AAS na prevenção primária ainda existe lugar?

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Declaração de Conflitos de Interesses

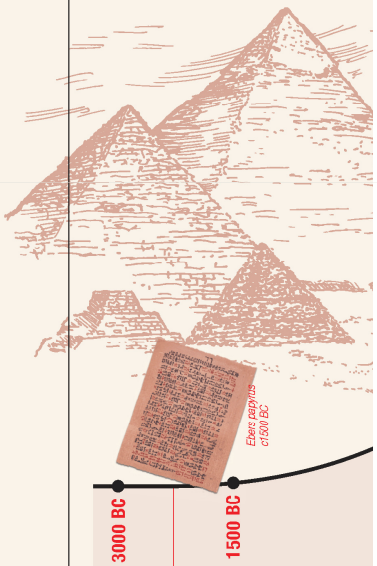
O apresentador declara **não** apresentar conflitos de interesses que possam ser relacionados à sua apresentação.

FEATURE

Aspirin was one of the first drugs to come into common usage and is still one of the most researched drugs in the world, with an estimated 700 to 1,000 clinical trials conducted each year

A history of aspiri

By **Dawn Connelly**



Ebers papyrus c1500 BC

3000 BC

1500 BC

c3000 – 1500 BC

Willow is used as a medicine by ancient civilisations like the Sumerians and Egyptians. The Ebers papyrus, an ancient Egyptian medical text, refers to willow as an anti-inflammatory or pain reliever for non-specific aches and pains.

White Willow (Salix alba)

derived, to women to ease the pain of childbirth.

Hippocrates administers Willow leaf tea in anca

1899

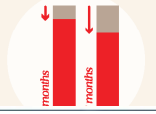
Acetylsalicyclic acid is named Aspirin by Bayer. The letter 'A' stands for acetyl, "spir" is derived from the plant known as *Spiraea ulmaria* (meadowsweet), which yields salicin, and "in" was a common suffix used for drugs at the time of the first stable synthesis of acetylsalicylic acid.

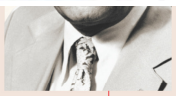
1838

Salicin is also found in the meadowsweet flower by Swiss pharmacist Johann Pagenstecher and later by German researcher Karl Jacob Löwig.

1974

Data from the first randomised controlled trial of aspirin in the secondary prevention of death from heart attack show a reduction in total mortality of 12% at 6 months and 25% at 12 months but the results are statistically





2014

A meta-analysis suggests that long-term prophylactic use of aspirin has a favourable benefit–harm profile and leads to a dramatic reduction in the incidence of bowel, stomach and oesophageal cancer (*Annals of Oncology*, online 5 August 2014).

2005 2009 2011 2013 2015 2018

2013

Follow-up results of the WHS confirm that long-term use of alternate day low-dose aspirin results in a 42% reduction in colorectal cancer incidence, with benefits starting to appear after 10 years. The results also show increased risk of gastrointestinal bleeding and peptic ulcers (*Annals of Internal Medicine* 2013;159:77).

2015

Results expected from the ARRIVE (aspirin to reduce risk of initial vascular events) study.

2018

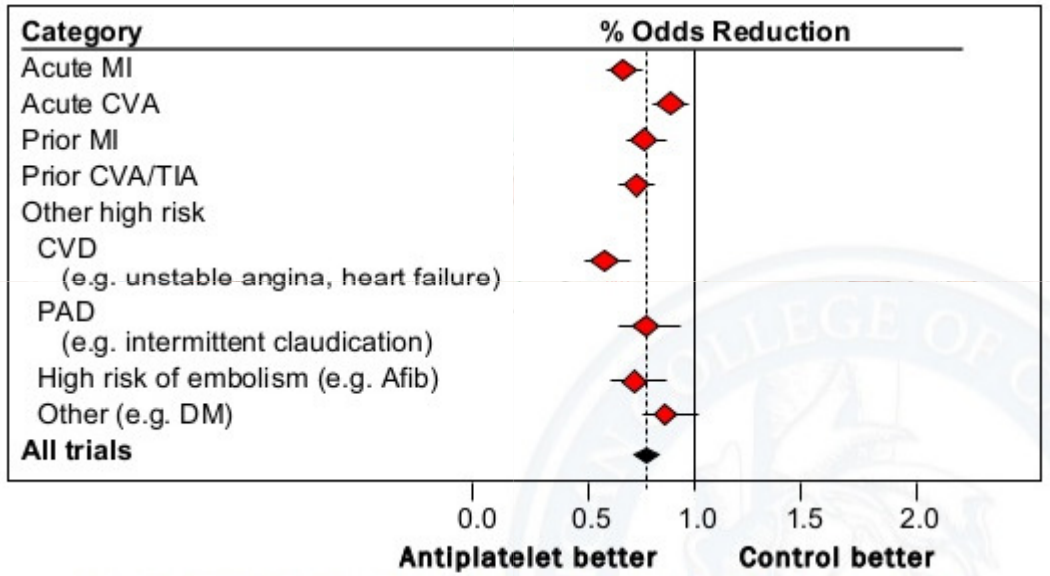
Results expected from the ASPREE (aspirin in reducing events in the elderly) study to determine whether the potential benefits of low-dose aspirin outweigh the risks in healthy people older than 70 years of age.

2011

A meta-analysis of eight clinical trials finds that, after five years of follow-up, trial participants who took aspirin daily for a mean of four years have a 44% reduced risk of dying from cancer compared with participants who took a placebo (*Lancet* 2011;377:31).

Aspirin Evidence: Secondary Prevention

Effect of antiplatelet treatment* on vascular events**



Aspirin reduces the risk of adverse cardiovascular events

Helping Cardiovascular Professionals Learn. Advance. Heal.

*Aspirin was the predominant antiplatelet agent studied
**Include MI, stroke, or death

Source: Antithrombotic Trialists' Collaboration. *BMJ* 2002;324:71–86

Ainda **existe lugar** na prevenção 1ª?

Ainda funcionam? Sim.

Ainda **existe lugar** na prevenção 1ª?

Ainda funcionam? Sim.
Mas ainda existe lugar?

Diretrizes

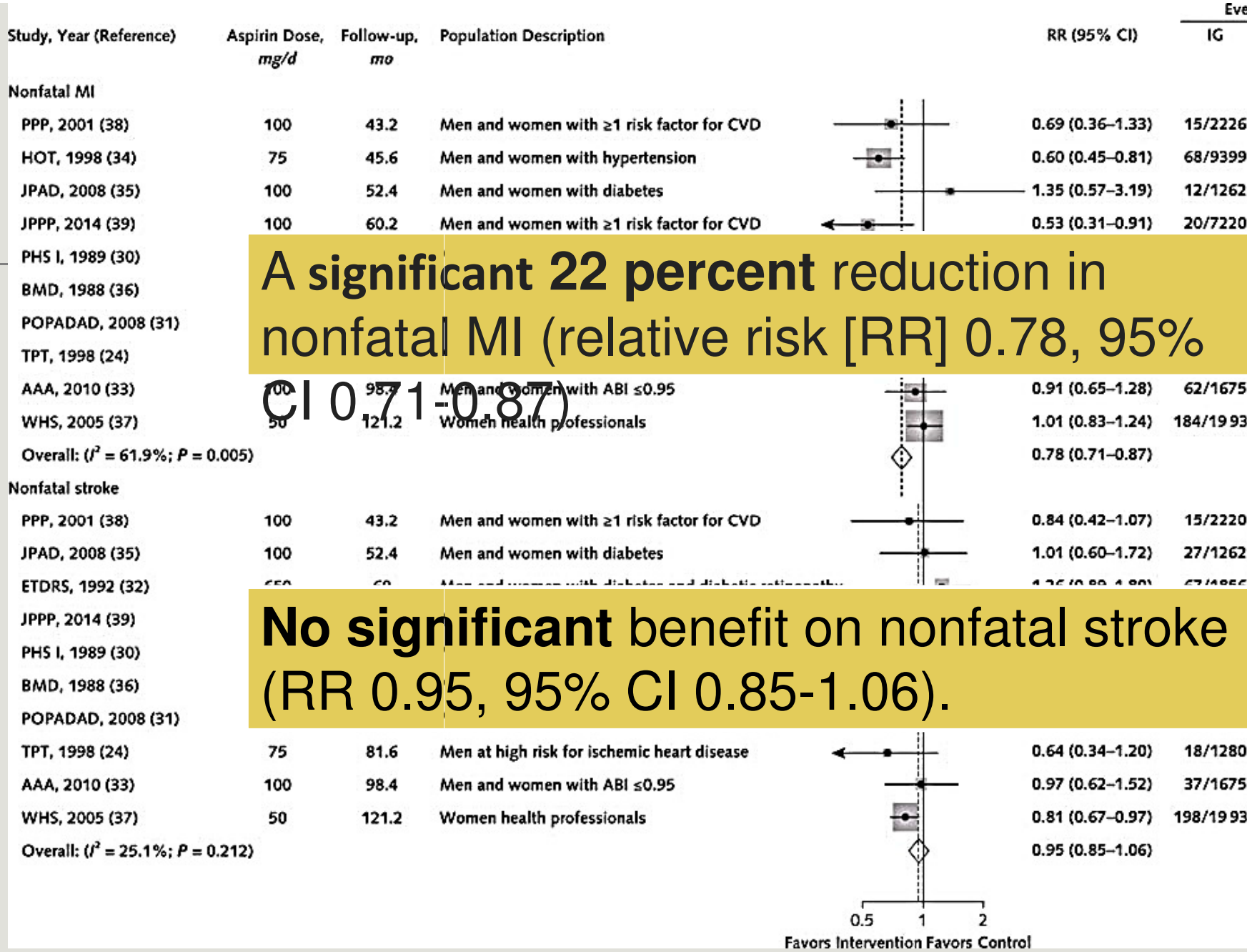
PSTF 2016: Adults aged 50 to 59
rs with a ≥10% 10-year CVD risk
A ADA 2015: Reasonable for
viduals with a ≥10% 10-year CVD
and without increased bleeding

ESC 2016: Antiplatelet therapy is not recommended in individuals free from CVD

I Diretriz Brasileira de Prevençã
Cardiovascular 2013

Diretrizes Brasileiras de Antiagregantes Plaquetários e Anticoagulantes em Cardiologia 2013

enefícios
n IAM não
al AVC
o fatal



Study, Year (Reference)	Aspirin Dose, mg/d	Follow-up, mo	Population Description	RR (95% CI)	Eve IG
Nonfatal MI					
PPP, 2001 (38)	100	43.2	Men and women with ≥1 risk factor for CVD	0.69 (0.36–1.33)	15/2226
HOT, 1998 (34)	75	45.6	Men and women with hypertension	0.60 (0.45–0.81)	68/9399
JPAD, 2008 (35)	100	52.4	Men and women with diabetes	1.35 (0.57–3.19)	12/1262
JPPP, 2014 (39)	100	60.2	Men and women with ≥1 risk factor for CVD	0.53 (0.31–0.91)	20/7220
PHS I, 1989 (30)					
BMD, 1988 (36)					
POPADAD, 2008 (31)					
TPT, 1998 (24)					
AAA, 2010 (33)	100	98.4	Men and women with ABI ≤0.95	0.91 (0.65–1.28)	62/1675
WHS, 2005 (37)	50	121.2	Women health professionals	1.01 (0.83–1.24)	184/19 93
Overall: (I^2 = 61.9%; P = 0.005)				0.78 (0.71–0.87)	
Nonfatal stroke					
PPP, 2001 (38)	100	43.2	Men and women with ≥1 risk factor for CVD	0.84 (0.42–1.07)	15/2220
JPAD, 2008 (35)	100	52.4	Men and women with diabetes	1.01 (0.60–1.72)	27/1262
ETDRS, 1992 (32)					
JPPP, 2014 (39)					
PHS I, 1989 (30)					
BMD, 1988 (36)					
POPADAD, 2008 (31)					
TPT, 1998 (24)	75	81.6	Men at high risk for ischemic heart disease	0.64 (0.34–1.20)	18/1280
AAA, 2010 (33)	100	98.4	Men and women with ABI ≤0.95	0.97 (0.62–1.52)	37/1675
WHS, 2005 (37)	50	121.2	Women health professionals	0.81 (0.67–0.97)	198/19 93
Overall: (I^2 = 25.1%; P = 0.212)				0.95 (0.85–1.06)	

0.5 1 2

Favors Intervention Favors Control

A **significant 22 percent** reduction in nonfatal MI (relative risk [RR] 0.78, 95% CI 0.71-0.87)

No significant benefit on nonfatal stroke (RR 0.95, 95% CI 0.85-1.06).

Ann Intern Med. 2016;164(12):804

enefícios
m
ortalidade
or DCV

ortalidade
otal

Study, Year (Reference)	Aspirin Dose, *mg/d*	Follow-up, *mo*	Population Description	RR (95% CI)	IG
CVD mortality					
PPP, 2001 (38)	100	43.2	Men and women with ≥1 risk factor for CVD	0.56 (0.31–1.01)	17/22
HOT, 1998 (34)	75	45.6	Men and women with hypertension	0.95 (0.75–1.20)	133/93
JPAD, 2008 (35)	100	52.4	Men and women with diabetes	0.10 (0.01–0.79)	1/126
ETDRS, 1992 (32)	650	60	Men and women with diabetes and diabetic retinopathy	0.89 (0.76–1.04)	244/18
JPPP, 2014 (39)	100	60.2	Men and women with ≥1 risk factor for CVD	1.02 (0.71–1.47)	58/72
PHS I, 1989 (30)	162.5	60.2	Men physicians	0.92 (0.66–1.28)	66/11
BMD, 1988 (36)	500	72	Men physicians	1.01 (0.74–1.37)	119/34
POPADAD, 2008 (31)	100	80.4	Men and women with diabetes and ABI ≤0.99	1.23 (0.80–1.89)	43/63
TPT, 1998 (24)	75	81.6	Men at high risk for ischemic heart disease	1.05 (0.69–1.61)	42/12
AAA, 2010 (33)	100	98.4	Men and women with ABI ≤0.95	1.17 (0.72–1.89)	35/16
WHS, 2005 (37)	50	121.2	Women health professionals	0.95 (0.74–1.22)	120/19
Overall: (I^2 = 8.8%; P = 0.360)				0.94 (0.86–1.03)	

0.25 0.5 1 2 4
Favors Intervention Favors Control

All-cause mortality					
PPP, 2001 (38)	100	43.2	Men and women with ≥1 risk factor for CVD	0.81 (0.58–1.13)	62/22
HOT, 1998 (34)	75	45.6	Men and women with hypertension	0.93 (0.79–1.09)	284/93
JPAD, 2008 (35)	100	52.4	Men and women with diabetes	0.91 (0.57–1.43)	34/12
TPT, 1998 (24)	75	81.6	Men at high risk for ischemic heart disease	1.03 (0.80–1.32)	113/12
AAA, 2010 (33)	100	98.4	Men and women with ABI ≤0.95	0.95 (0.78–1.15)	176/16
WHS, 2005 (37)	50	121.2	Women health professionals	0.95 (0.85–1.06)	609/19
Overall: (I^2 = 0.0%; P = 0.996)				0.94 (0.89–0.99)	

0.5 1 2
Favors Intervention Favors Control

A **significant 6 percent reduction** in all-caus
mortality (RR 0.94, 95% CI 0.89-0.99)

Ann Intern Med. 2016;164(12):804

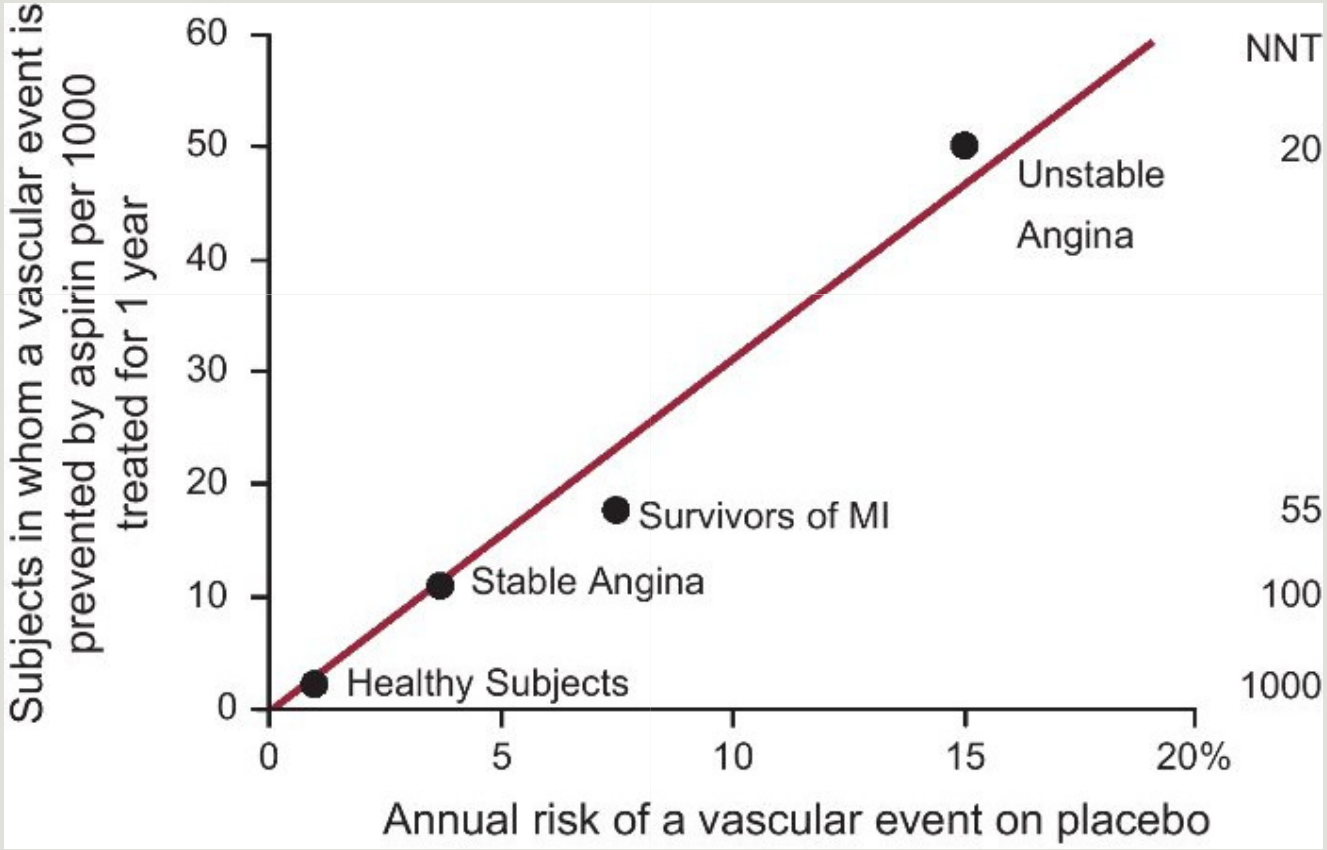
Absolute Risk Reduction With Low-Dose Aspirin Use ≤10 Years

ble 2. Absolute Risk Reduction With Low-Dose Aspirin Use ≤10 Years

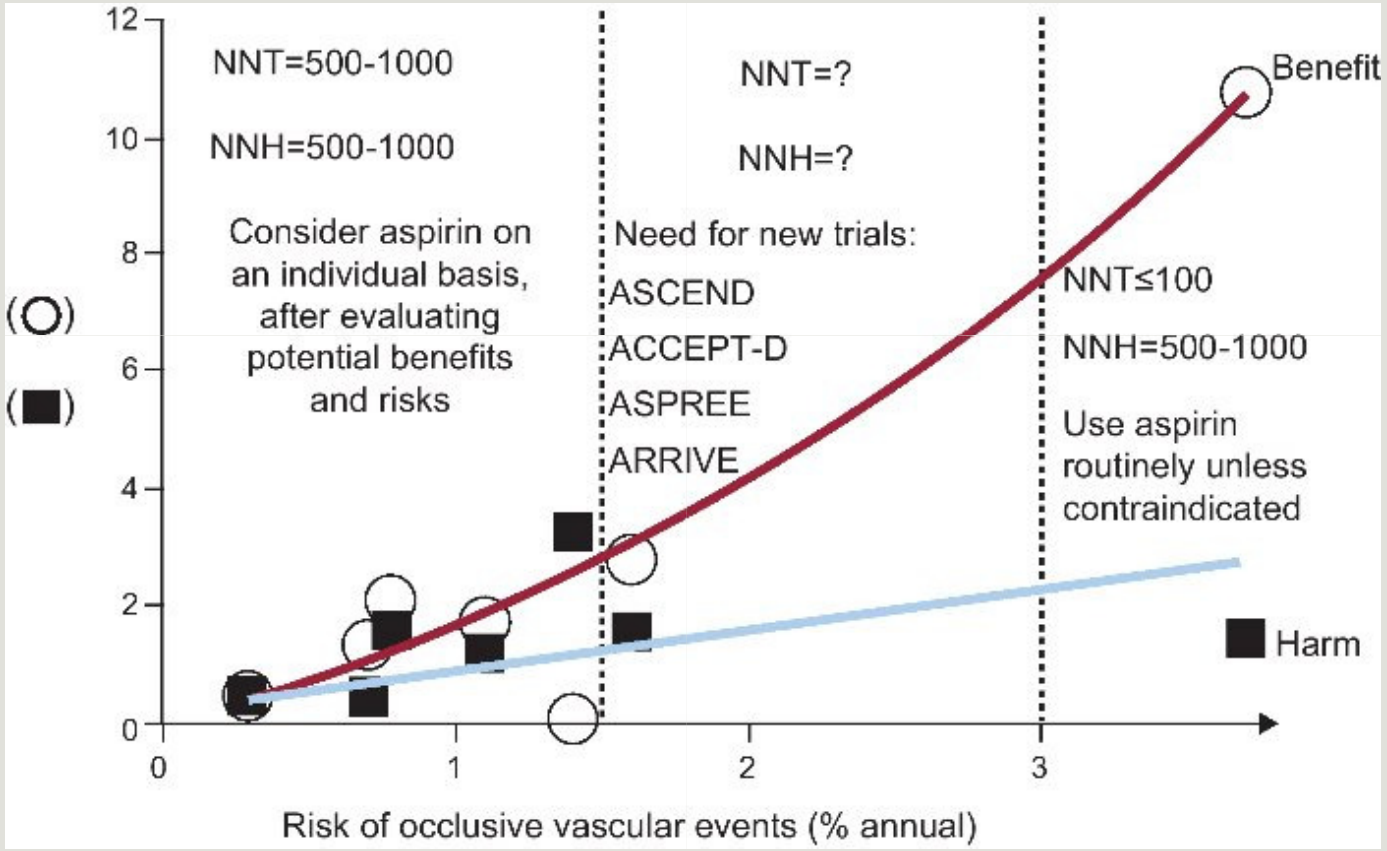
tcome	Risk Level*	Baseline Risk for Outcome, *events per 1000 person-years*	RR (95% CI)†	Events Prevented per Person-Years (95% CI)
-cause mortality (*k* = 8)	Low	3.19	0.95 (0.89 to 1.01)	0.16 (−0.03 to 0.35)
	Median	8.55		0.43 (−0.09 to 0.94)
	High	13.54		0.68 (−0.14 to 1.49)
D mortality (*k* = 8)	Low	0.63	0.97 (0.85 to 1.10)	0.02 (−0.06 to 0.09)
	Median	2.18		0.07 (−0.22 to 0.33)
	High	4.62		0.14 (−0.46 to 0.69)
nfatal stroke (*k* = 7)	Low	1.21	0.86 (0.76 to 0.98)	**0.17 (0.02 to 0.29)**
	Median	2.83		**0.40 (0.06 to 0.68)**
	High	4.84		**0.68 (0.10 to 1.16)**
nfatal MI (*k* = 8)	Low	0.90	0.83 (0.74 to 0.94)	**0.15 (0.05 to 0.23)**
	Median	2.69		**0.46 (0.16 to 0.70)**
	High	8.44		**1.43 (0.51 to 2.19)**

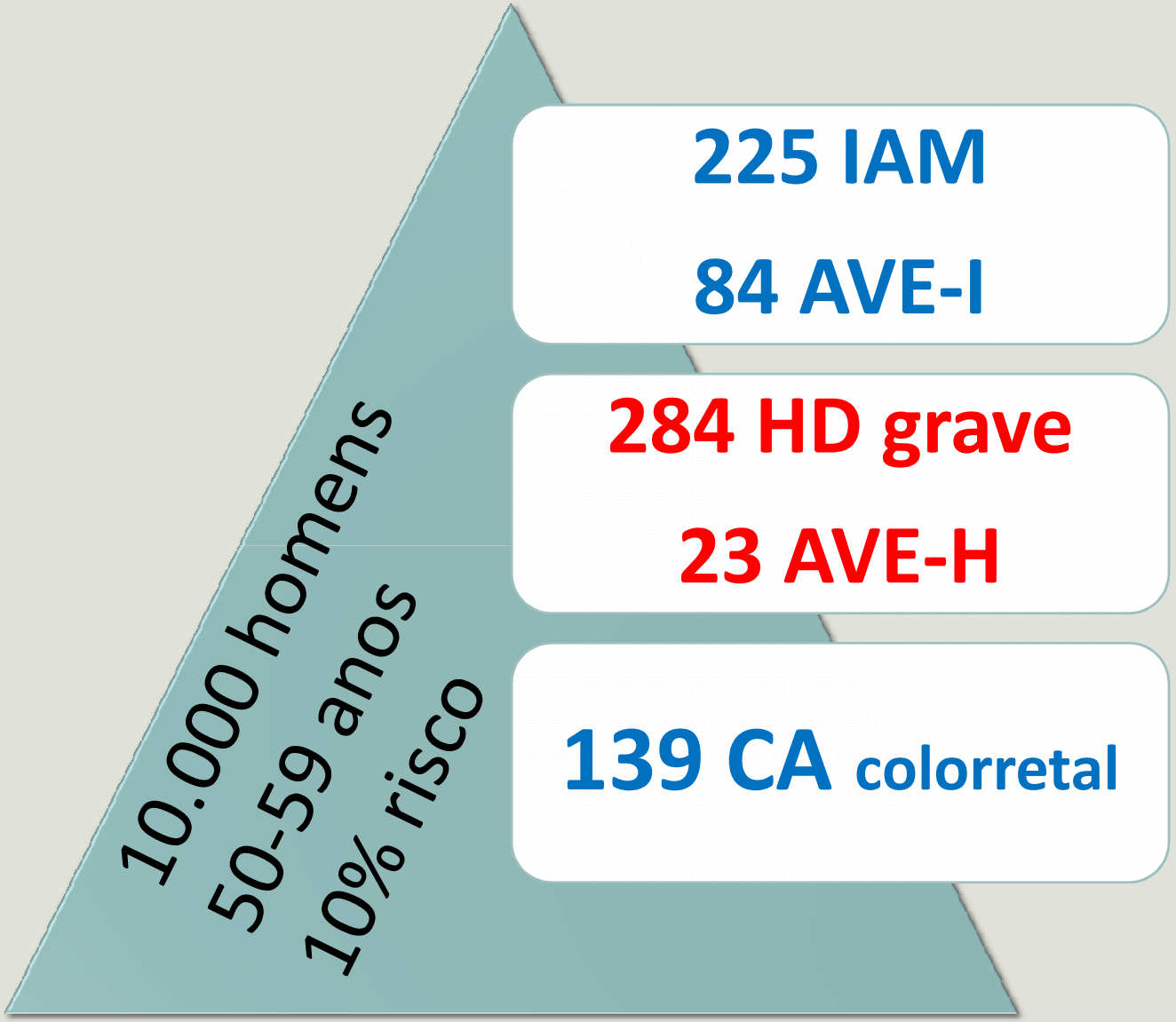
= cardiovascular disease; MI = myocardial infarction; RR = relative risk.
w (minimum), median, and high (maximum) control group rate for each outcome, excluding zeros and outliers.
sed on aspirin doses ≤100 mg/d in primary CVD prevention trials.
ldface data represent clearly prevented events (i.e., 95% CI does not include both caused and prevented events).

Benefício absoluto depende do risco subjacente



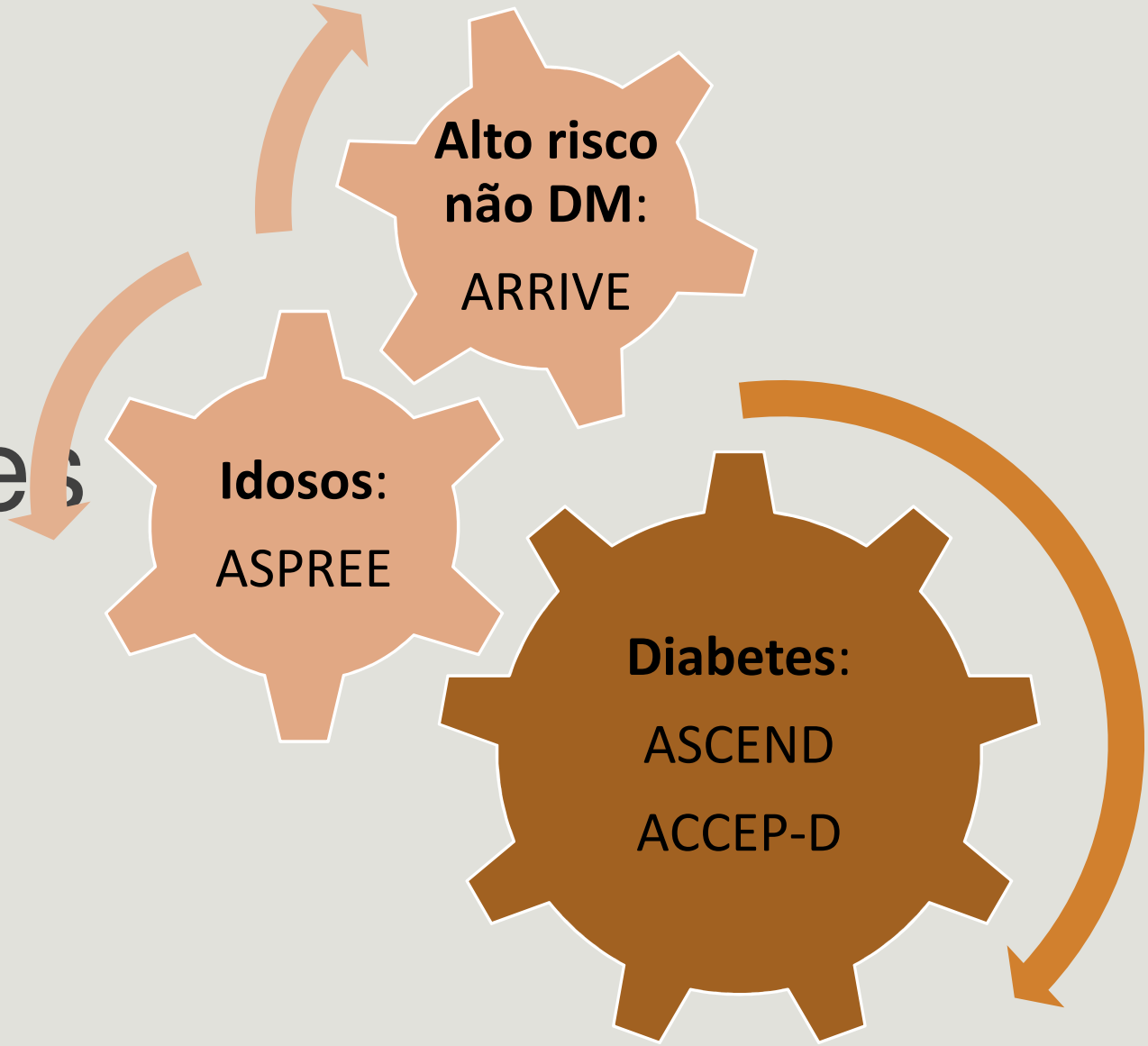
AAS aumenta sangramento em 50%
AAS reduz risco em …





http://www.acc.org/latest-in-cardiology/ten-points-to-remember/2016

40.000 pacientes



The Aspirin-Guide app from researchers at Brigham and Women's Hospital, Harvard Medical School, helps clinicians decide which patients are candidates for the use of low-dose aspirin (75 to 81 mg/d) in the primary prevention of atherosclerotic cardiovascular disease (ASCVD) by balancing the ASCVD benefits against the risk of harm due to gastrointestinal (GI) or other bleeding.

http://www.aspiringuid

e: 50
x: Male
ce: Black
noker: No
pertension Medication: Yes
stolic BP: 125 mmHg
abetes: No
olesterol Medication: Yes
tal Cholesterol: 180 mg/dL
DL Cholesterol: 40 mg/dL
rial Fibrillation: No
ptic Ulcer: No
spepsia/GI Pain: Yes
gular NSAID use: No
ednisone/Systemic Corticosteroids: No

Guidance: Do not advise aspirin

ASCVD Risk Score: 3.70% over 10 years without aspirin

Bleeding Risk Score: 2.40% over 10 years without aspiri
2 risk factors for increased risk of bleeding
- Male
- Upper gastrointestinal pain or dyspepsia

Number Needed to Treat (NNT) with aspirin over 10 yea
prevent one ASCVD event: 77

Number Needed to Harm (NNH): number needed to tr
with aspirin over 10 years to result in one aspirin-relate
bleeding event: 72

50
Male
e: Black
oker: Yes
ertension Medication: Yes
olic BP: 125 mmHg
betes: Yes
lesterol Medication: Yes
l Cholesterol: 180 mg/dL
Cholesterol: 40 mg/dL
l Fibrillation: No
tic Ulcer: No
bepsia/GI Pain: No
ular NSAID use: No
lnisone/Systemic Corticosteroids: No

Guidance: Advise low-dose aspirin (75-81 mg/d)

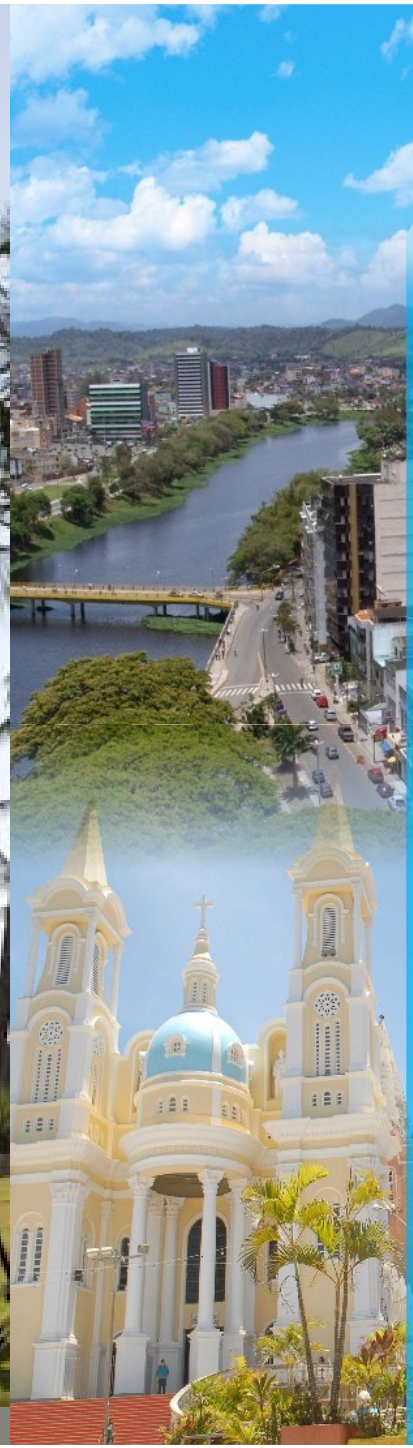
ASCVD Risk Score: >20% over 10 years without aspirin us

Bleeding Risk Score: 1.20% over 10 years without aspirin
1 risk factor for increased risk of bleeding
•Male

Number Needed to Treat (NNT) with aspirin over 10 year
prevent one ASCVD event: 26

Number Needed to Harm (NNH): number needed to tre
with aspirin over 10 years to result in one aspirin-related
bleeding event: 144

Goal: NNT less than NNH (i.e., benefit is greater than har
[more]



Todos Batendo em um só Coração
Itabuna-BA

XV JORNADA DE CARDIOLOGIA DO SUL DA BAHIA

29 E 30 DE SETEMBRO DE 2017

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