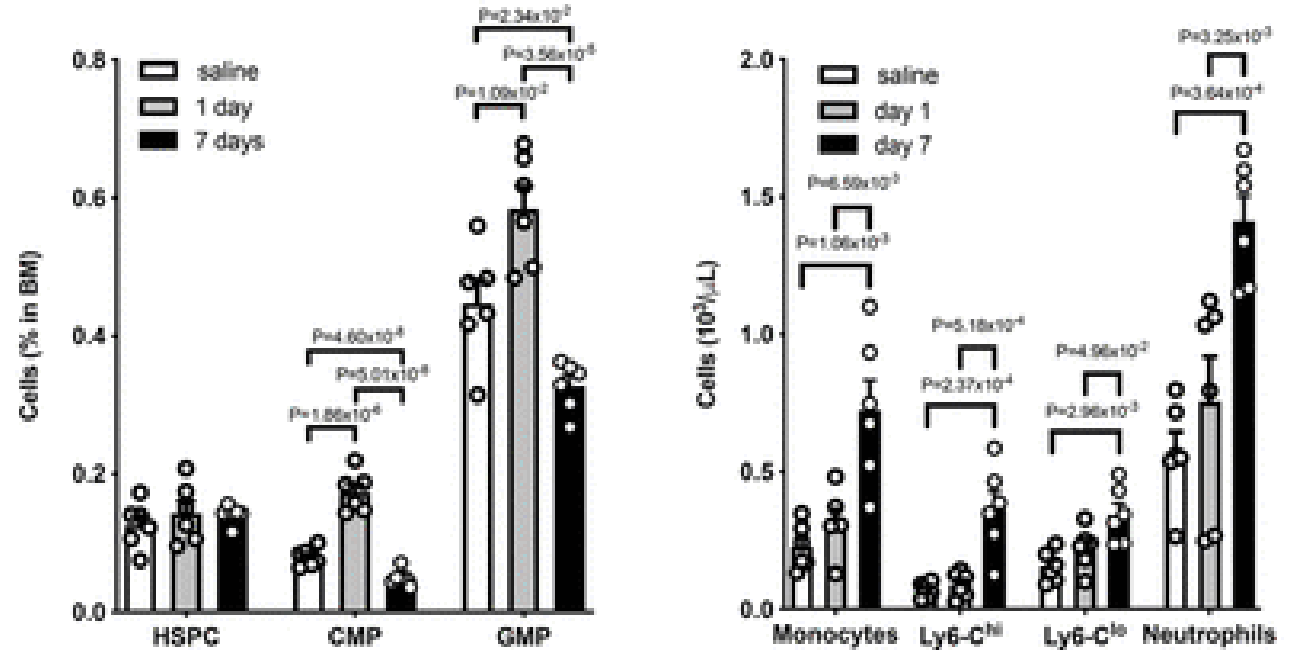
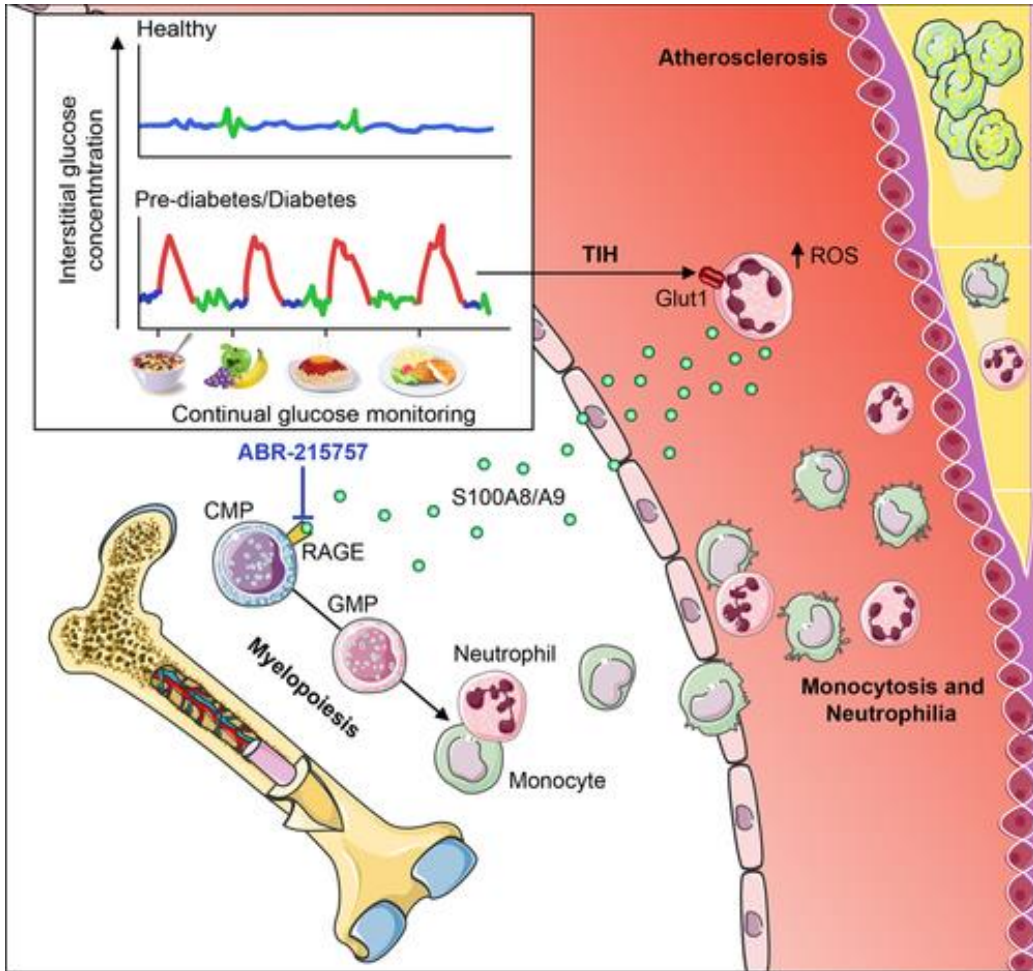
Disclosures

Sponsoring/Research funds:	Novo Nordisk
Honorarium:	Novo Nordisk, Bayer and Ingelheim Boehringer
Stock:	
Other...	

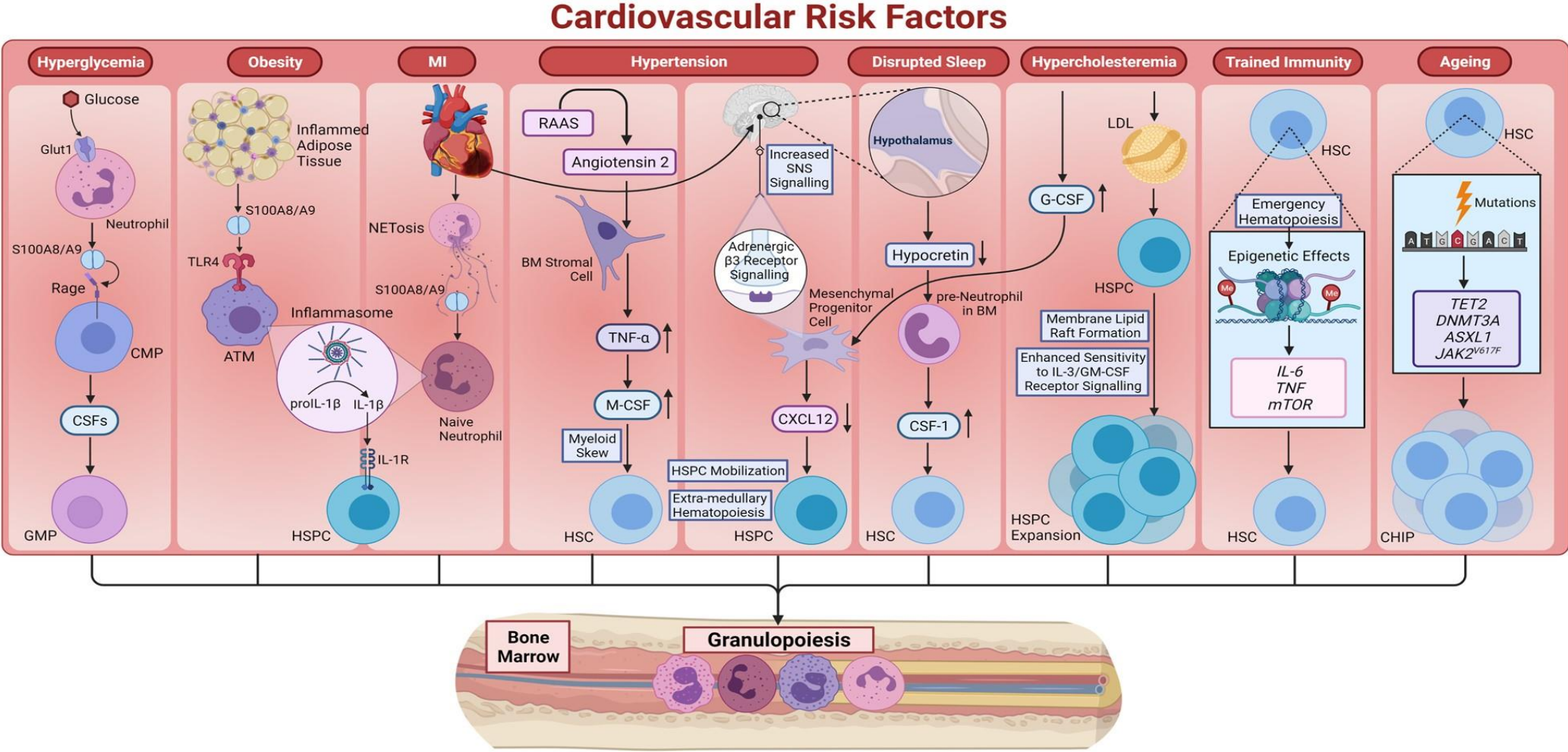
Textbook inflammation



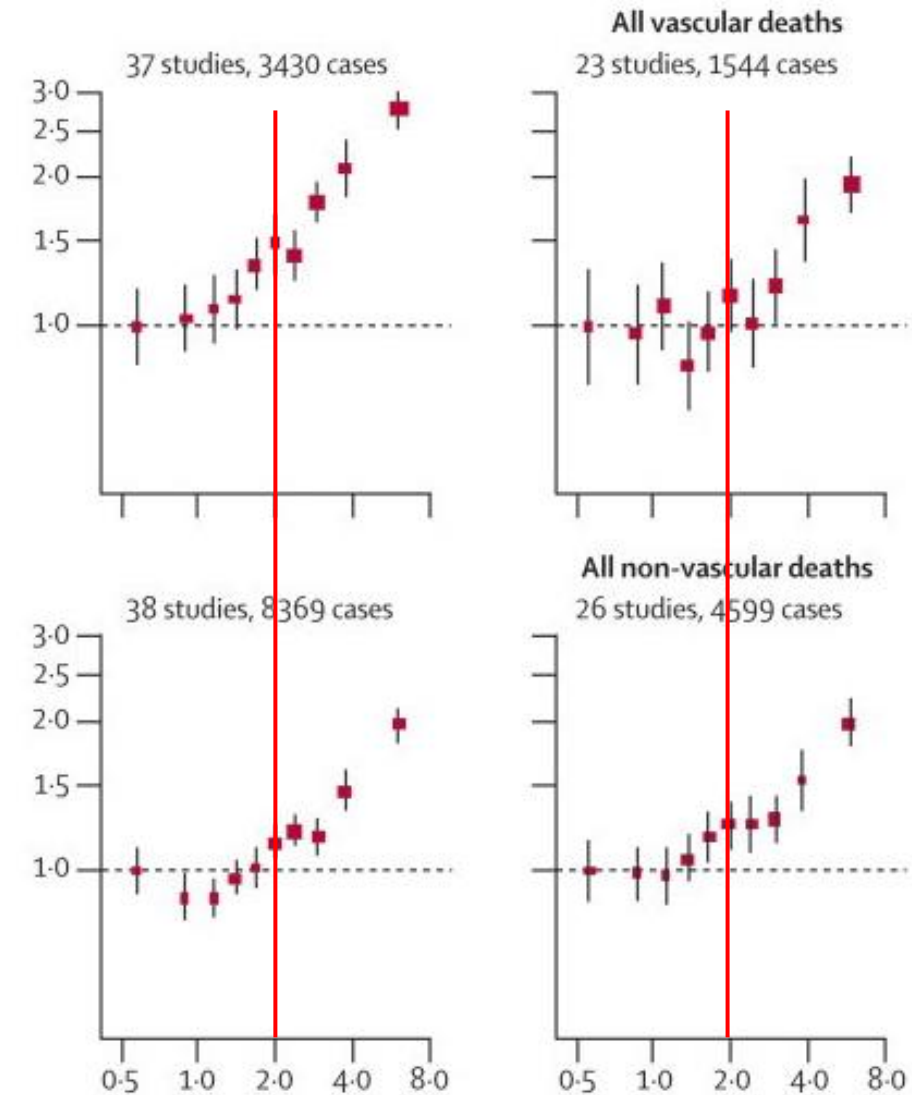
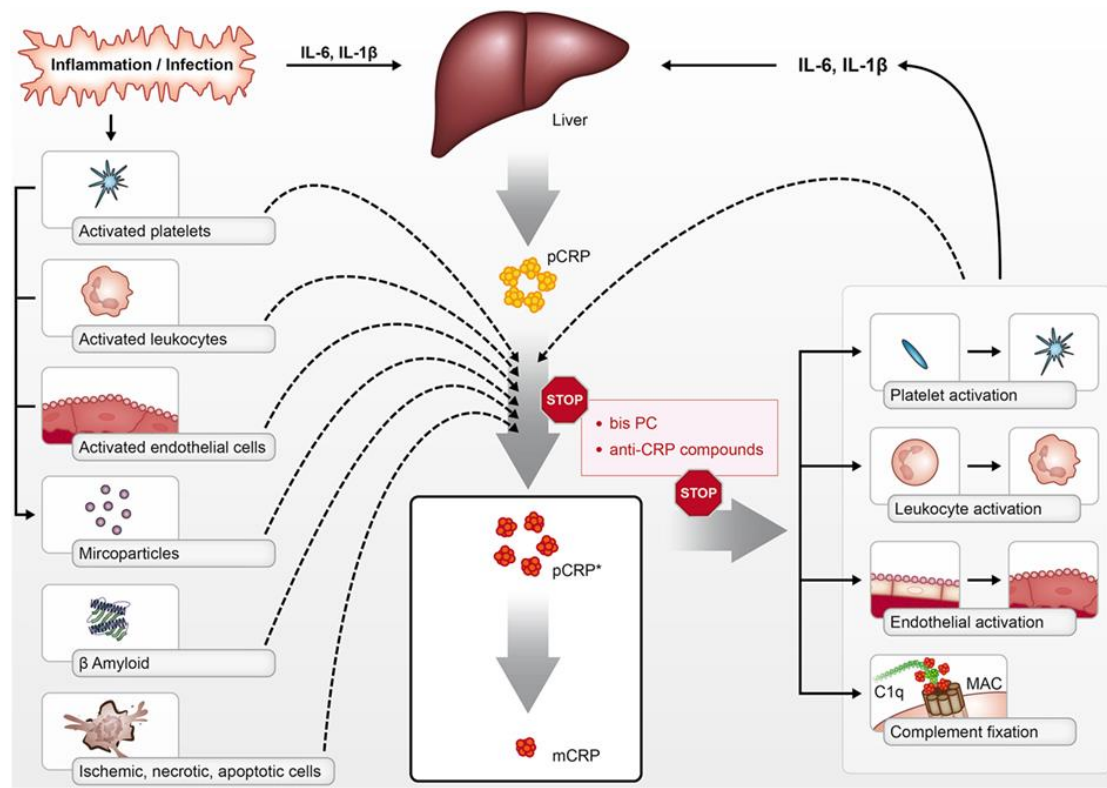
What we talk about when we talk about inflammation in diabetic cardiovascular disease



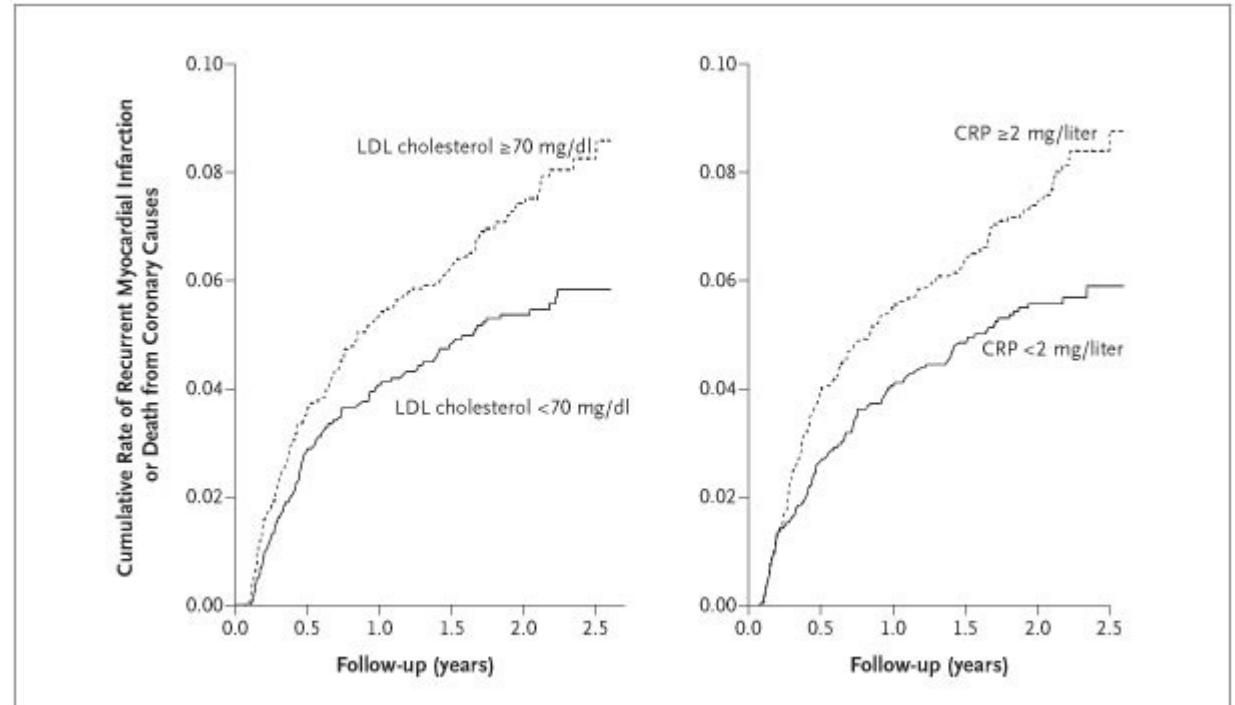
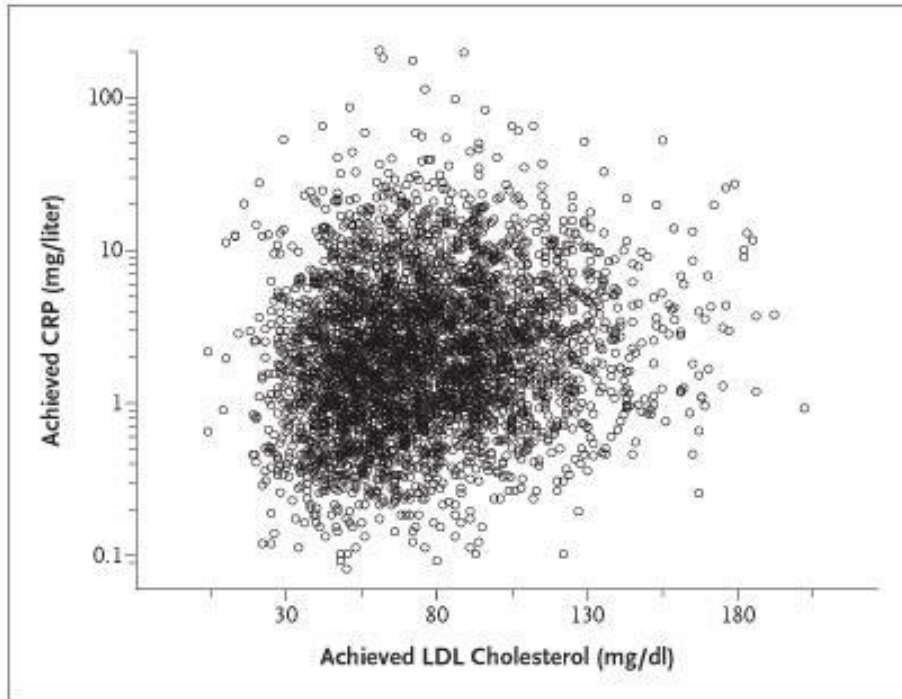
A multi-system challenge: how to tune this system?



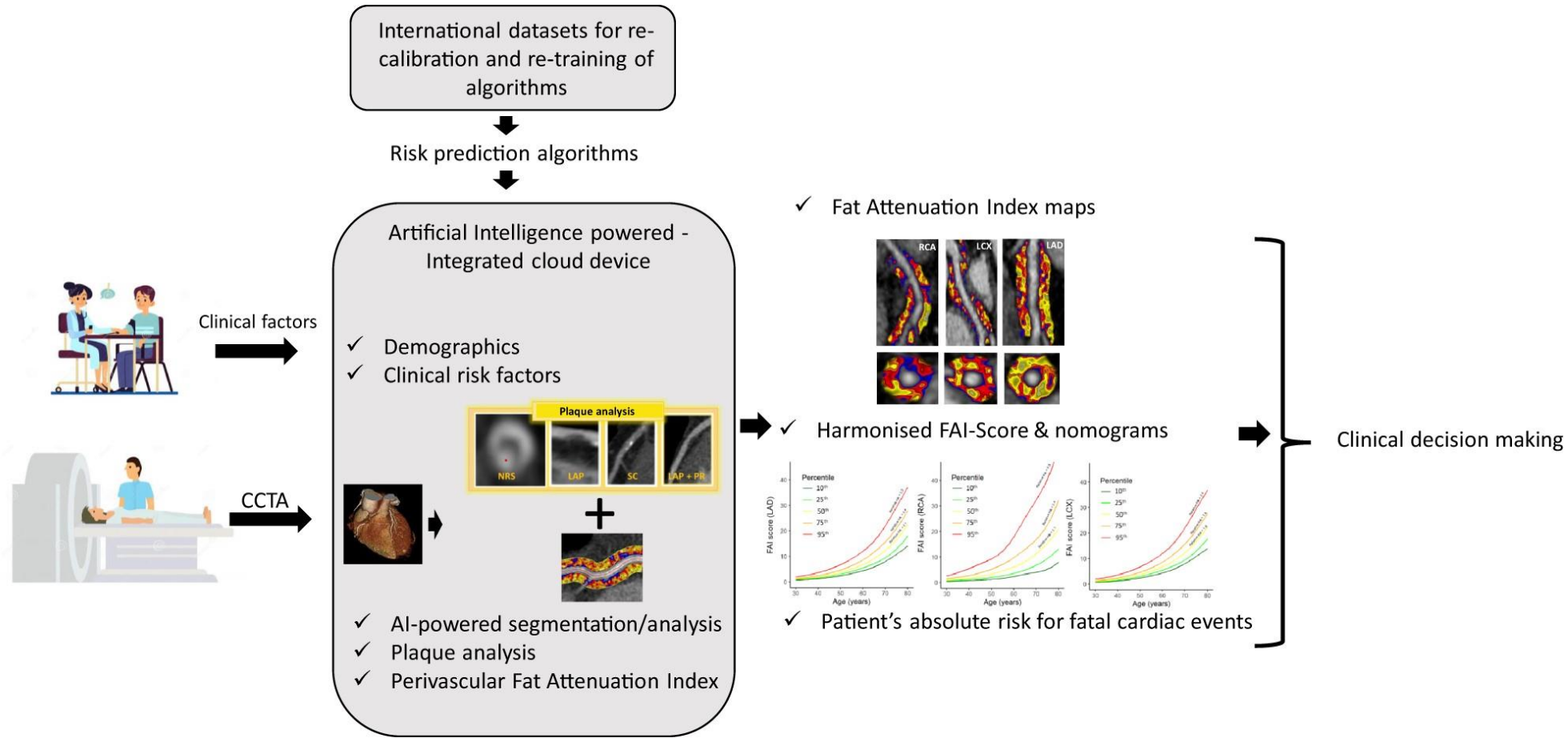
CRP, a reductionist view?



PROVE-IT TIMI-22 (pravastatine/atorvastatine)

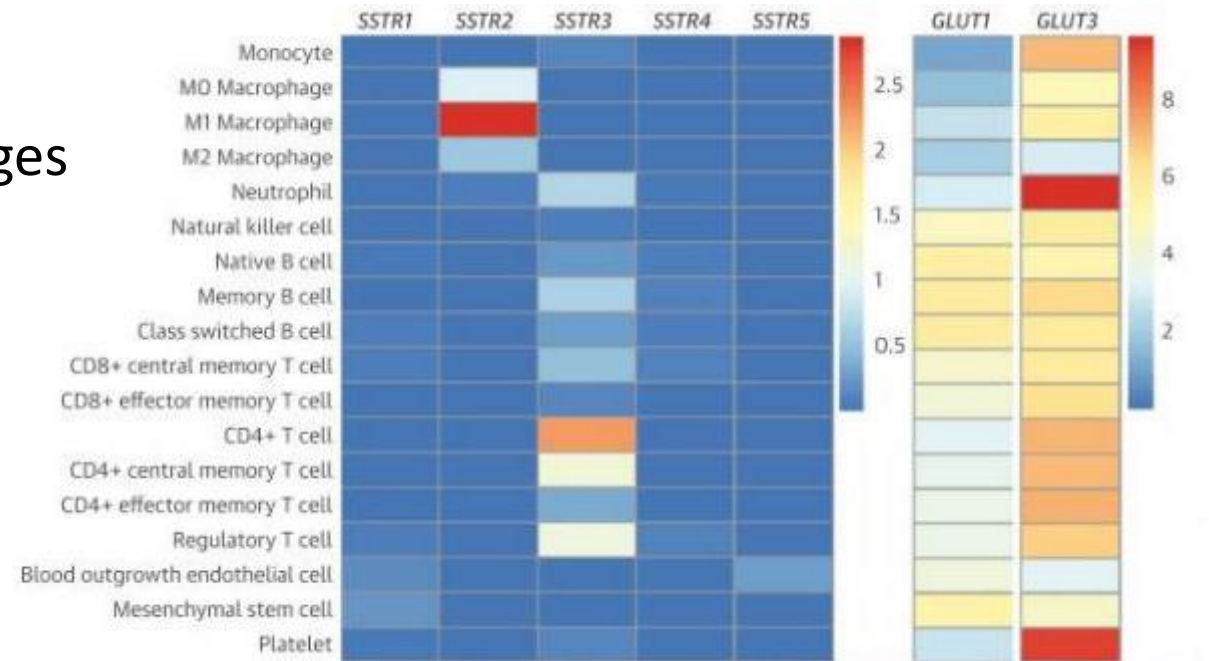


Blood or imaging?

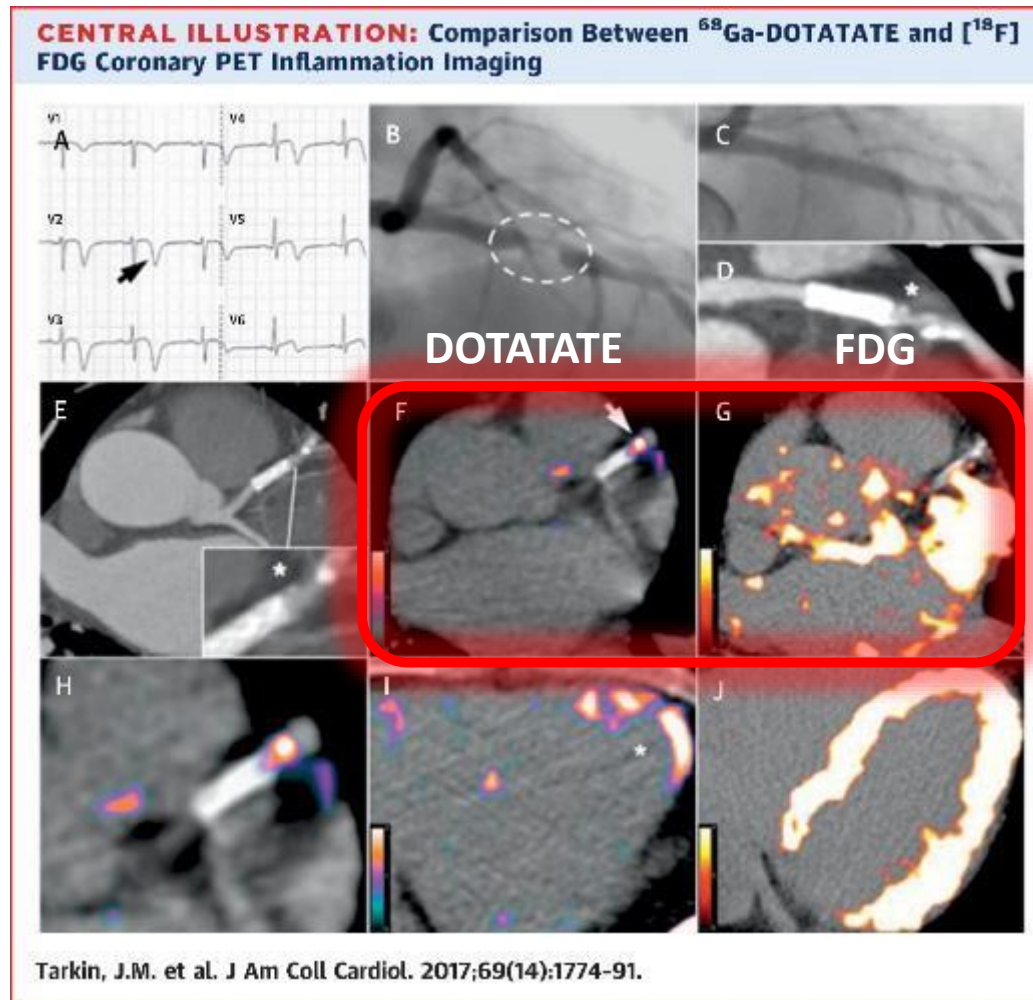


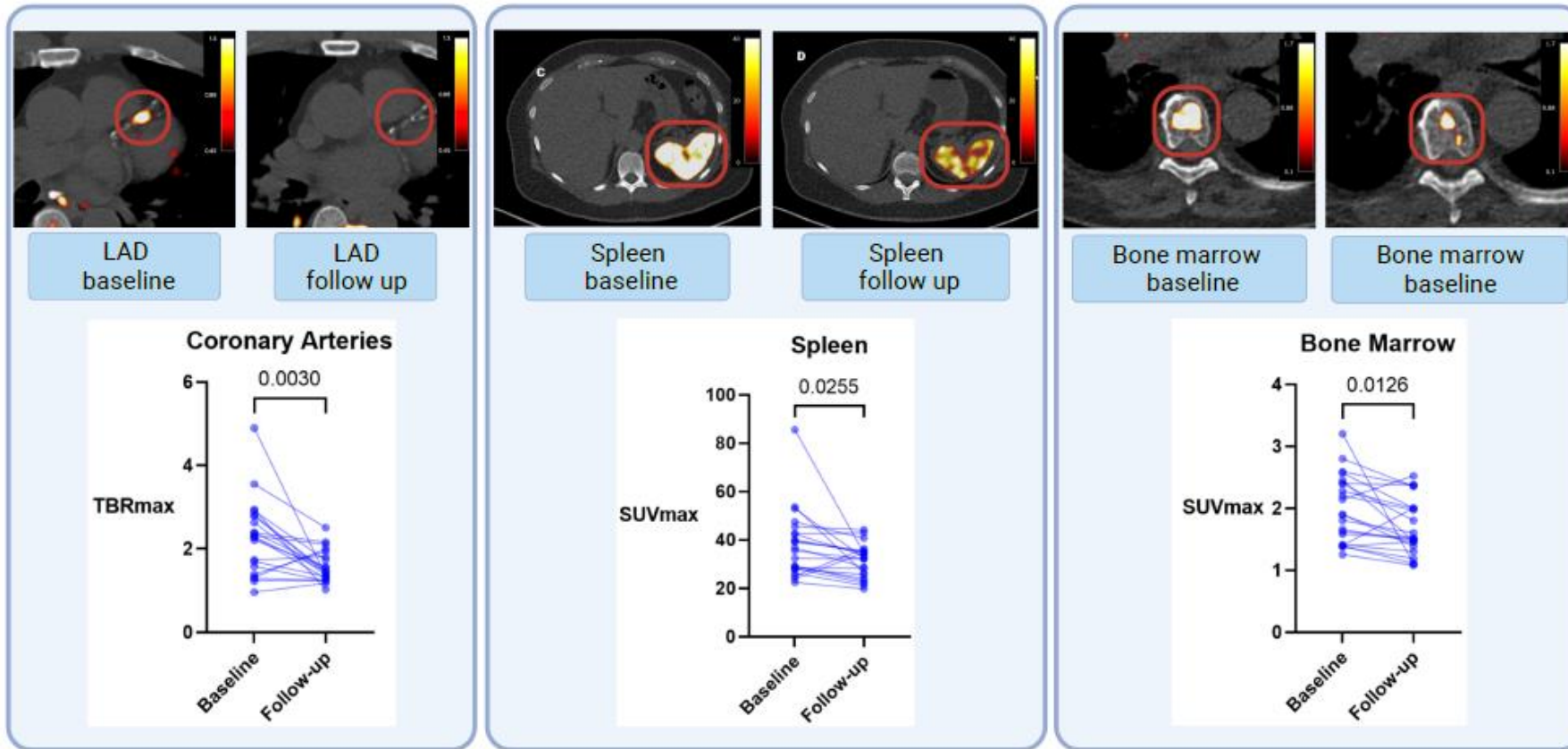
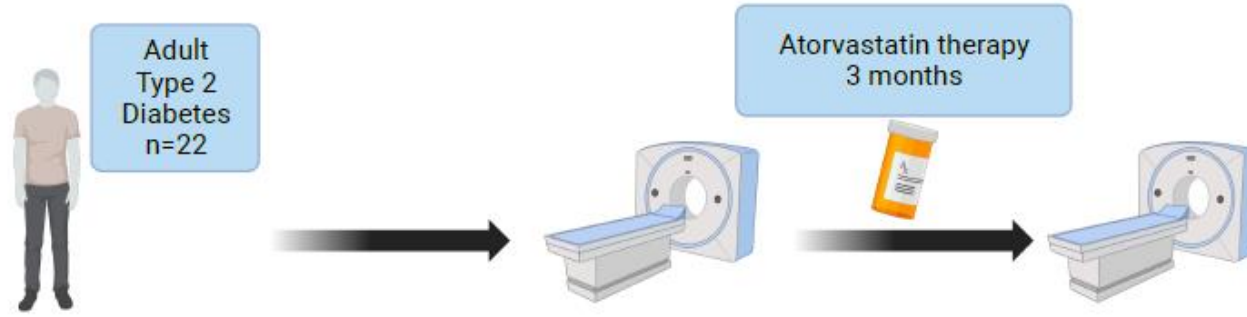
Imaging inflammation

- ^{68}Ga -DOTATATE PET/CT
- SSTR2 expression specific for M1 macrophages

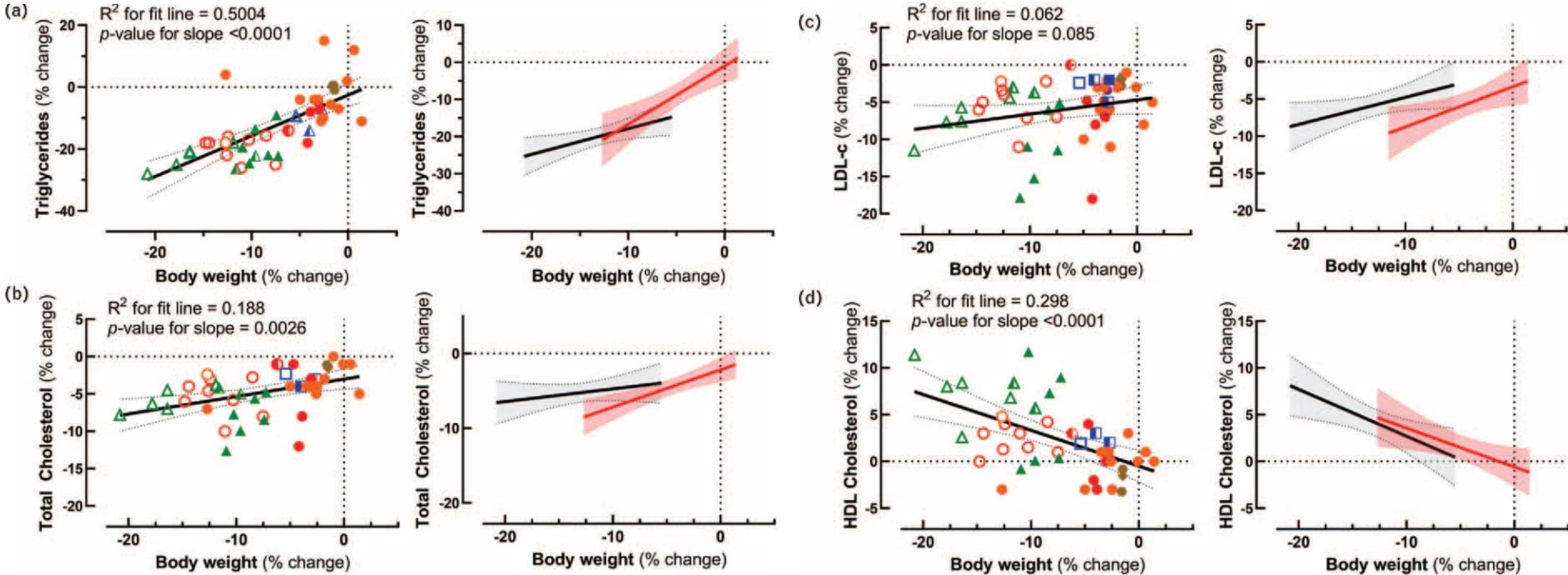


^{68}Ga -DOTATATE PET/CT





Reducing risk factors in T2D with GLP1RA



- Liraglutide (Obesity)
- Liraglutide (Obesity + T2DM)
- Liraglutide (T2DM)
- △ Tirzepatide (Obesity)
- △ Tirzepatide (Obesity + T2DM)
- △ Tirzepatide (T2DM)
- Semaglutide (Obesity)
- Semaglutide (Obesity + T2DM)
- Semaglutide (T2DM)
- Oral semaglutide (Obesity)
- Oral semaglutide (T2DM)
- ◆ Dulaglutide (T2DM)
- Exenatide QW (T2DM)

Semaglutide
Up to 2.0mg weekly

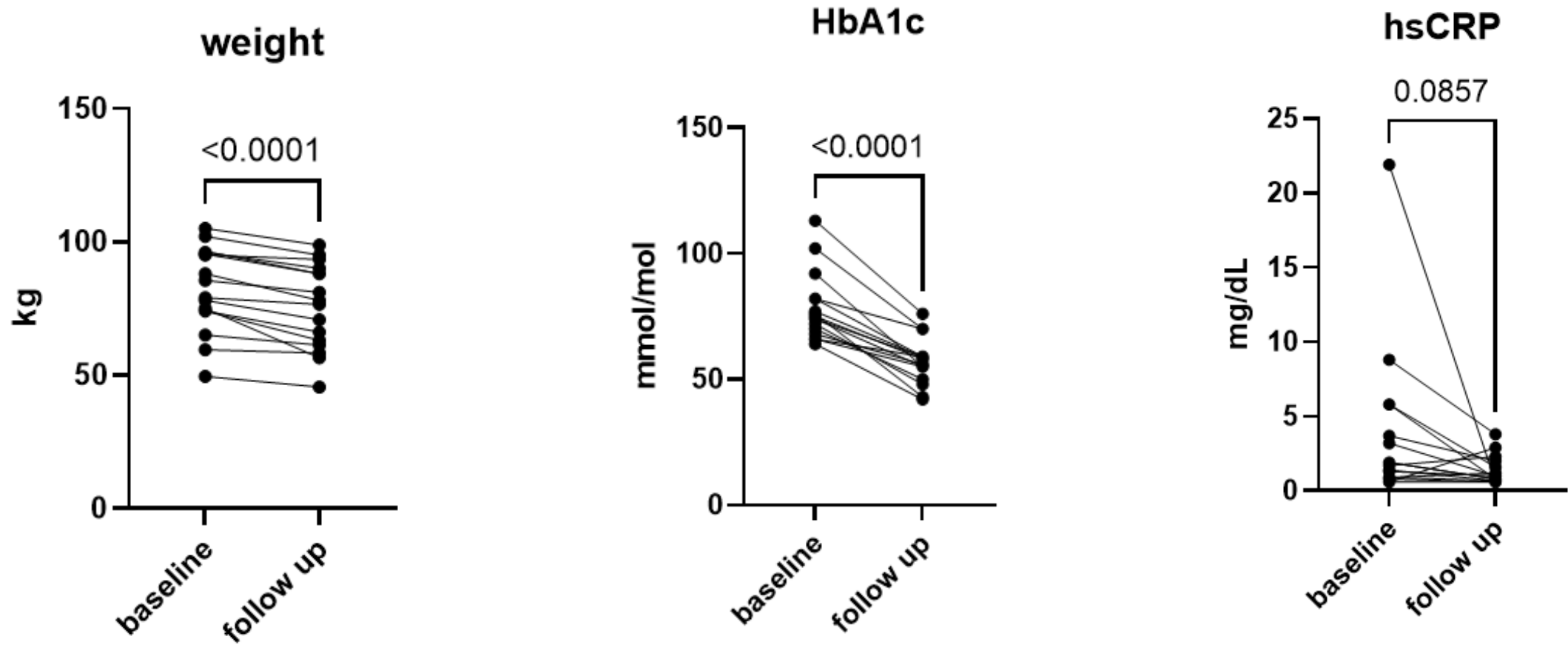


Visit 1
Day 0

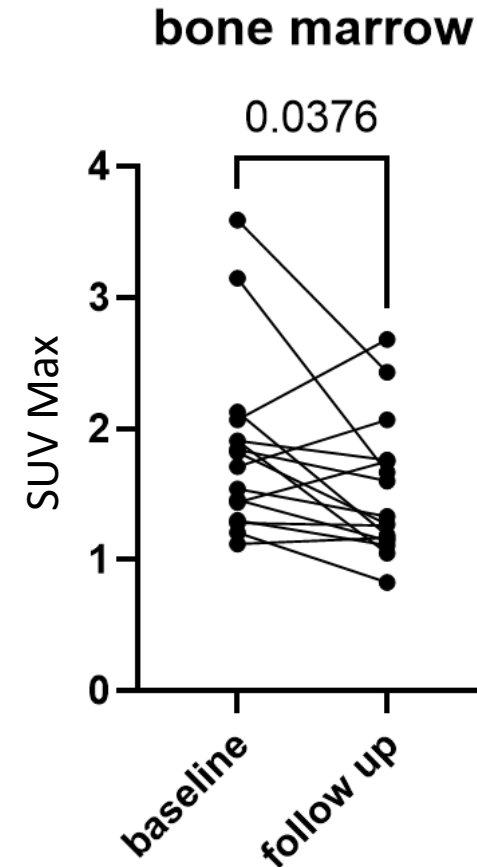
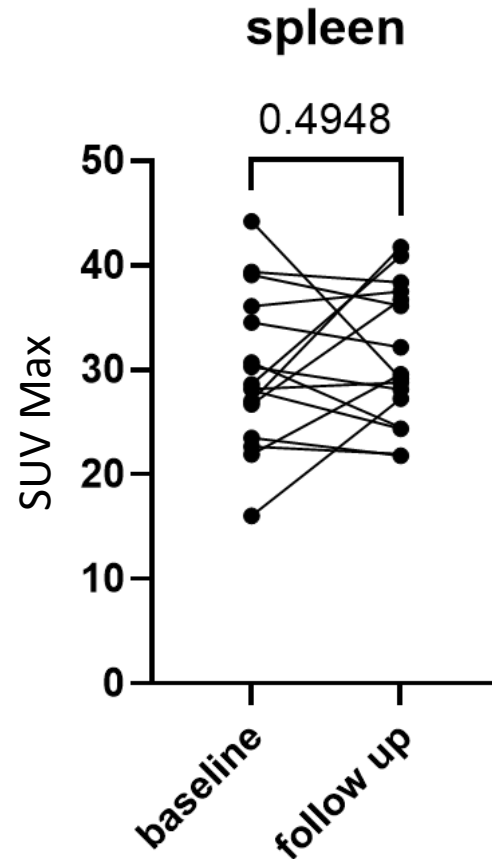
Visit 2
Week 24



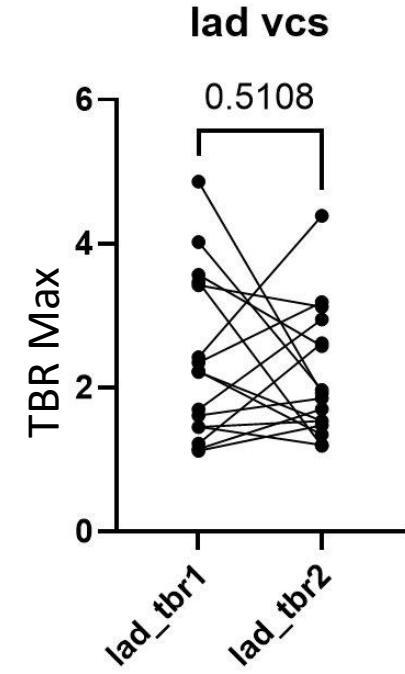
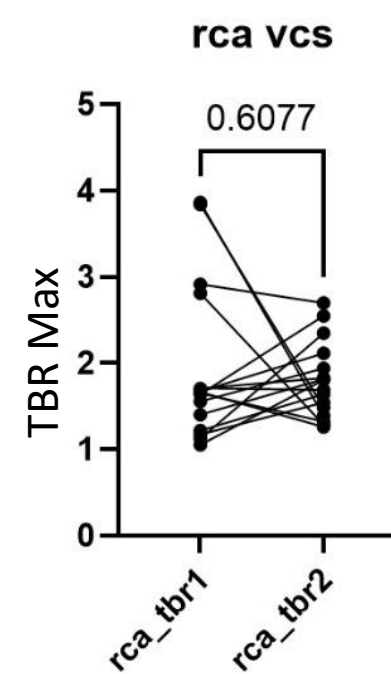
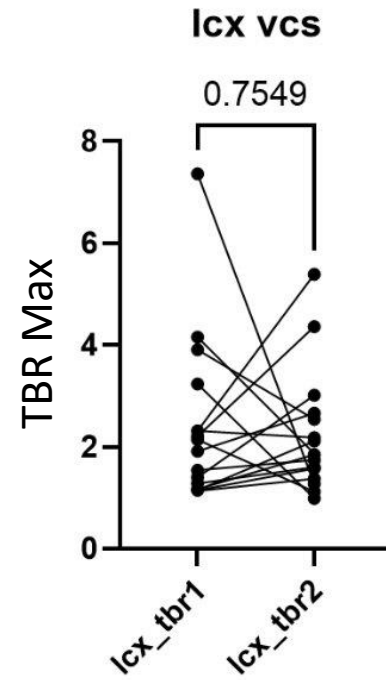
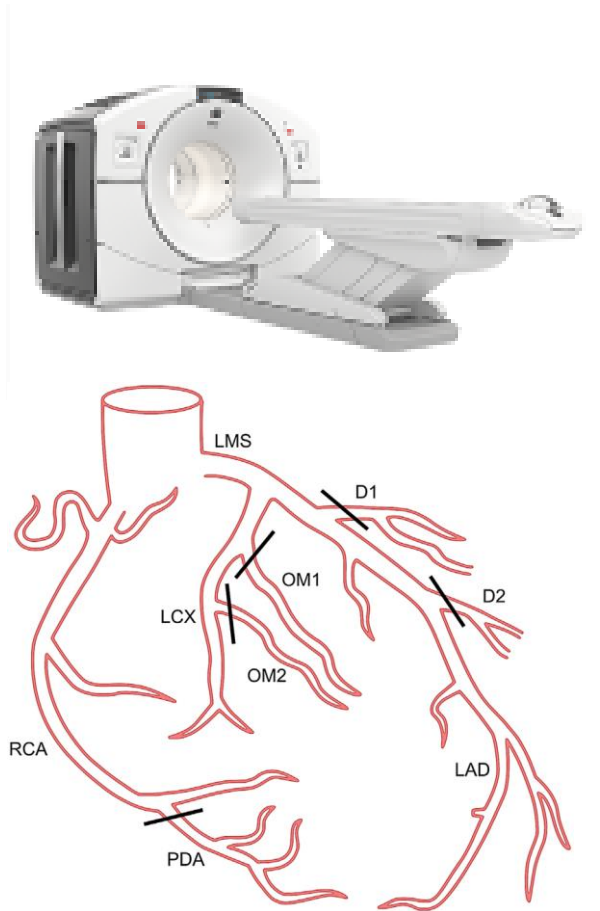
Reductions in weight, HbA1c and CRP by 2mg semaglutide



Reduction in DOTATATE uptake in bone marrow by 2mg semaglutide

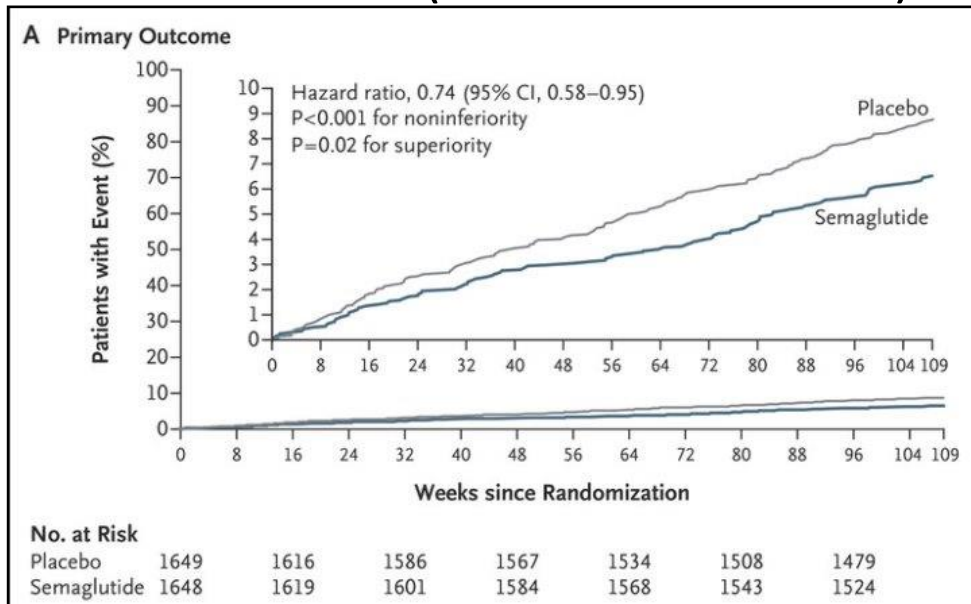


No reduction in coronary uptake of DOTATATE after 2mg semaglutide treatment

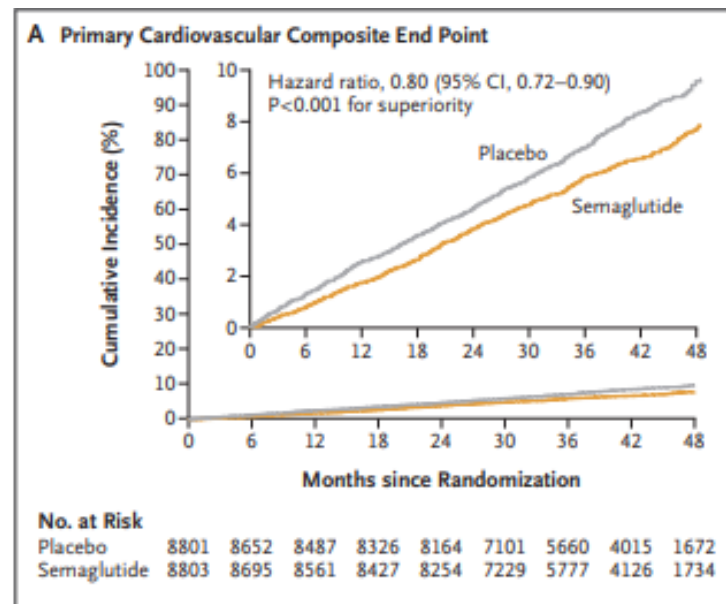


Too soon? – Sequence of events?

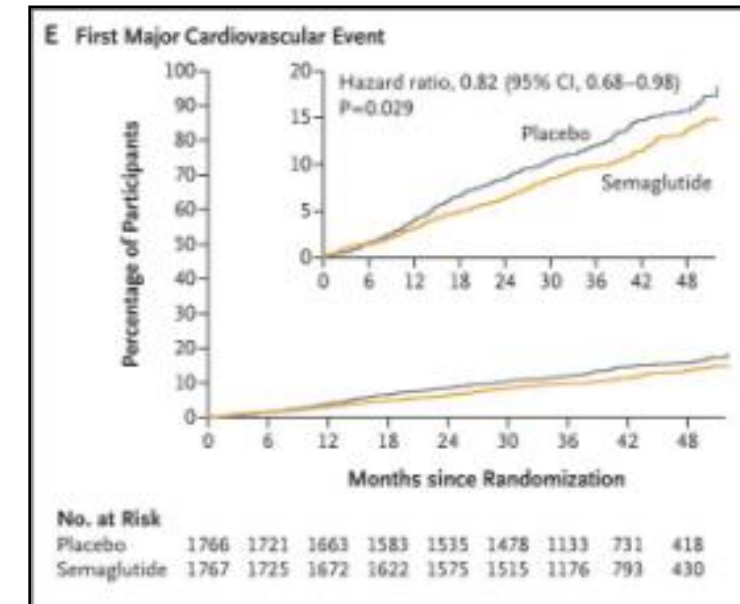
SUSTAIN6 (Marso NEJM 2016)



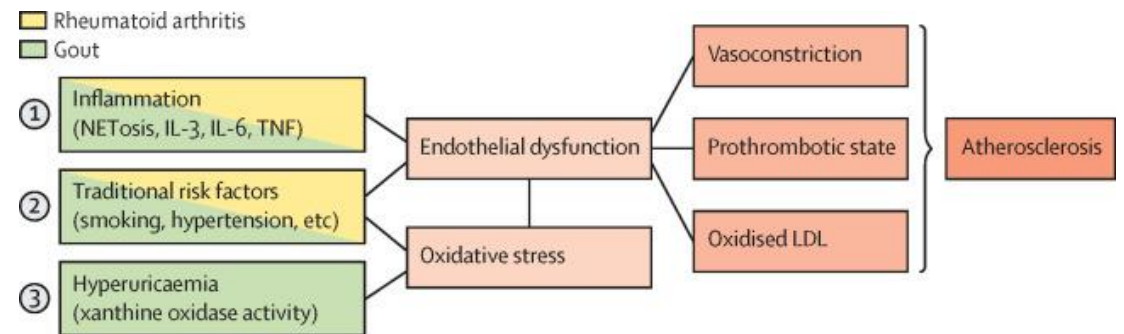
SELECT (Lincoff NEJM 2023)



FLOW (Perkovic NEJM 2024)

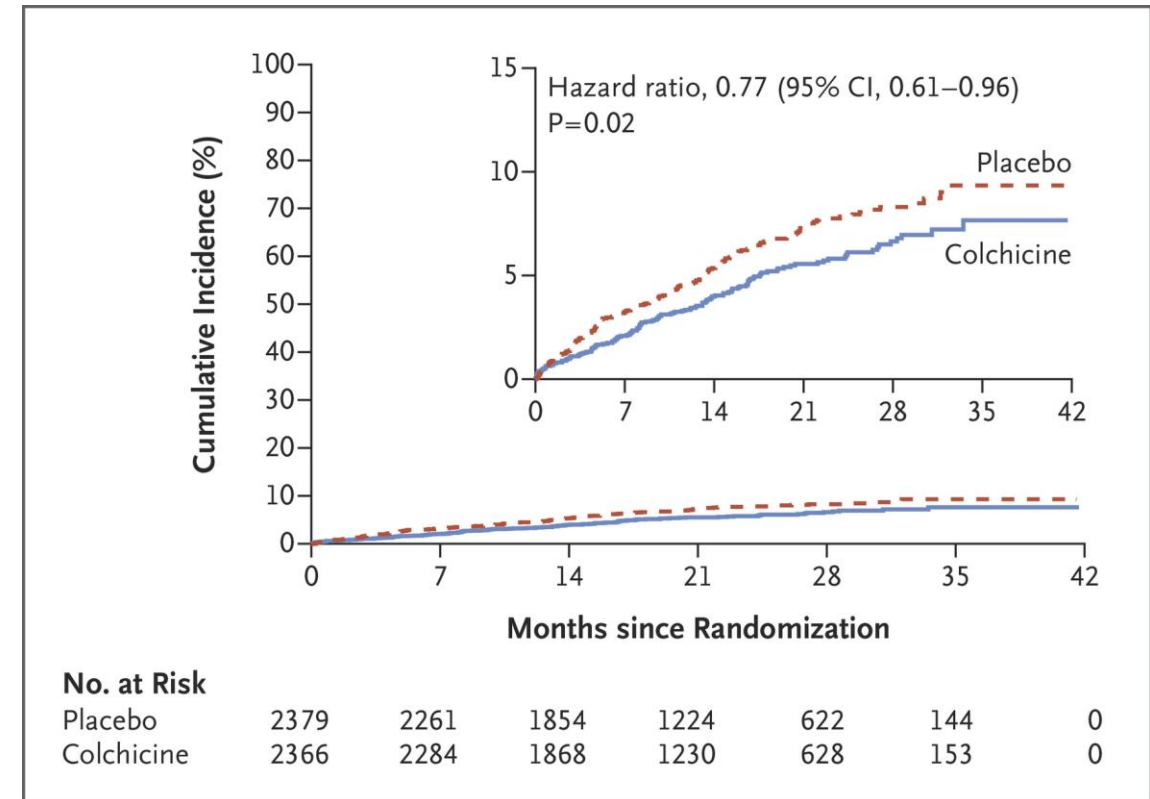


Inflammatory diseases, cardiovascular risk

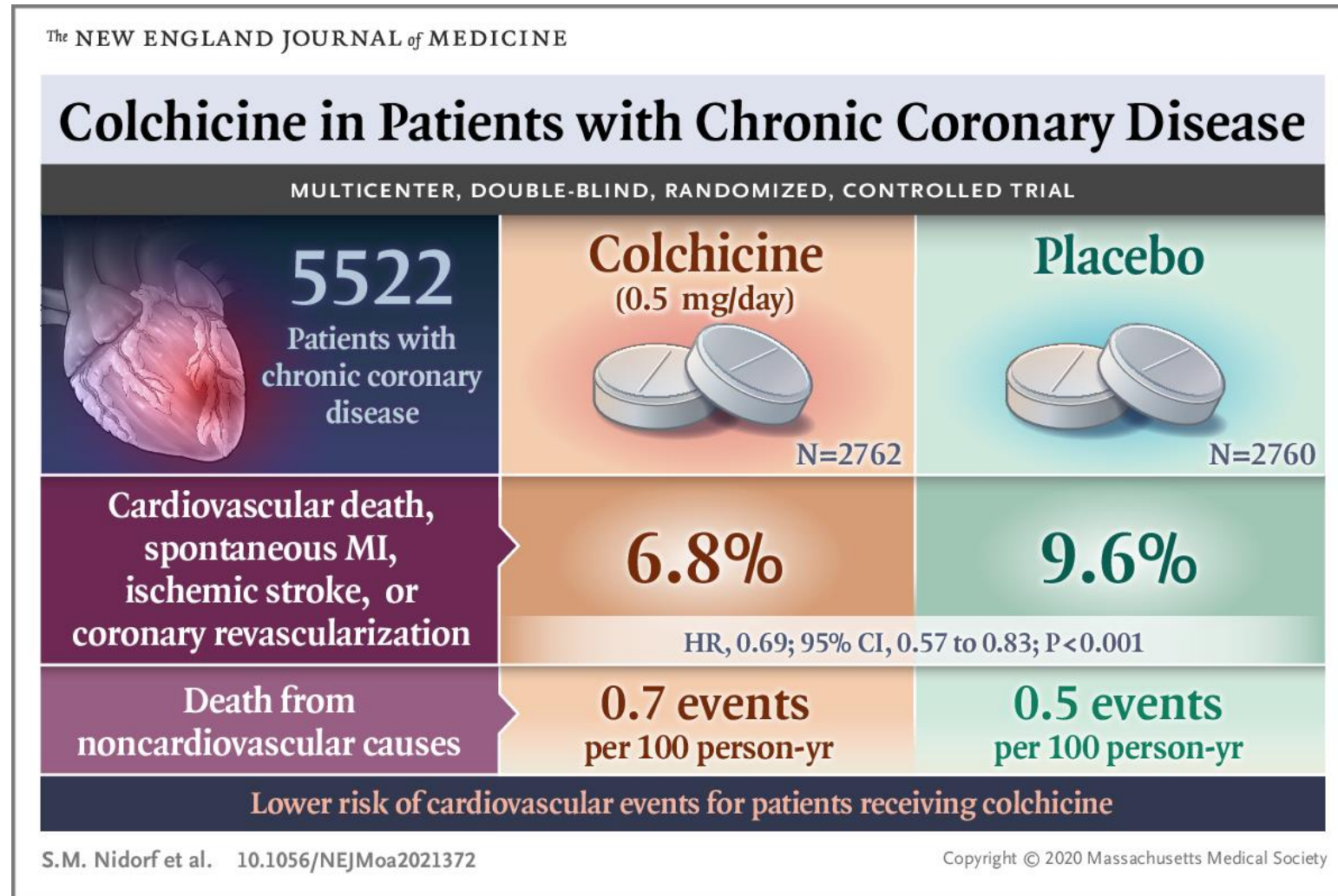


Can we reduce risk further by targeting inflammation?

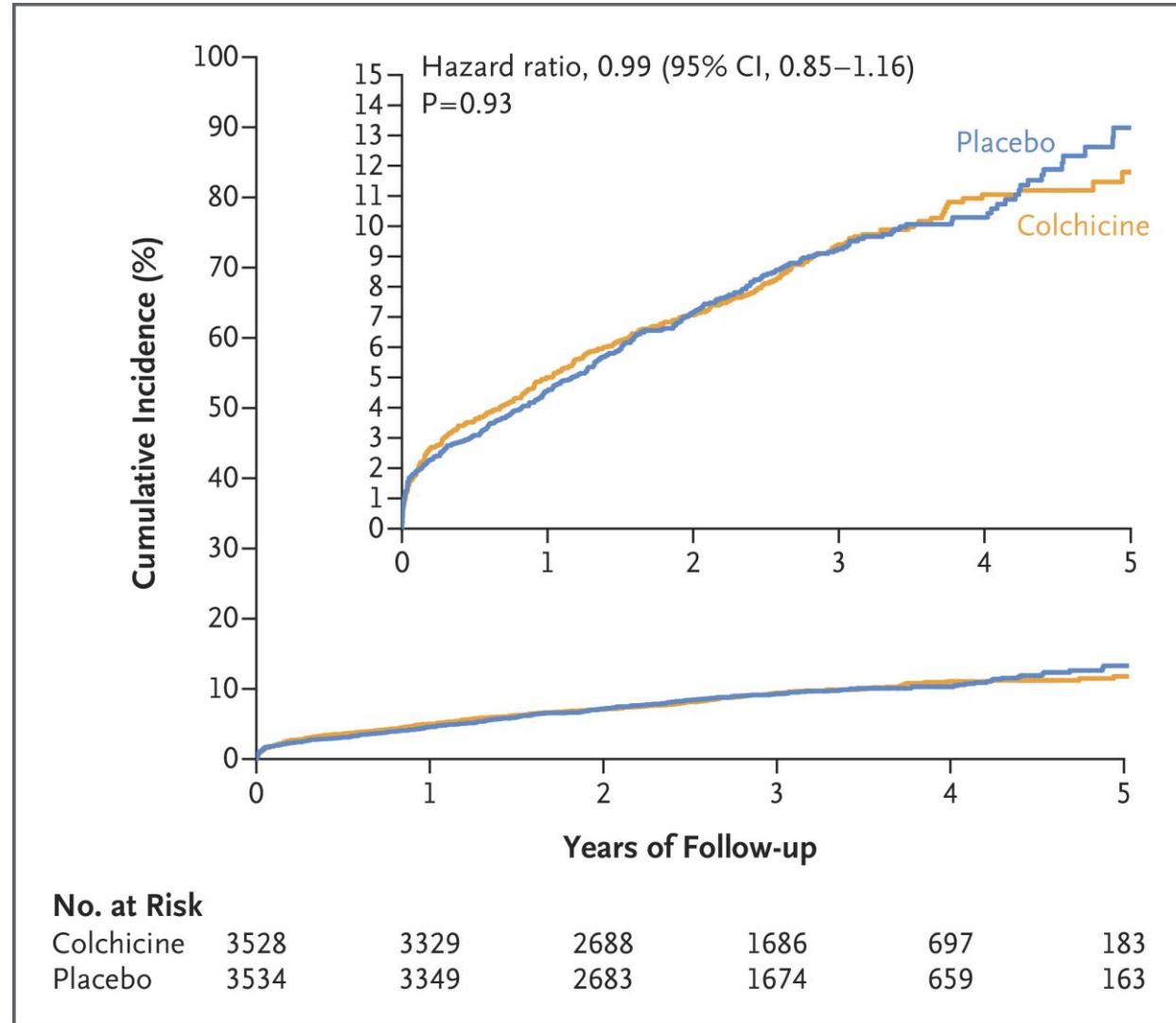
- Colchicine 0.5mg
- <30 days myocardial infarction



Colchicine

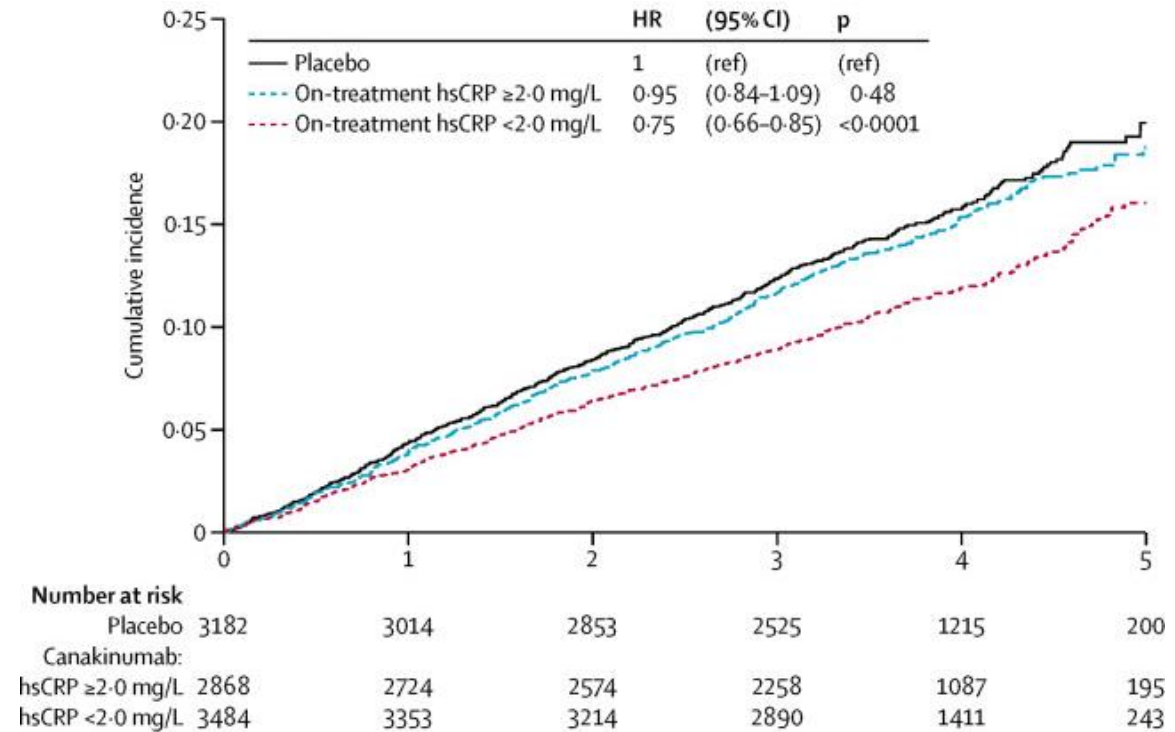


Some disappointment, hot of the press...

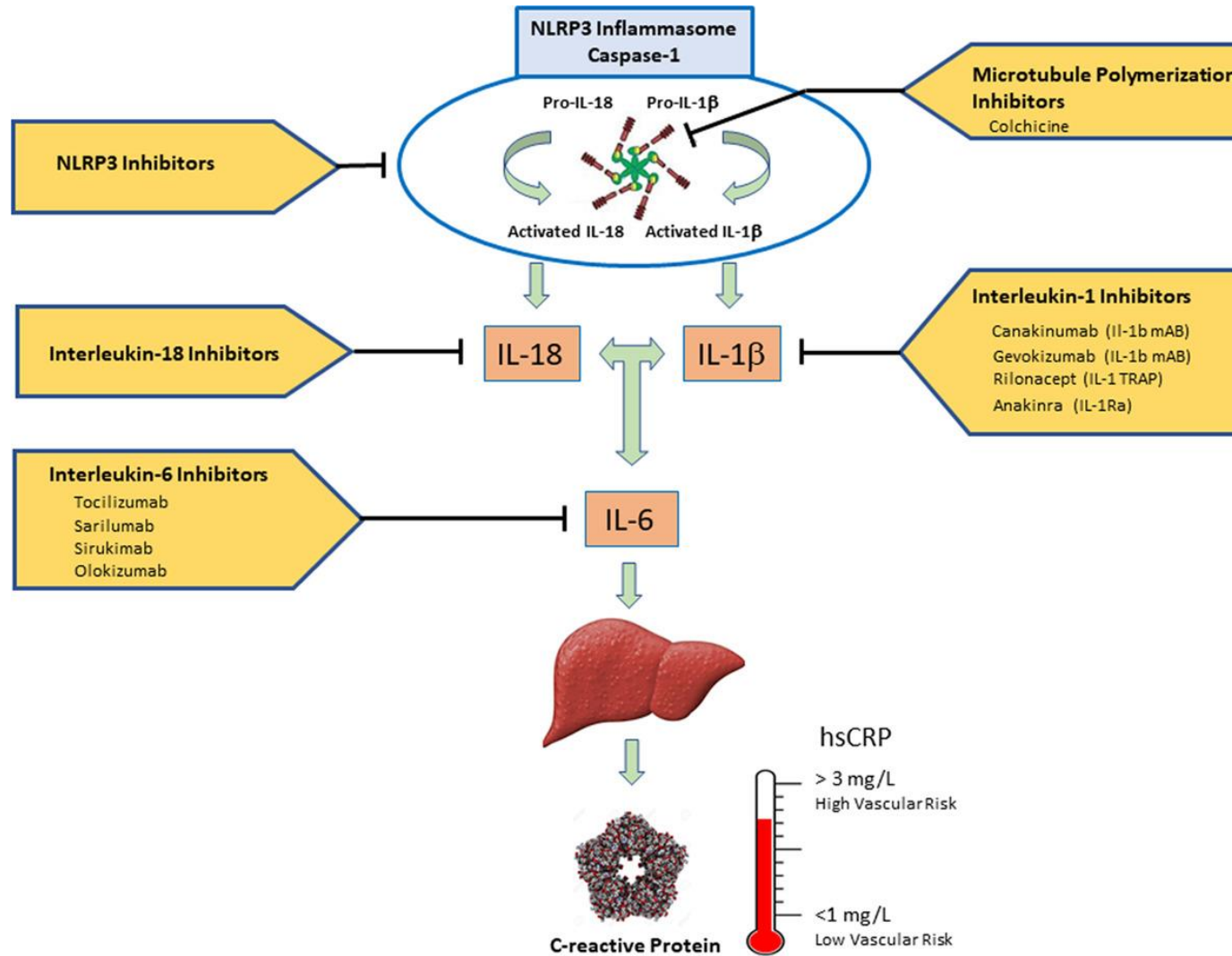


CANTOS

- Canakinumab (anti-IL1-beta)
- Prior MI + CRP > 2mg/L
- Trade-off: more (fatal) infections
- Effect dependent on CRP after 3 months
 - All NNT 24
 - CRP < 2mg/L NNT 16
 - CRP ≥ 2mg/L NNT 57

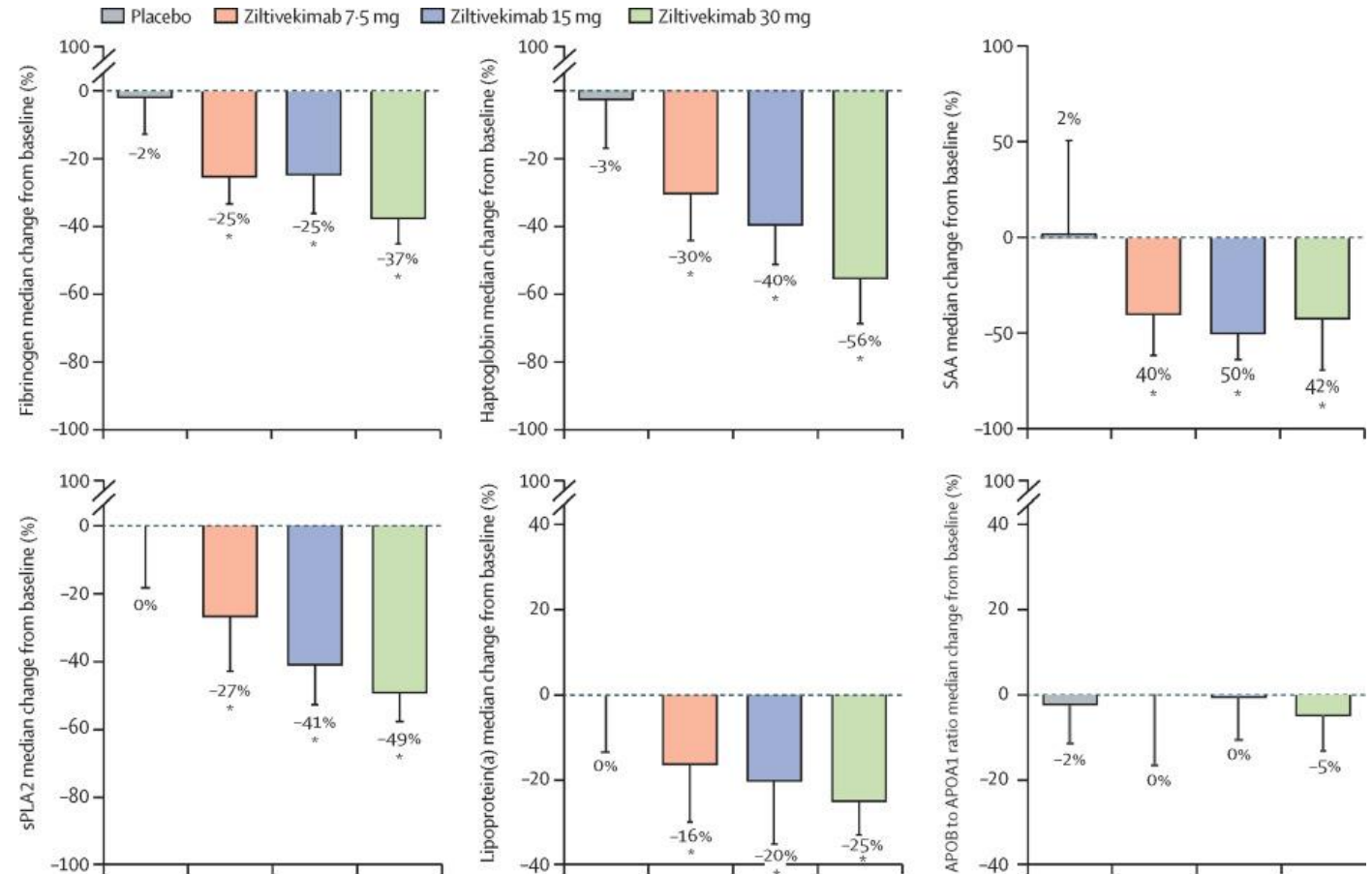


Trials inform mechanism



New kid on the block

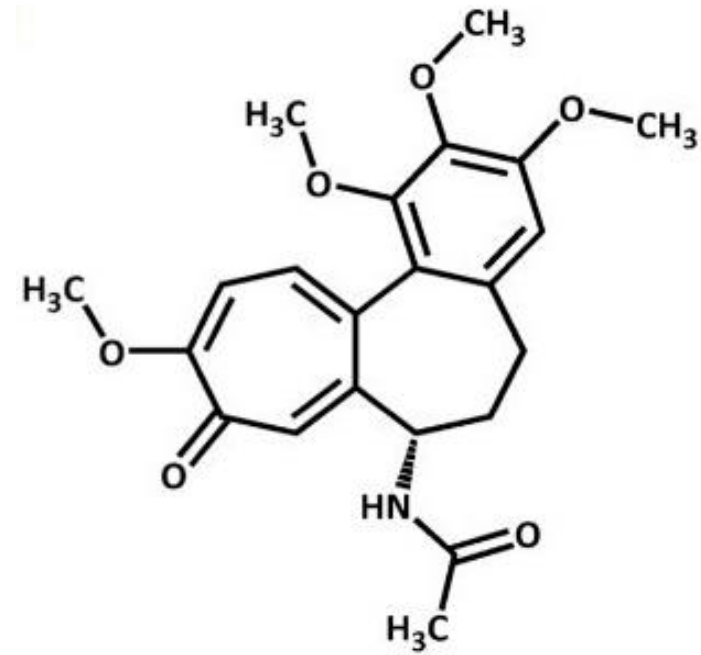
- Ziltivekimab (anti IL6)
- N=264, CKD + CRP \geq 2
- Once weekly 24 weeks
- Placebo, 7.5, 15 or 30mg
- CRP up to -87.8% lower



Take home message

- Inflammation in diabetes and cardiovascular risk is a complex mechanism, CRP does not fully capture this process
 - Is there a role for imaging?
- Optimising conventional risk factors also reduces inflammation
- Colchicine and canakinumab reduce cardiovascular risk
 - There will be new kids on the block
- Major challenges remain
 - Who benefits?
 - Adverse events?

Questions?



Colchicum autumnale

Colchicine