Cardiovasculaire risicobepaling

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Aspirine in primaire preventie?

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- *Primaire preventie : 3 grote studies*

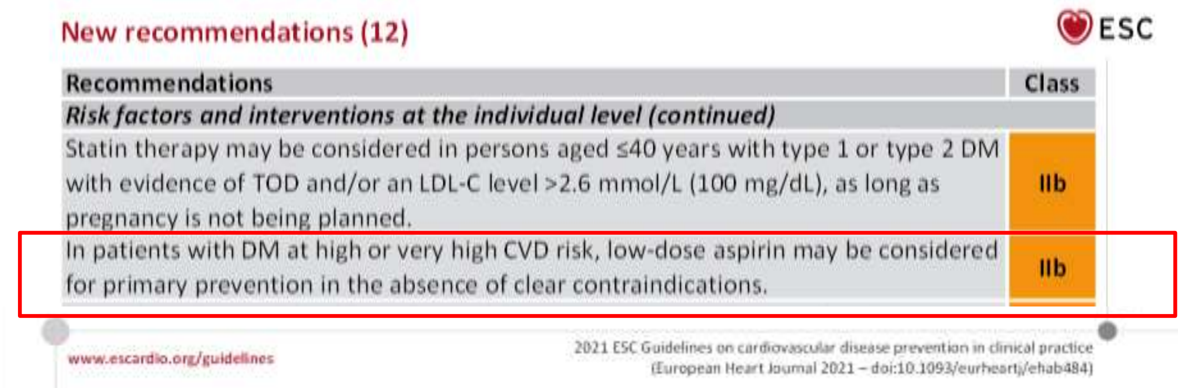
- ARRIVE[1]-studie (matig cardiovasculair risico) en de ASPREE[2]-studie (ouderen)
  - Incidentie cardiovasculaire events: geen significant verschil ASA en placebo
  - Toename risico majeure bloedingen

- ASCEND[3]-studie (diabetes)
  - Beperkte, maar statistisch significante daling incidentie cardiovasculaire events
  - Belangrijke toename risico majeure bloedingen

1 Gaziano JM, Brotons C, Coppolecchia R et al. Use of aspirin to reduce risk of initial vascular events in patients at moderate risk of cardiovascular disease (ARRIVE): a randomised, double-blind, placebo-controlled trial. Lancet 2018; 392: 1036-46. doi: 10.1016/S0140-6736(18)31924-X
2 McNeil JJ, Woods RL, Nelson MR et al. Effect of Aspirin on Disability-free Survival in the Healthy Elderly. N Engl J Med 2018; 379: 1499-508. doi: 10.1056/NEJMoa1800722
3 Bowman L, Mafham M, Wallendszus K et al. Effects of Aspirin for Primary Prevention in Persons with Diabetes Mellitus. N Engl J Med 2018; 379: 1529-39. doi: 10.1056/NEJMoa1804988

Aspirine in primaire preventie?

- Beperkte winst op cardiovasculaire morbiditeit (niet op mortaliteit) < toename risico majeure bloeding (ook voor diabetici)
- ESC 2016 : idem
- ESC 2021


New recommendations (12)

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Recommendations	Class
Risk factors and interventions at the individual level (continued)	
Statin therapy may be considered in persons aged ≤40 years with type 1 or type 2 DM with evidence of TOD and/or an LDL-C level >2.6 mmol/L (100 mg/dL), as long as pregnancy is not being planned.	IIb
In patients with DM at high or very high CVD risk, low-dose aspirin may be considered for primary prevention in the absence of clear contraindications.	IIb

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- AHA : wel plaats in bepaalde sterk geselecteerde patiëntengroepen (oa 50-69 jaar met matig tot hoog cardiovasculair risico (≥10% volgens ASCVD), zonder verhoogd bloedingsrisico en levensverwachting > 10 jr)
- Dus standaard eerder geen plaats, tenzij individueel bij geselecteerde hoog-risico patiënten!

Statines bij bejaarden?

- Primaire versus secundaire preventie

Statines bij bejaarden?

A) Primaire preventie:

- Spaanse retrospectieve cohortstudie[2] : werkzaamheid statines in de primaire cardiovasculaire preventie bij ouderen?
  - >85 jr en >74 jr zonder diabetes: geen vermindering # CV events of '*all cause*' mortaliteit
  - Diabetici tussen 74 en 85 jaar : bescheiden effect

- Meta-analyse van de *Cholesterol Treatment Trialists' Collaboration*[3] *:* weinig evidentie voordeel ≥ 75jr

2: Ramos R, Comas-Cufí M, Martí-Lluch R, Balló E, Ponjoan A et al. Statins for primary prevention of cardiovascular events and mortality in old and very old adults with and without type 2 diabetes: Retrospective cohort study. BMJ. 2018;362:1-4. doi: 10.1136/bmj.k3359

3: Armitage J, Baigent C, Barnes E, Betteridge DJ, Blackwell L et al. Efficacy and safety of statin therapy in older people: a meta-analysis of individual participant data from 28 randomised controlled trials. Lancet. 2019;393:407-15. doi: 10.1016/S0140-6736(18)31942-1

Statines bij bejaarden?

A) Primaire preventie:

- = geïndividualiseerde beslissing (*shared decision making)*
- baten / kwetsbaarheid voor patiënt + levensverwachting + kosten-effectiviteit in overweging
- gebruik overwegen bij patiënten van 65 tot 80 jaar met een verhoogd cardiovasculair risico (DM, CKD, fam, (SCORE) …)
- > 80-85 jaar : minder zinvol in primaire preventie?
- te verwachten voordeel hoogstens beperkt

Statines bij bejaarden?

B) Secundaire preventie: JA

Recommendations for the treatment of dyslipidaemias in older people (>70 years)

Recommendations	Class	Level
Treatment with statins is recommended for older people with ASCVD in the same way as for younger patients.	I	A
Initiation of statin treatment for primary prevention in older people aged ≥70 may be considered, if at high risk or above.	IIb	B
It is recommended that the statin is started at a low dose if there is significant renal impairment and/or the potential for drug interactions.	I	C

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Nut homocysteïne in CV risicobepaling?

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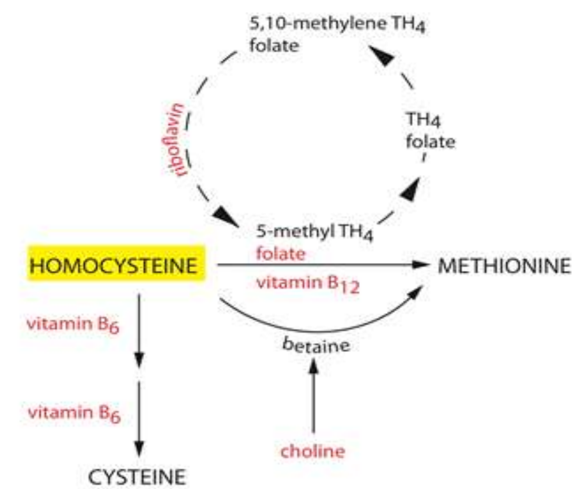
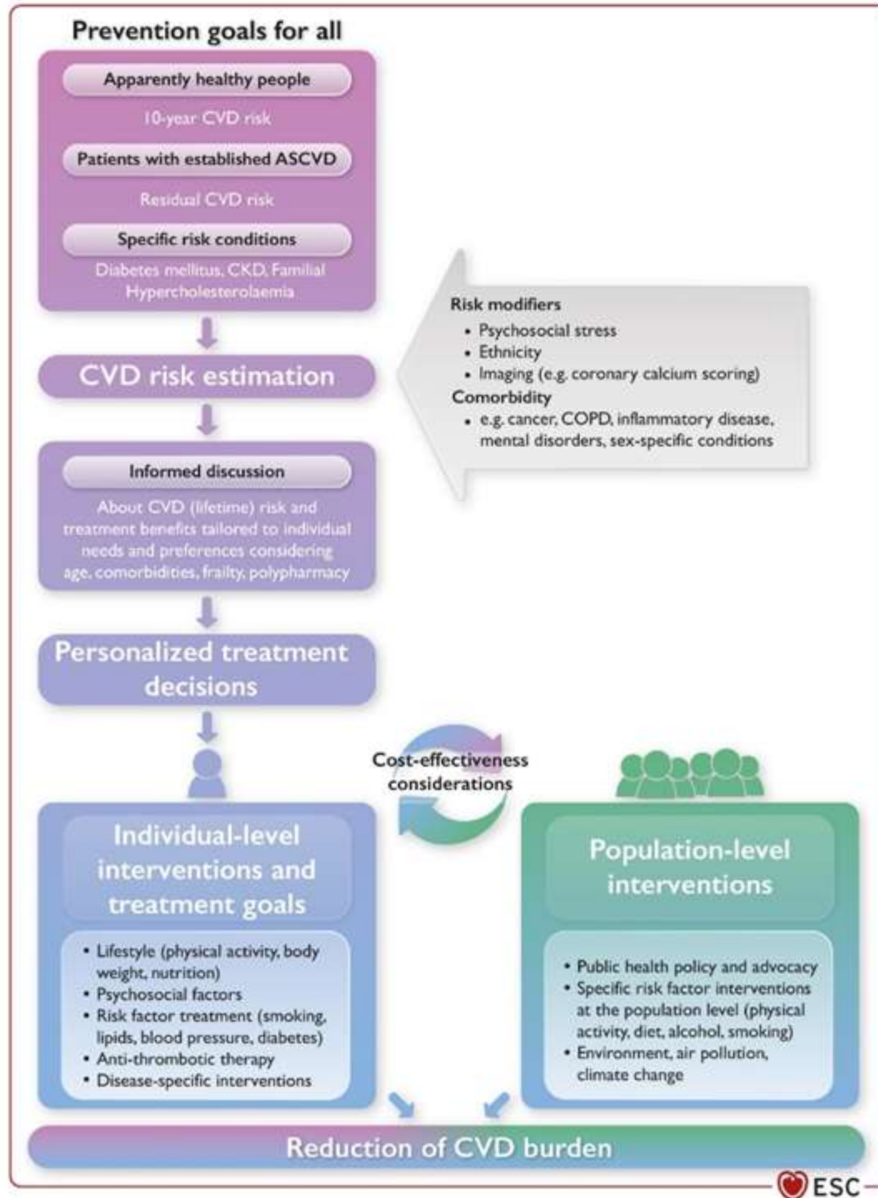


- Intracellulair gevormd aminozuur
- Vitamine B12 en foliumzuur nodig (tekort uitsluiten)
- Verhoogde homocysteïne-concentratie : onafhankelijke risicofactor voor cardiovasculaire aandoeningen : atherogene effect waarschijnlijk via invloed op endotheelcellen en stollingscascade.
- Hypothese terug in vraag gesteld (Moat 2009 Ann.clin.Biochem.45:345-348).
- Hoge homocysteïne concentratie is mogelijk eerder een gevolg dan een oorzaak van cardiovasculair lijden.

Nut homocysteïne in CV risicobepaling?

- Wel bij **trombofilie onderzoek** *(naast antitrombine III, proteïne C, proteïne S, factor VIII, APC resistentie en factor V Leiden mutatie, factor II (protrombine) mutatie en lupus anticoagulans*

- **Niet routinematig aanbevolen ikv cardiovasculaire risicobepaling of na acuut coronair syndroom**



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Prevention of CVD

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ESC Classes of recommendations

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Classes of recommendations

	Definition	Wording to use
Class I	Evidence and/or general agreement that a given treatment or procedure is beneficial, useful, effective.	Is recommended or is indicated
Class II	Conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of the given treatment or procedure.	
Class IIa	Weight of evidence/opinion is in favour of usefulness/efficacy.	Should be considered
Class IIb	Usefulness/efficacy is less well established by evidence/opinion.	May be considered
Class III	Evidence or general agreement that the given treatment or procedure is not useful/effective, and in some cases may be harmful.	Is not recommended

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ESC Levels of evidence

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Level of evidence A	Data derived from multiple randomized clinical trials or meta-analyses.
Level of evidence B	Data derived from a single randomized clinical trial or large non-randomized studies.
Level of evidence C	Consensus of opinion of the experts and/or small studies, retrospective studies, registries.

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