Qual o melhor Escore de Risco para a população brasileira?

Claudio Marcelo B. das Virgens

Salvador, 11 de maio de 2017

Conceito de "Fatores de Risco" Cardiovascular

Factors of Risk in the Development of Coronary Heart Disease—
Six-Year Follow-up Experience

The Framingham Study

WILLIAM B. KANNEL, M.D., THOMAS R. DAWBER, M.D., F.A.C.P.,
ABRAHAM KAGAN, M.D., F.A.C.P., NICHOLAS REVOTSKIE, M.D.,
AND JOSEPH STOKES, III, M.D.
Framingham, Massachusetts

Age, sex, hypertension, hyperlipidemia, smoking, diabetes, (family history), (obesity)

Kannel et al, Ann Intern Med 1961

O escore de risco é clinicamente apropriado?

- Evidência sólida e robusta (avaliação crítica CBE)

- Impacto na sobrevida livre de eventos

- Benefício claro em desfechos clinicamente relevantes (AVC/óbito)

- Menor aumento em taxas de erro de predição

- Benefícos consistentes em grupos específicos

- Localmente custo efetivo (análise CE local)

- Disponibilidade e Facilidade de utilização

- Benefícios não baseados em subgupos, isoladamente

I Diretriz Brasileira de Prevenção Cardiovascular

REALIZAÇÃO

Sociedade Brasileira de Cardiologia

I Diretriz Brasileira de Prevenção Cardiovascular

Tabela 1.2 – Atr

Tabela 1.4 – At

Pontos
-2
-1
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Pontos

HDL-C: coleste

•••••○ Claro BR   4G   01:33

Excel   QR Code   GarageBand   Campeões

Transamérica   CID-10 Pro   Cardiology:...   CALCULAD...

Telefone   Safari   Mail   Música

12.739

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CALCULADORA PARA ESTRATIFICAÇÃO DE RISCO CARDIOVASCULAR

ATUALIZAÇÃO DA DIRETRIZ BRASILEIRA DE DISLIPIDEMIAS E PREVENÇÃO DA ATEROSCLEROSE - 2017 &

DIRETRIZ BRASILEIRA DE PREVENÇÃO DE DOENÇA CARDIOVASCULAR EM PACIENTE COM DIABETES - 2017

clique aqui

CONSULTORES:
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Dr. Rodrigo de Oliveira Moreira
Dr. Luiz Turatti

SANOFI   REGENERON
Going beyond today

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CALCULADORA PARA ESTRATIFICAÇÃO DE RISCO CARDIOVASCULAR

Resultado

RISCO: **Alto**

SEM TRATAMENTO	USANDO ESTATINA	
META REDUÇÃO PERCENTUAL (%)	META LDL-c (mg/dL)	META N-HDLc (mg/dL)
> 50% Se LDL-c ≥ 70 mg/dL	< 70	< 100

TRATAMENTO RECOMENDADO	
(doses diárias em mg)	Atorvastatina 40-80 Rosuvastatina 20-40 Sinvastatina 40 / ezetimiba 10

« VOLTAR

SBC   ATEROSCLEROSE   SBEM   SBD DIABETES   SANOFI REGENERON   Going beyond today

APOIO

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os, para mulheres. [19,20]

Risco (%)
10,0
11,7
13,7
15,9

anos, para homens. [19,20]

Risco (%)
15,6
18,4
21,6
25,3
29,4
>30

Qual o Escore recomendado pela SBC?

Fase 2 – Escore de risco

O Escore de Risco Global (ERG)[15] (http://www.zunis.org/FHS_CVD_Risk_Calc_2008.htm) deve ser utilizado na avaliação inicial entre os indivíduos que não foram enquadrados nas condições de alto risco (**Tabelas 1.2, 1.3, 1.4, 1.5**).

Primary prevention of cardiovascular disease: Global cardiovascular risk assessment and management in clinical practice


Eur Heart J Qual Care Clin Outcomes. 2015;1(1):31-36.

Primary prevention of cardiovascular disease:
Global cardiovascular risk assessment and management in clinical practice

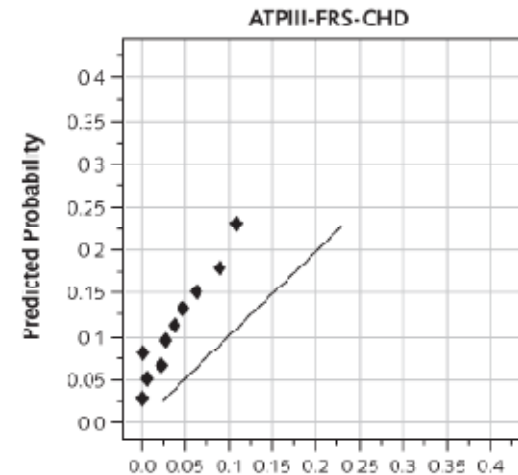Eur Heart J Qual Care Clin Outcomes. 2015;1(1):31-36.
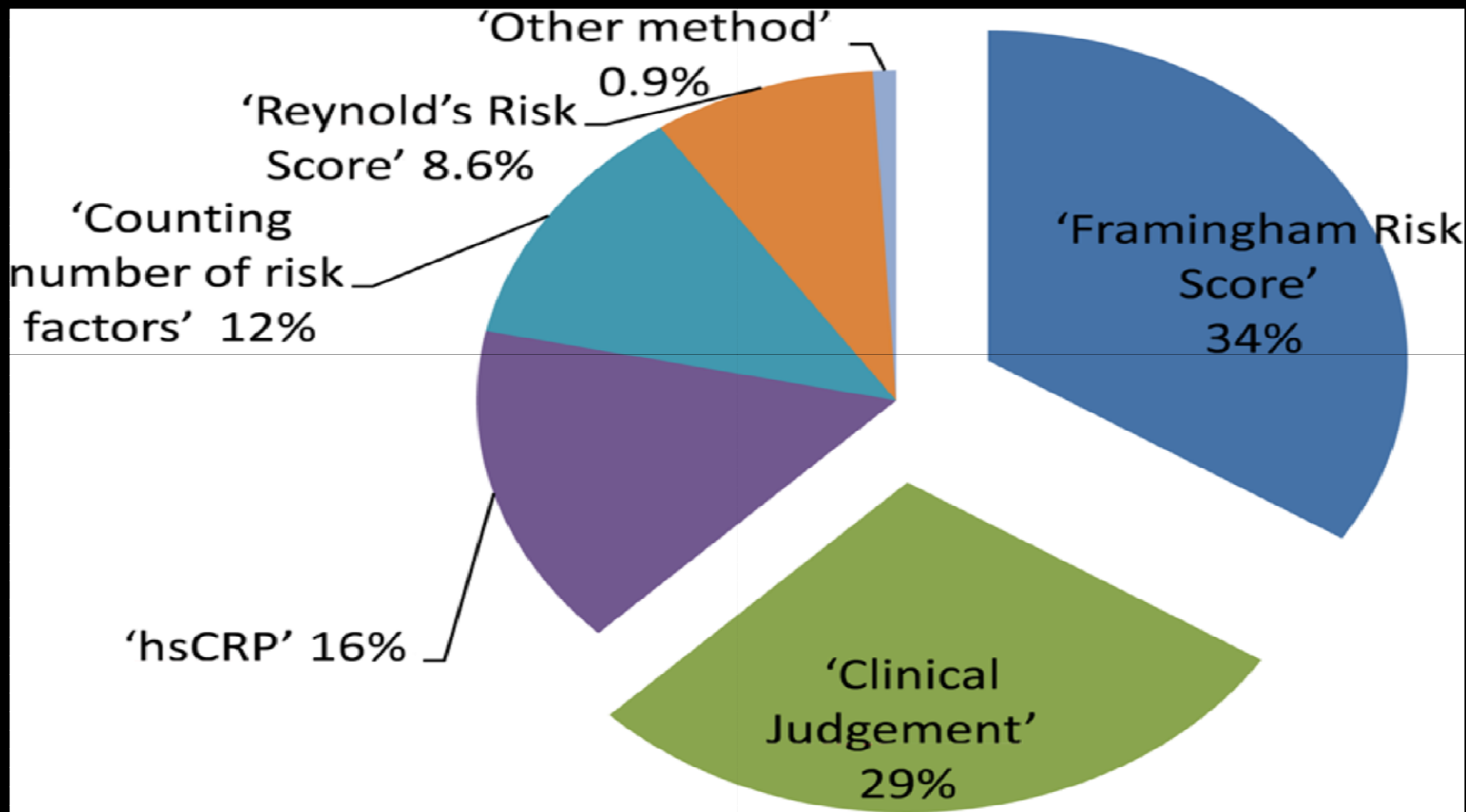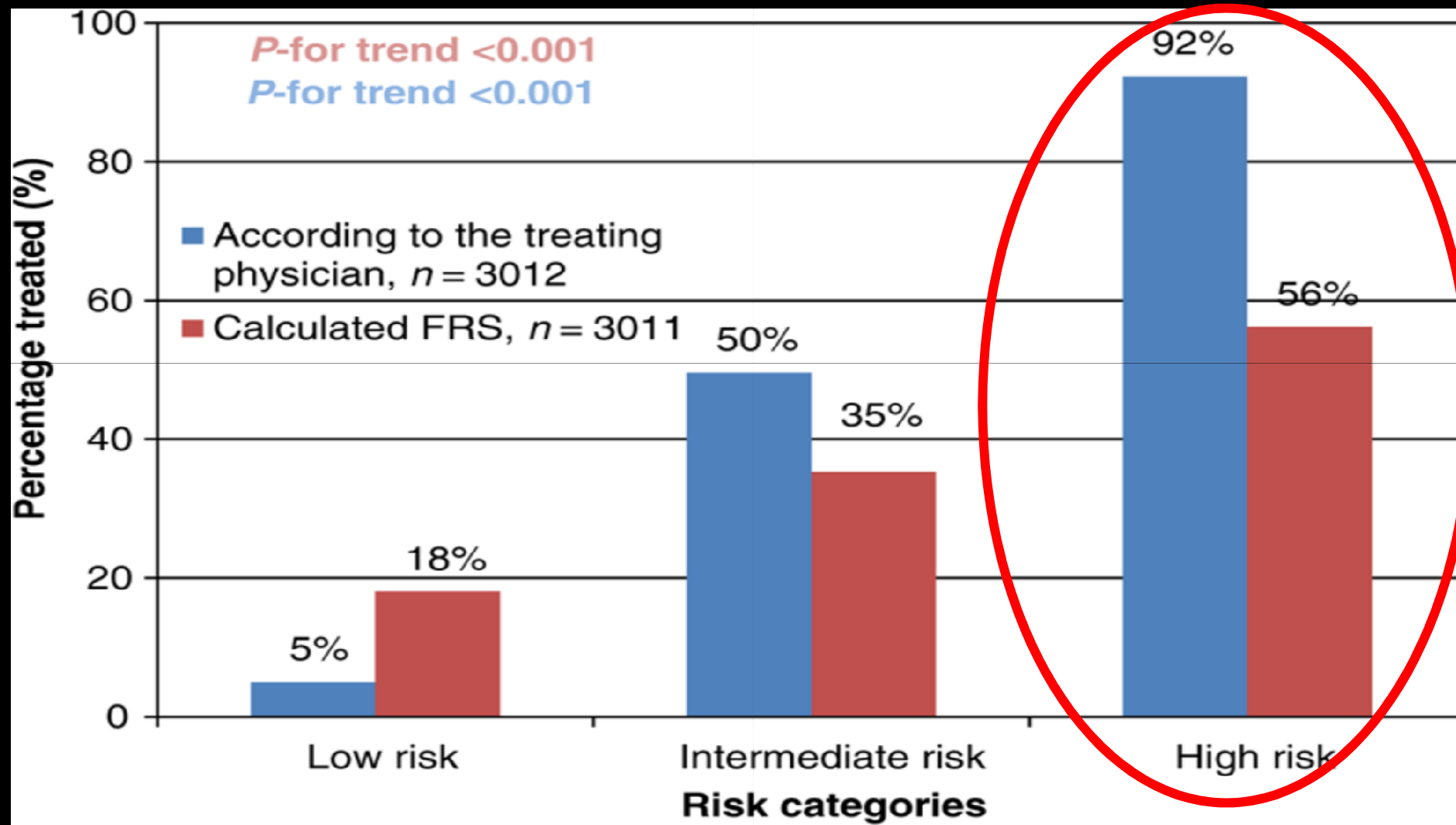
An Analysis of Calibration and Discrimination Among Multiple Cardiovascular Risk Scores in a Modern Multiethnic Cohort

MESA data (2000 to 2002): FRS-CHD, FRS-CVD, ATPIII-FRS-CHD, RRS, and AHA-ACC-ASCVD.
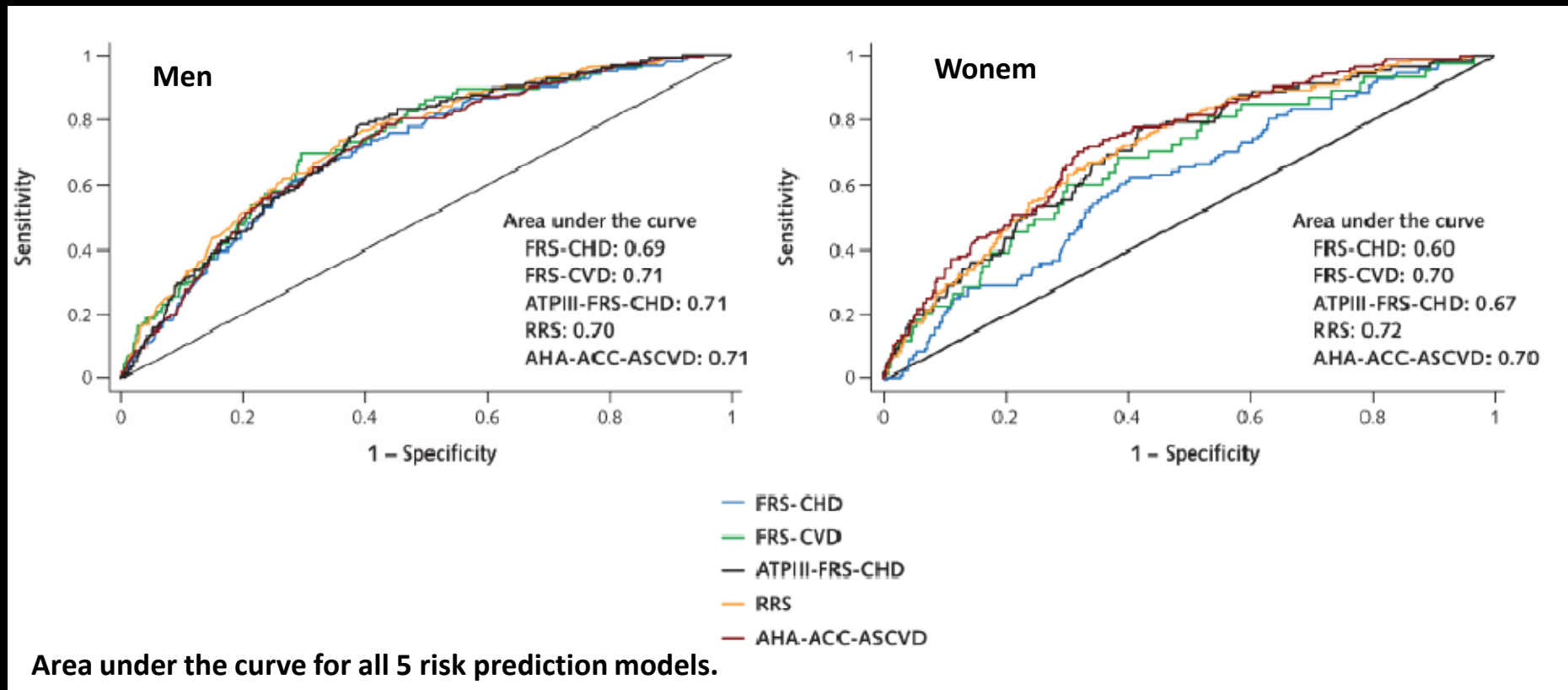
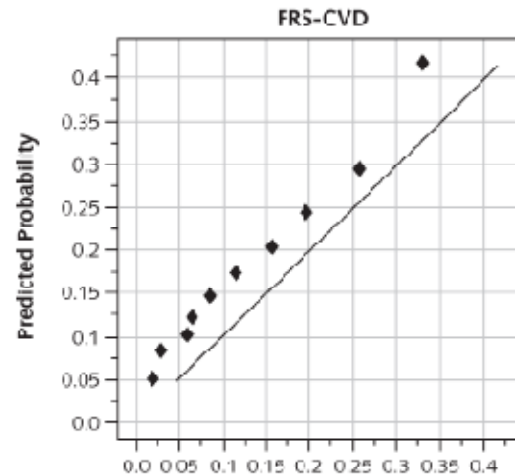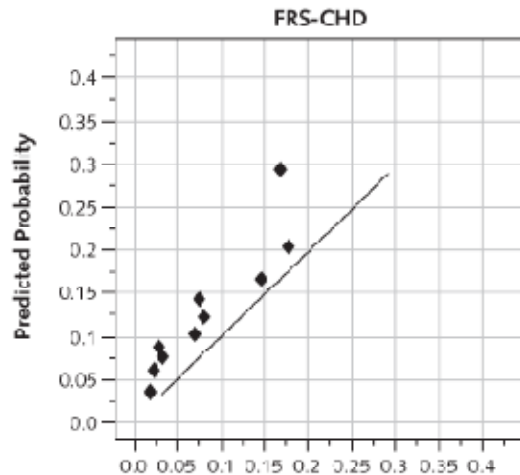Area under the curve for all 5 risk prediction models.

An Analysis of Calibration and Discrimination Among Multiple Cardiovascular Risk Scores in a Modern Multiethnic Cohort

overestimate risk by 37% to 154% in men and 8% to 67% in women.
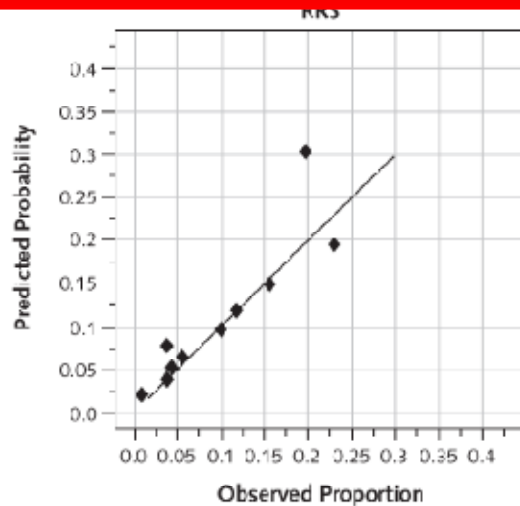
Hosmer–Lemeshow chi-square statistic:
FRS-CHD: 44.75; *P* < 0.001
FRS-CVD: 40.55; *P* < 0.001
ATPIII-FRS-CHD: 96.02; *P* < 0.001
RRS: 16.61; *P* = 0.084
AHA-ACC-ASCVD: 62.80; *P* < 0.001

Risk score–specific predicted and observed events in men, by decile of calculated risk

An Analysis of Calibration and Discrimination Among Multiple Cardiovascular Risk Scores in a Modern Multiethnic Cohort
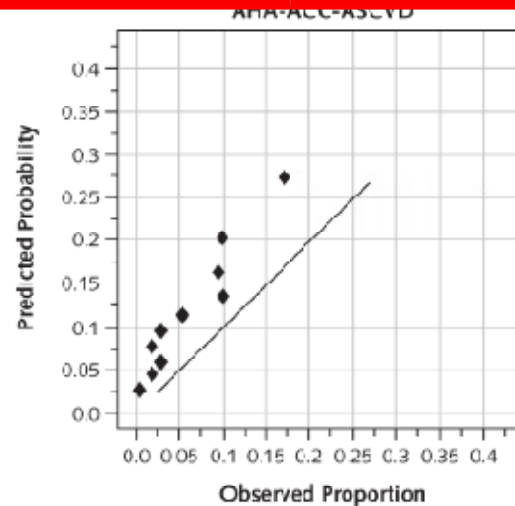

Hosmer–Lemeshow chi-square statistic:
FRS-CHD: 30.39; $P < 0.001$
FRS-CVD: 9.57; $P = 0.479$
ATPIII-FRS-CHD: 15.63; $P = 0.111$
RRS: 21.69; $P = 0.017$
AHA-ACC-ASCVD: 35.58; $P < 0.001$

Risk score–specific predicted and observed events in women
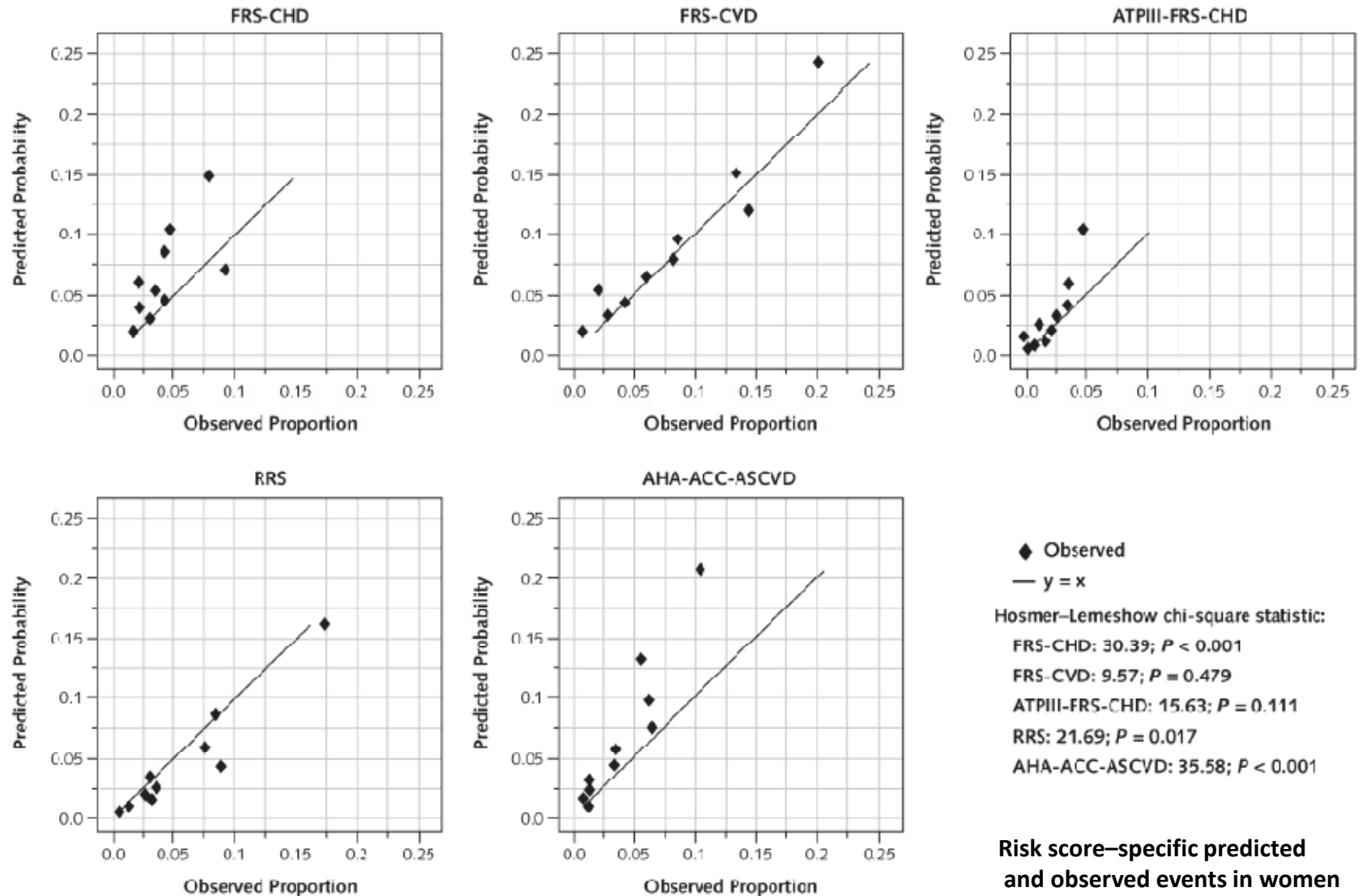
Qual o melhor Escore de Risco para a população brasileira?

MESA 10-Year CHD Risk with Coronary Artery Calcification

Male ○   Female ○

-85 years)   ┌──────────┐ Years
              └──────────┘

ry Artery Calcification   ┌──────────┐ Agatston
                           └──────────┘

hnicity   **Choose One**

Caucasian   ○
Chinese   ○
African American   ○
Hispanic   ○

s   Yes ○   No ○
ly Smoke   Yes ○   No ○
History of Heart Attack   Yes ○   No ○   History in parents, siblings, or children
nolesterol   ┌──────────┐ mg/dL   or   ┌──────────┐ mmol/L
olesterol   ┌──────────┐ mg/dL   or   ┌──────────┐ mmol/L
: Blood Pressure ┌──────────┐ mmHg   or   ┌──────────┐ kPa
owering Medication   Yes ○   No ○
nsion Medication   Yes ○   No ○

http://www.mesa-nhlbi.

┌─────────────────────────────────┐
│   **Calculate 10-year CHD risk**   │
└─────────────────────────────────┘

The Multi-Ethnic Study of Atherosclerosis

MESA 10-Year CHD Risk with Coronary Artery Calcification

[Back to CAC Tools](#)

Gender	Male ● Female ○	
Age (45-85 years)	70	Years
Coronary Artery Calcification	0	Agatston

Race/Ethnicity   **Choose One**

Caucasian	○
Chinese	○
African American	○
Hispanic	●

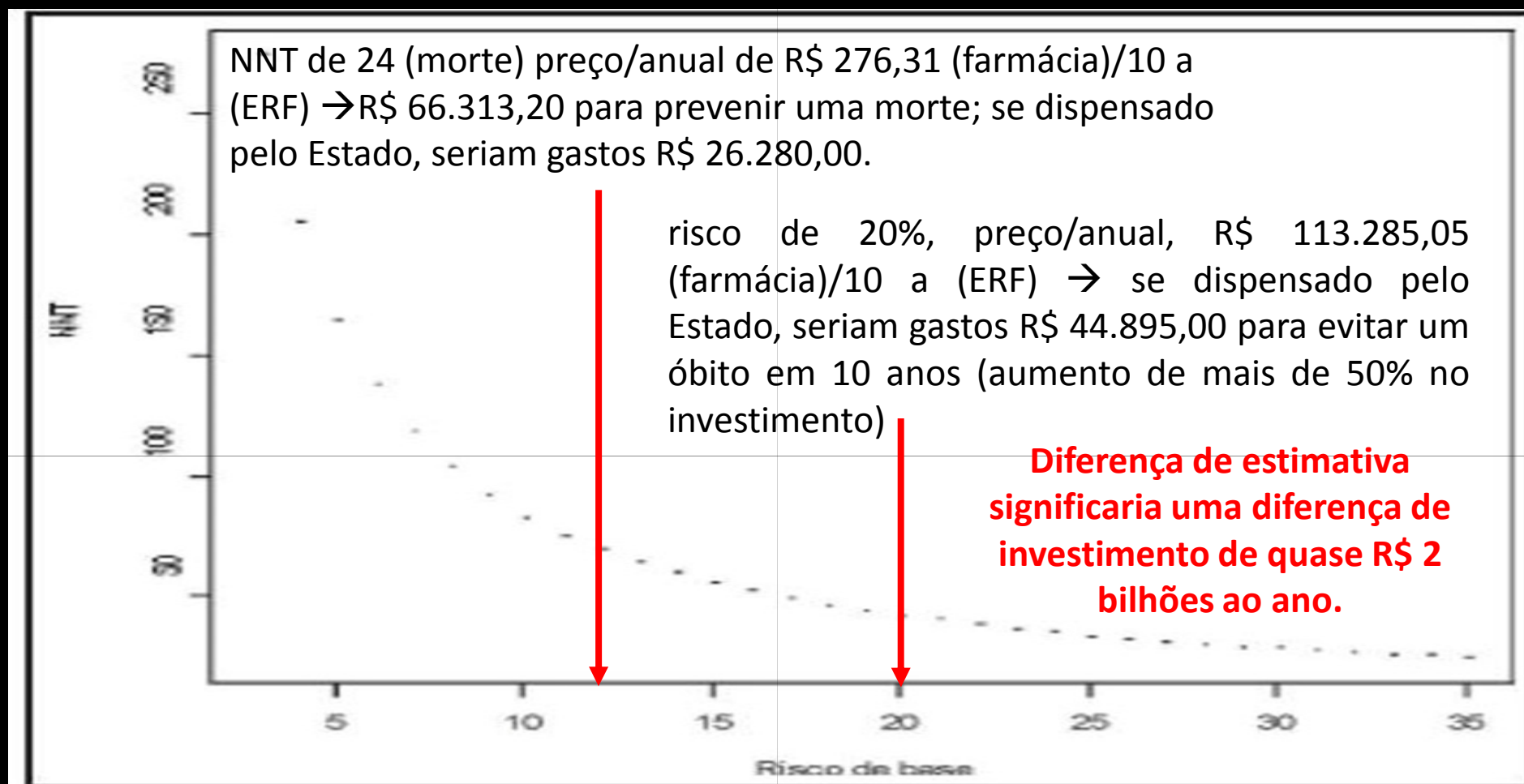|			
Diabetes	Yes ○	No ●	
Currently Smoke	Yes ○	No ●	
Family History of Heart Attack	Yes ○	No ●	History in parents, siblings, or children
Total Cholesterol	190	mg/dL	
HDL Cholesterol	50	mg/dL	
Systolic Blood Pressure	130	mmHg	
Lipid Lowering Medication	Yes ○	No ●	
Hypertension Medication	Yes ●	No ○	

Calculate 10-year CHD risk

The estimated 10-year risk of a CHD event for a person with this risk factor profile including coronary calcium is 3.1%. The esti...
10-year risk of a CHD event for a person with this risk factor profile if we did not factor in their coronary calcium score would be...

Ten-Year Coronary Heart Disease Risk Prediction Using Coronary Artery Calcium and Traditional Risk Factors: Derivation in the Multi-Ethnic Study of Atherosclerosis with Validation in the Heinz Nixdorf Recall Study and the Dallas Heart Study

NNT de 24 (morte) preço/anual de R$ 276,31 (farmácia)/10 a (ERF) →R$ 66.313,20 para prevenir uma morte; se dispensado pelo Estado, seriam gastos R$ 26.280,00.

risco de 20%, preço/anual, R$ 113.285,05 (farmácia)/10 a (ERF) → se dispensado pelo Estado, seriam gastos R$ 44.895,00 para evitar um óbito em 10 anos (aumento de mais de 50% no investimento)

Diferença de estimativa significaria uma diferença de investimento de quase R$ 2 bilhões ao ano.
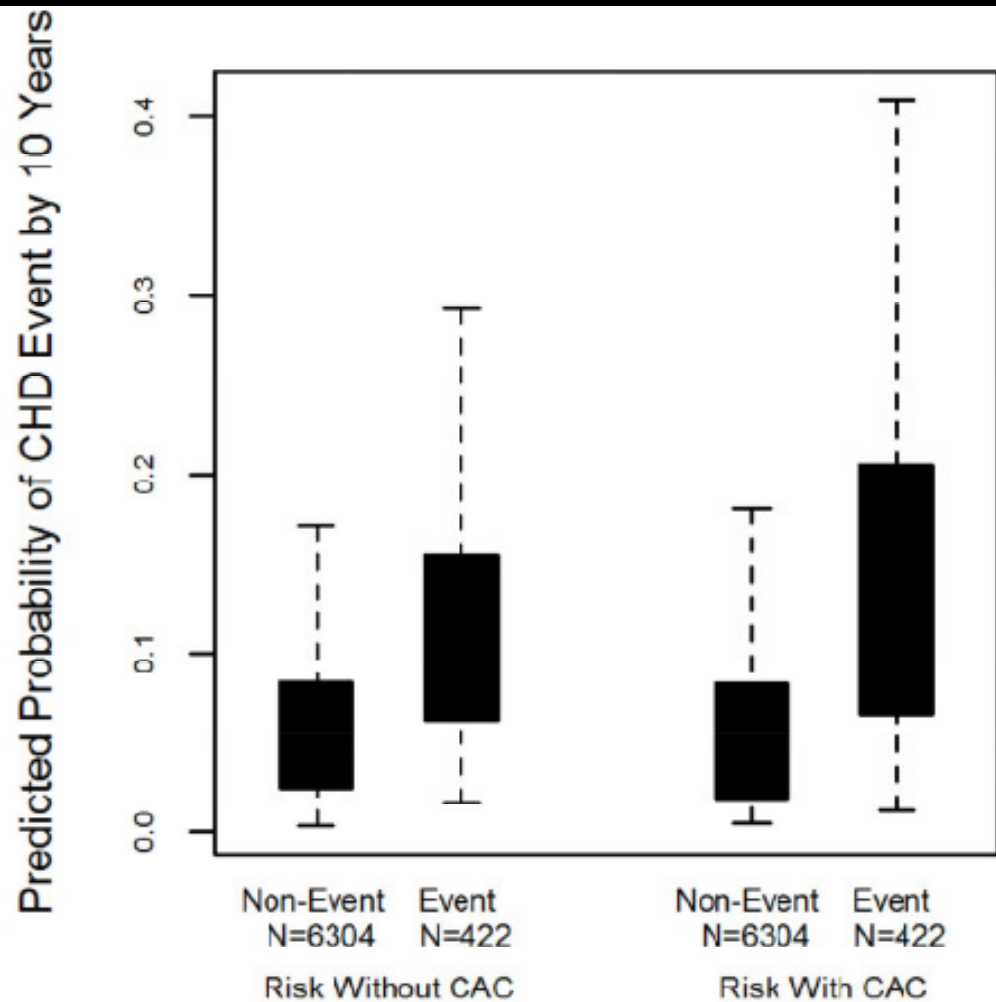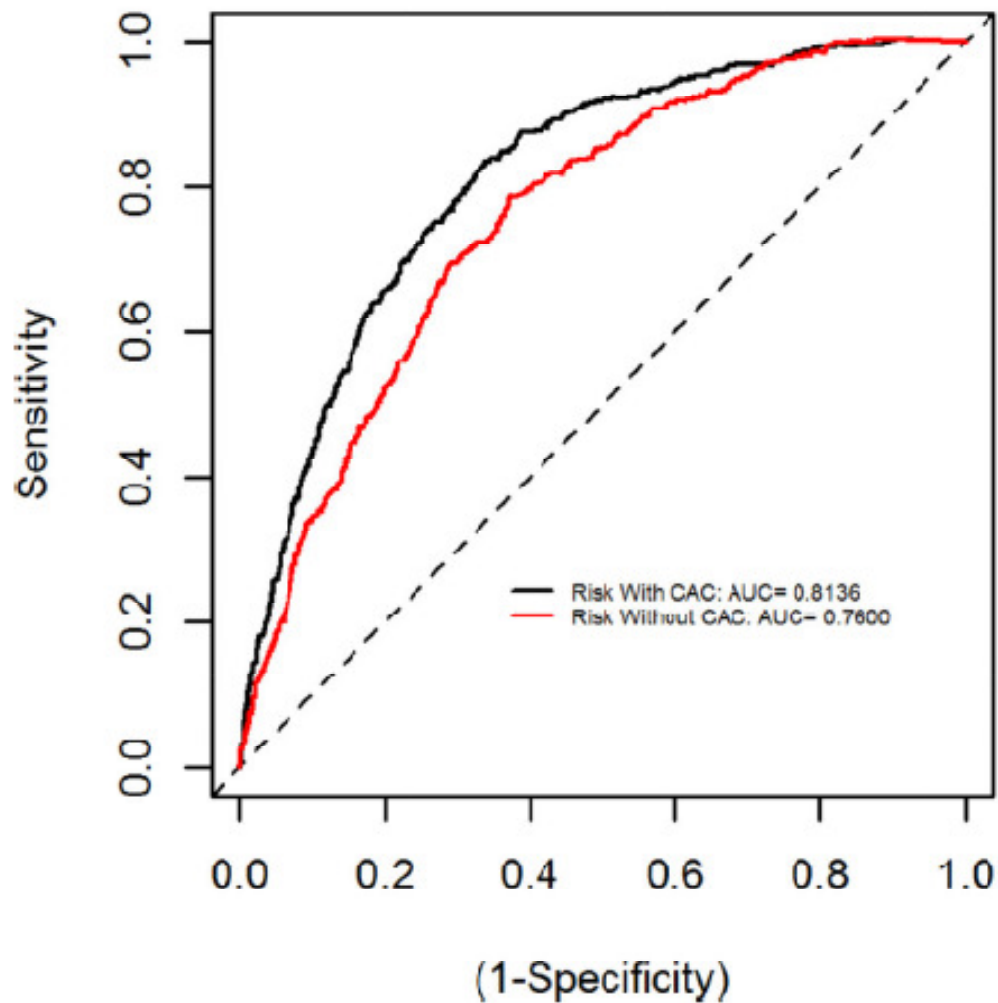
Figura 4
NNT segundo o risco de base do paciente A, considerando uma RRR de 12,2%