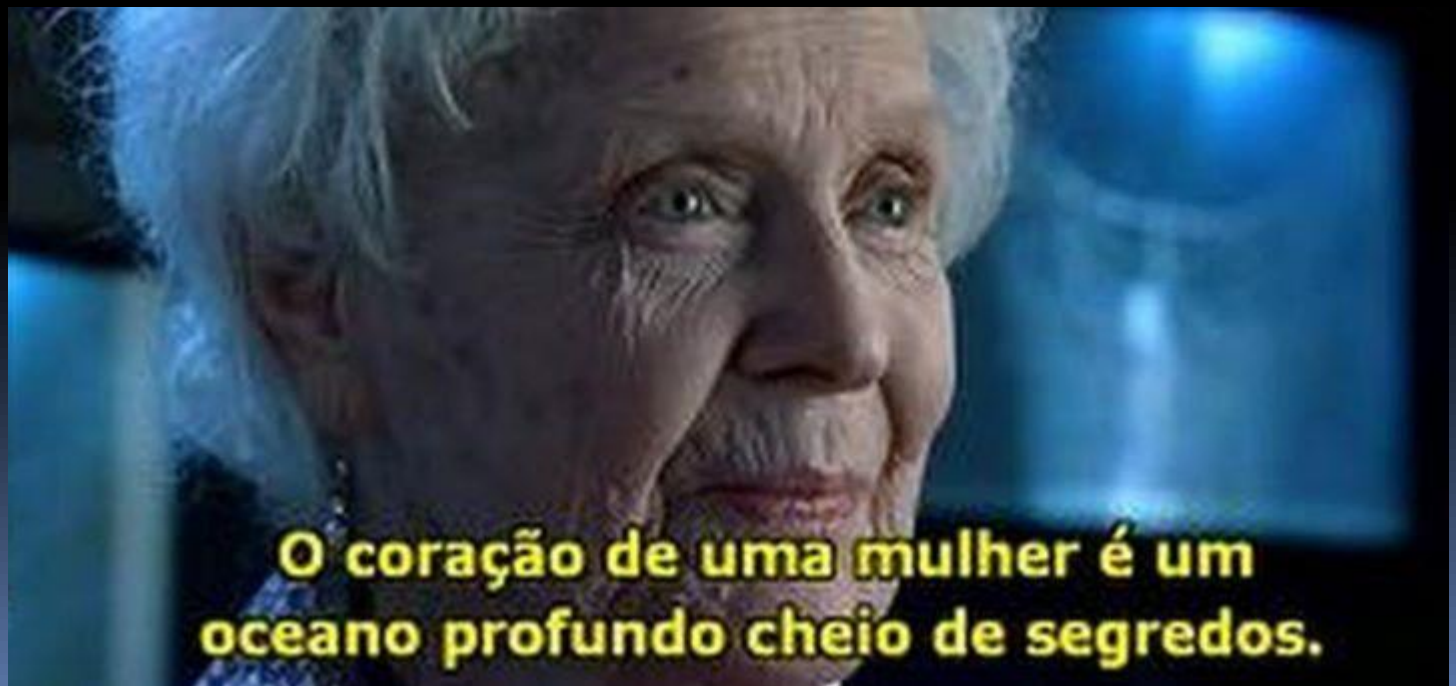
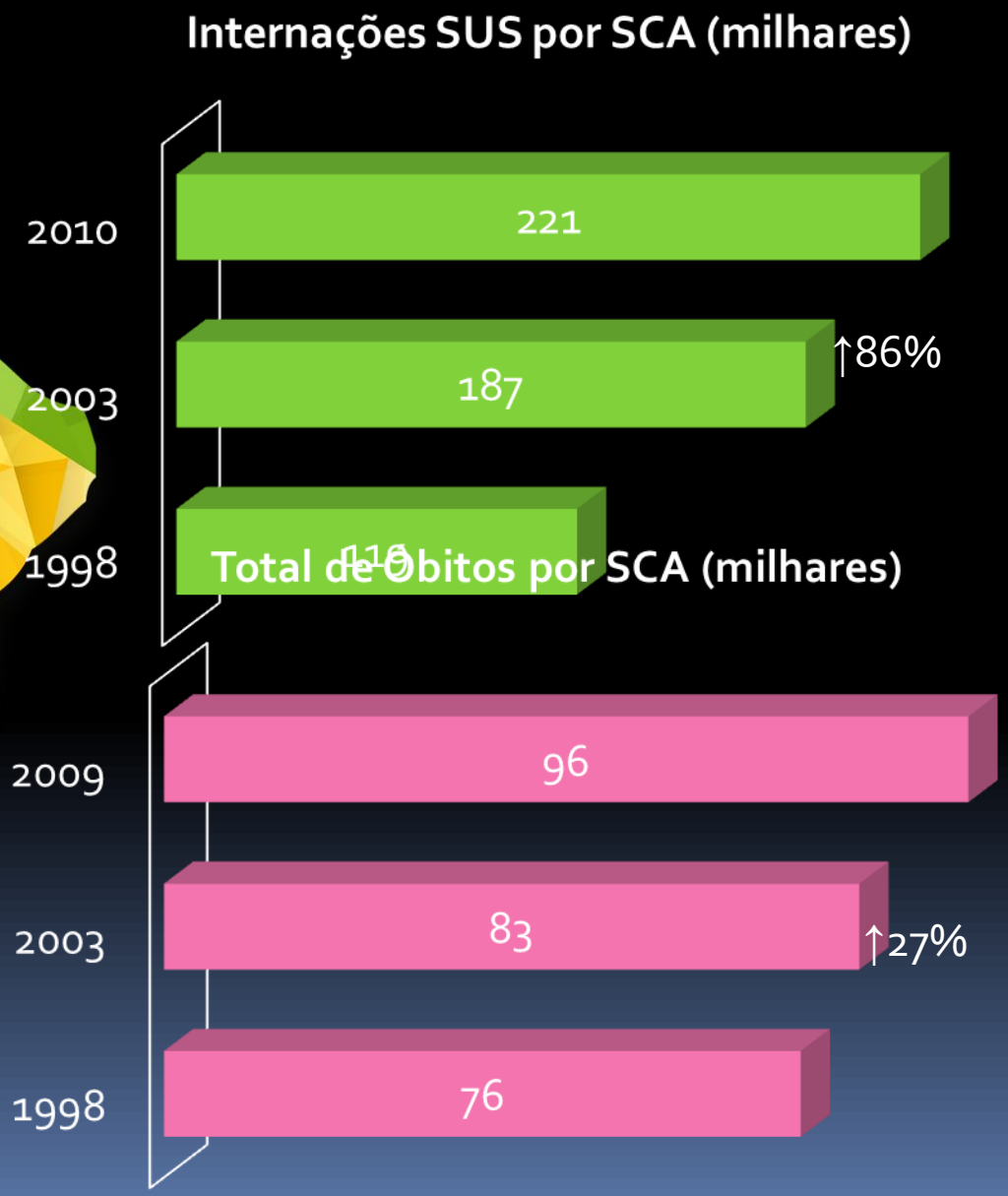
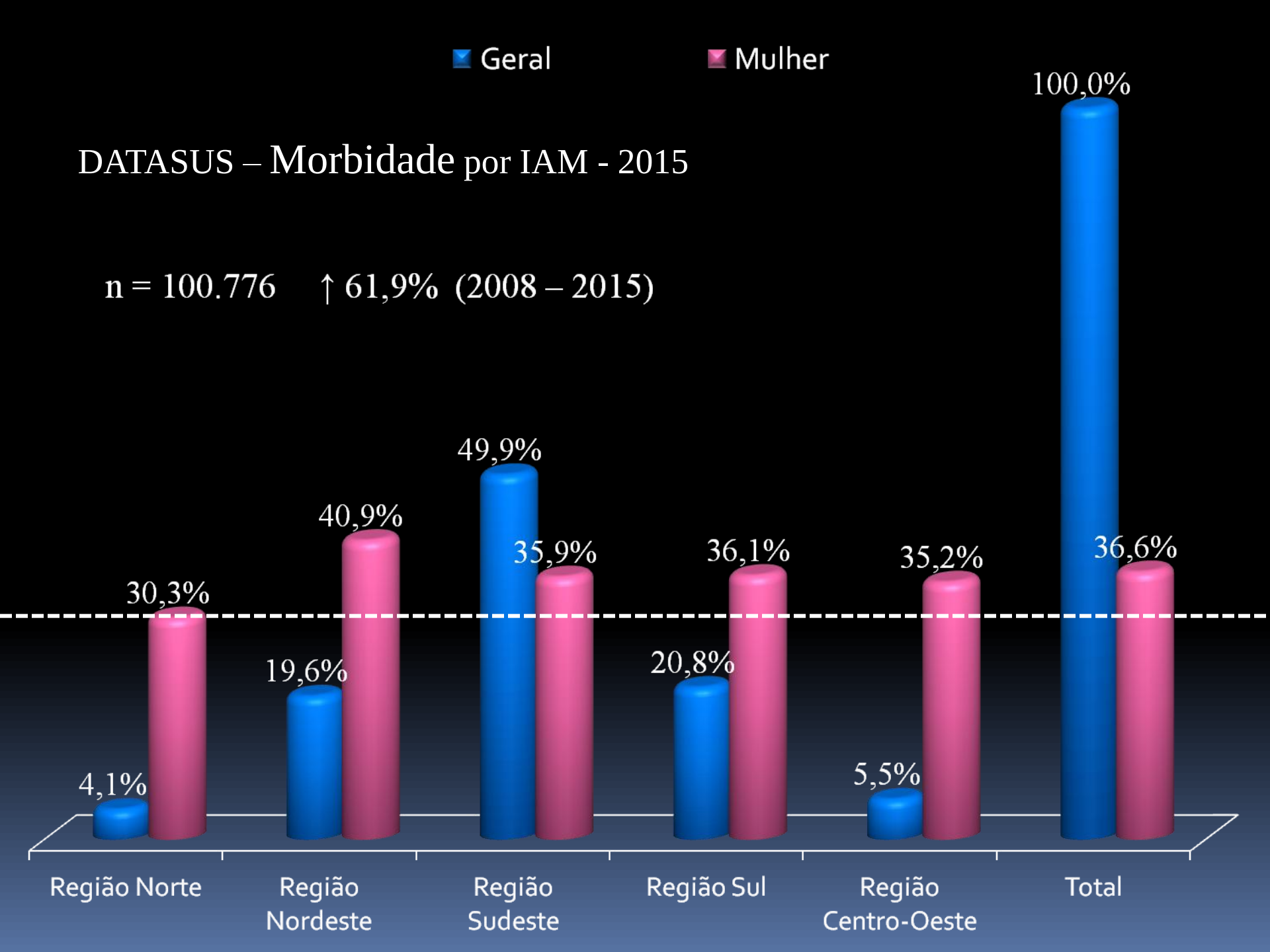
Coração da Mulher



SCA no Brasil

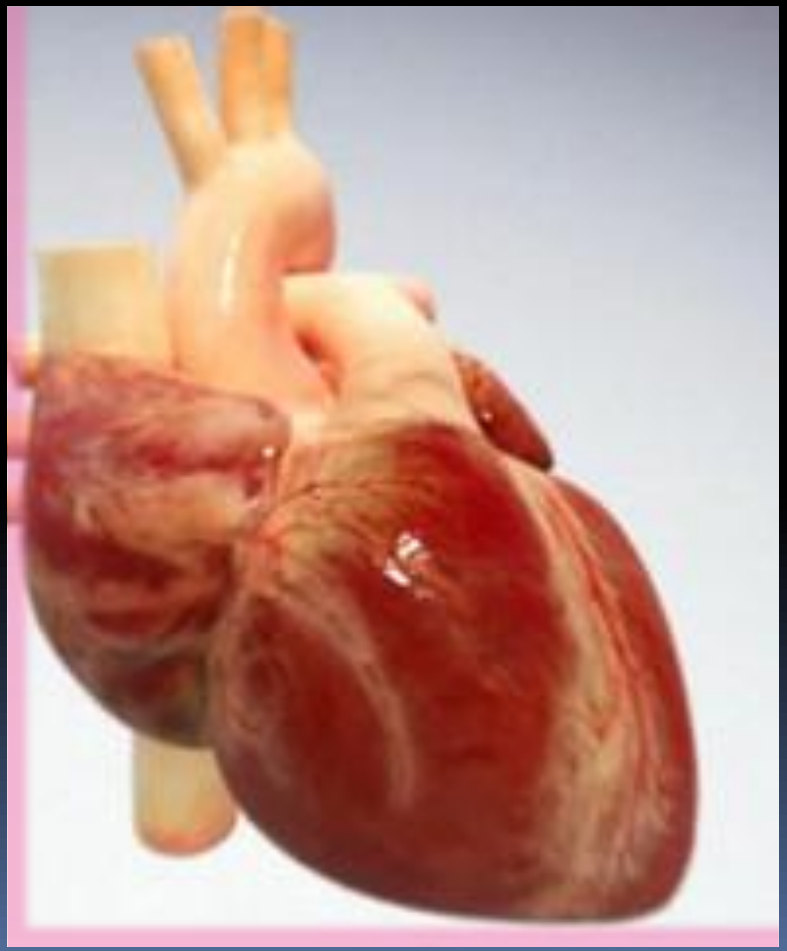


Datasus – www.datasus.gov.br


Geral
Mulher
DATASUS – Morbidade por IAM - 2015
n = 100.776 ↑ 61,9% (2008 – 2015)
4,1%
30,3%
19,6%
40,9%
49,9%
35,9%
20,8%
36,1%
5,5%
35,2%
100,0%
36,6%
Região Norte
Região Nordeste
Região Sudeste
Região Sul
Região Centro-Oeste
Total

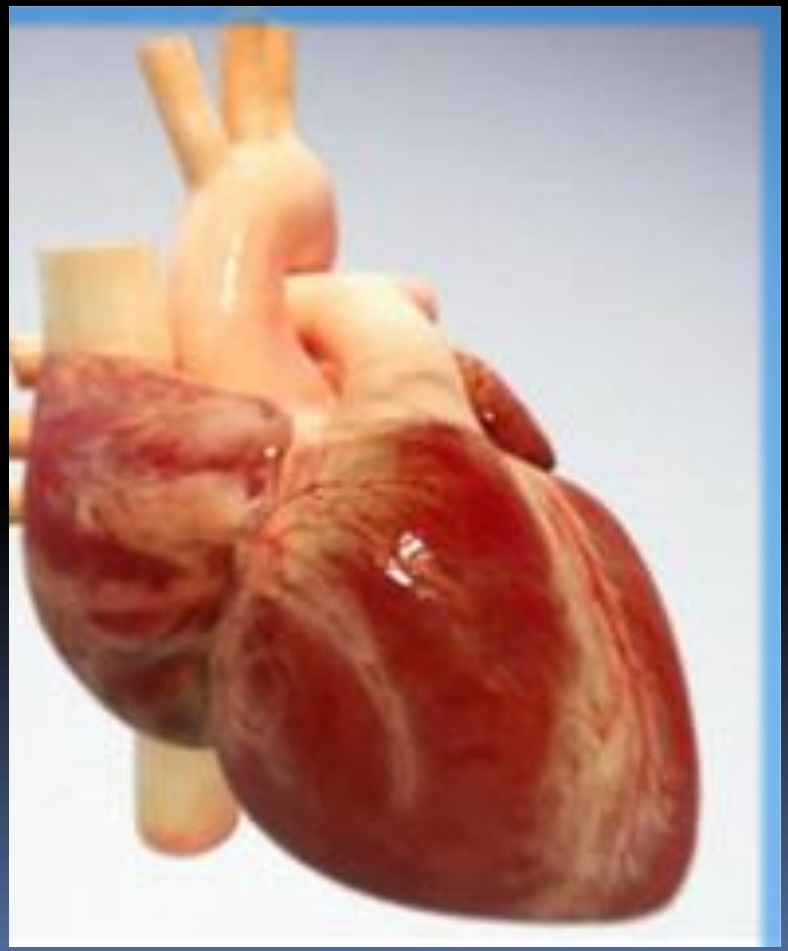
Há diferença?

- Mulher



- Anatômico
- Funcional
- Fisiológico
- Doenças
- Tratamentos

- Homem



Diferenças biológicas

Mulher X Homem

- Menor massa ventricular
- Cavidades menores
- Menor espessura de parede

- Menor número de Hemácias

- Predomínio Estrogenio/Testosterona

Consequencias

- Menor volume sistólico
- Maior frequencia cardíaca

- Menor transporte de O_2

- Menor massa magra (20% - 40%)
- Maior massa gorda (10%)
- Proteçao aterosclerótica

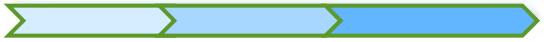
Cardiac Ageing in Women

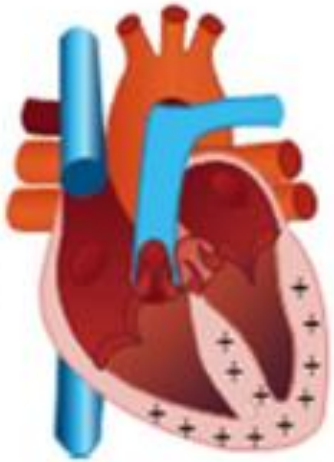
↑↑Pulsatile load
↑Steady state load
Hormonal effects

↑↑Concentric remodeling
↑↑Diastolic dysfunction

Cardiac Ageing in Men

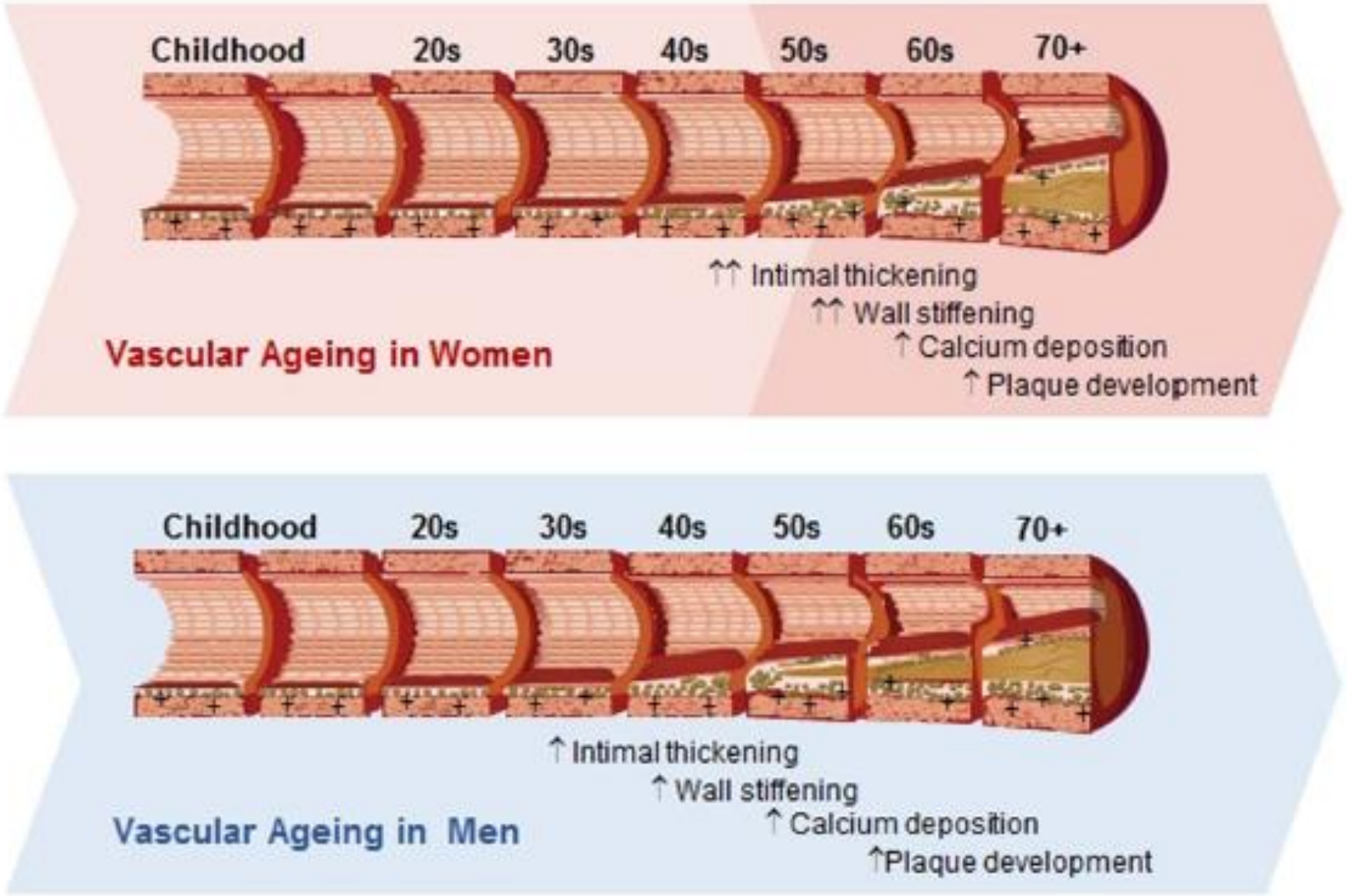
↑Pulsatile load
↑Steady state load





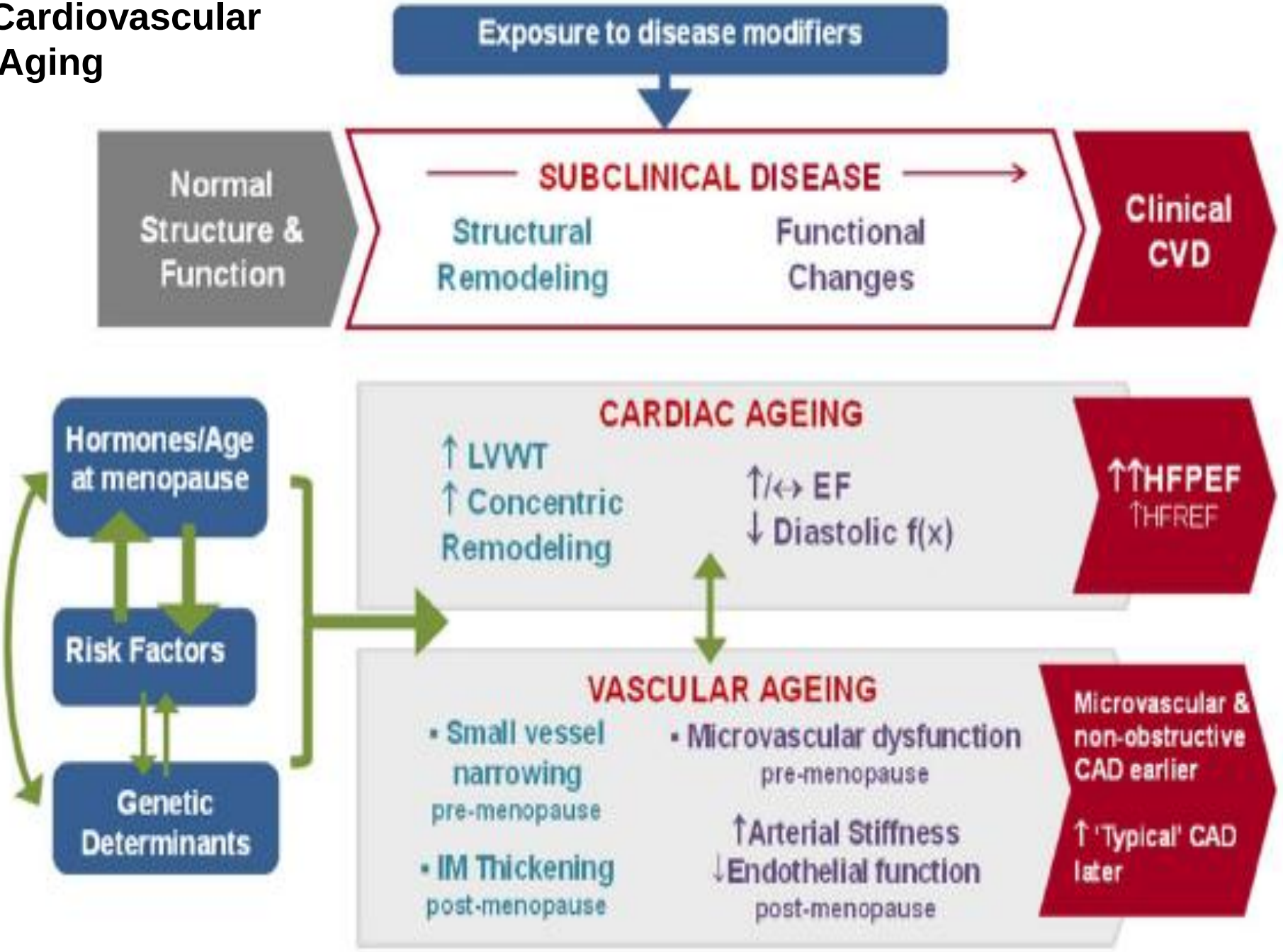
↑Concentric remodeling
↑Eccentric remodeling
↑Diastolic dysfunction

Merz AA, Cheng S. *Heart* 2016;**0**:1–7. doi:10.1136/heartjnl-2015-308769



Merz AA, Cheng S. *Heart* 2016;**0**:1–7. doi:10.1136/heartjnl-2015-308769

Cardiovascular Aging



1. Bolooki H, Vargas A, Green R, Kaiser GA, Ghahramani A. Results of direct coronary artery surgery in women. J Thorac Cardiovasc Surg 1975;69:271–277.
2. Kennedy JW, Kaiser GC, Fisher LD, Fritz JK, Myers W, Mudd JG, Ryan TJ. Clinical and angiographic predictors of operative mortality from the collaborative study in coronary artery surgery (CASS). [illegible]
3. Tyras DH, Barner HB, Kaiser GC, Codd JE, Laks H, Willman VL. Myocardial revascularization in women. Ann Thorac Surg 1978;25:449–453.
4. Cowley MJ, Mullin SM, Kelsey SF, Kent KM, Gruentzig AR, Detre KM, Passamani ER. Sex differences in early and long-term results of coronary angioplasty in the NHLBI PTCA Registry. Circulation 1985;71:90–97.
5. Peterson ED, [illegible] Effect of gender on the outcomes of contemporary percutaneous coronary intervention. Am J Cardiol 2001;88:359–364.
6. Bell MR, Holmes DR Jr, Berger PB, Garratt KN, Bailey KR, Gersh BJ. The changing in-hospital mortality of women undergoing percutaneous transluminal coronary angioplasty. JAMA 1993;269:2091–2095.

Impacto do sexo nas técnicas de revascularização

Sex Differences in Outcomes Following Percutaneous Coronary Intervention According to Age

Kelly C. Epps, MD; Elizabeth M. Holper, MD; Faith Selzer, PhD; Helen A. Vlachos; Sarah K. Gualano, MD; J. Dawn Abbott, MD; Alice K. Jacobs, MD; Oscar C. Marroquin, MD; Srihari S. Naidu, MD; Peter W. Groeneveld, MD, MS; Robert L. Wilensky, MD

Background—Women <50 years of age with coronary artery disease may represent a group at higher risk for recurrent ischemic events after percutaneous coronary intervention (PCI); however, no long-term, multicenter outcomes assessment exists in this population.

Methods and Results—Using the National Heart, Lung, and Blood Institute Dynamic Registry, we evaluated the association of sex and age on cardiovascular-related outcomes in10963 patients (3797 women, 394 <50 years) undergoing PCI and followed for 5 years. Death, myocardial infarction, coronary artery bypass graft surgery, and repeat PCI were primary outcomes comprising major adverse cardiovascular events. Although procedural success rates were similar by sex, the cumulative rate of major adverse cardiovascular events at 1 year was higher in young women (27.8 versus 19.9%; P=0.003), driven largely by higher rates of repeat revascularizations for target vessel or target lesion failure (coronary artery bypass graft surgery: 8.9% versus 3.9%, P<0.001, adjusted hazard ratio 2.4, 95% confidence interval 1.5–4.0; PCI: 19.0% versus 13.0%, P=0.005, adjusted hazard ratio 1.6, 95% confidence interval 1.2–2.2). At 5 years, young women remained at higher risk for repeat procedures (coronary artery bypass graft surgery: 10.7% versus 6.8%, P=0.04, adjusted hazard ratio 1.71, 95% confidence interval 1.01–2.88; repeat PCI [target vessel]: 19.7% versus 11.8%, P=0.002, adjusted hazard ratio 1.8, 95% confidence interval 1.24–2.82). Compared with older women, younger women remained at increased risk of major adverse cardiovascular events, whereas all outcome rates were similar in older women and men.

Conclusions—Young women, despite having less severe angiographic coronary artery disease, have an increased risk of target vessel and target lesion failure. The causes of this difference deserve further investigation.

(*Circ Cardiovasc Qual Outcomes*. 2016;9:S16-S25. DOI: 10.1161/CIRCOUTCOMES.115.002482.)

Table 3. One-year and 5-Year Cumulative Event Rates

	Age <50			Age ≥50		
	Women	Men	*P* Value	Women	Men	*P* Value
One-year events, %						
	N=394	N=1142		N=3403	N=6025	
MACE	27.8	19.9	0.003	22.6	21.2	0.15
Death	2.2	2.4	0.84	5.8	4.9	0.07
MI	6.3	4.6	0.25	5.4	5.1	0.67

Conclusions—Young women, despite having less severe angiographic coronary artery disease, have an increased risk of target vessel and target lesion failure. The causes of this difference deserve further investigation.

Multiple studies have shown that women with acute coronary syndromes (ACS) are less likely to be treated with guideline-directed medical therapies,[8–10] less likely to undergo cardiac catheterization,[8–11] and less likely to receive timely reperfusion.[9,10,12–16]

Sex differences in clinical presentation have consequences for timely identification of ischemic symptoms, appropriate triage, and judicious diagnostic testing and management. The detrimental consequences for women are misdiagnosis, delayed revascularization, and higher AMI mortality rates.

Table 1. Typical Versus Atypical Symptoms in Women Presenting With AMI

Typical Symptoms	Atypical Symptoms
Chest pain/discomfort (pressure, tightness, squeezing)	Chest pain: sharp, pleuritic, burning, aching, soreness, reproducible
Additional symptoms with chest pain Radiation of pain to jaw, neck, shoulders, arm, back, epigastrium Associated symptoms: dyspnea, nausea, vomiting, lightheadedness, diaphoresis	Other symptoms excluding chest pain Unusual fatigue Unusual shortness of breath Upper back/chest pain Neck, jaw, arm, shoulder, back, epigastric pain Flu-like symptoms Dizziness Generalized scared/anxiety feeling Generalized weakness Indigestion Palpitations

Anticoncepcionais e Risco cardiovascular

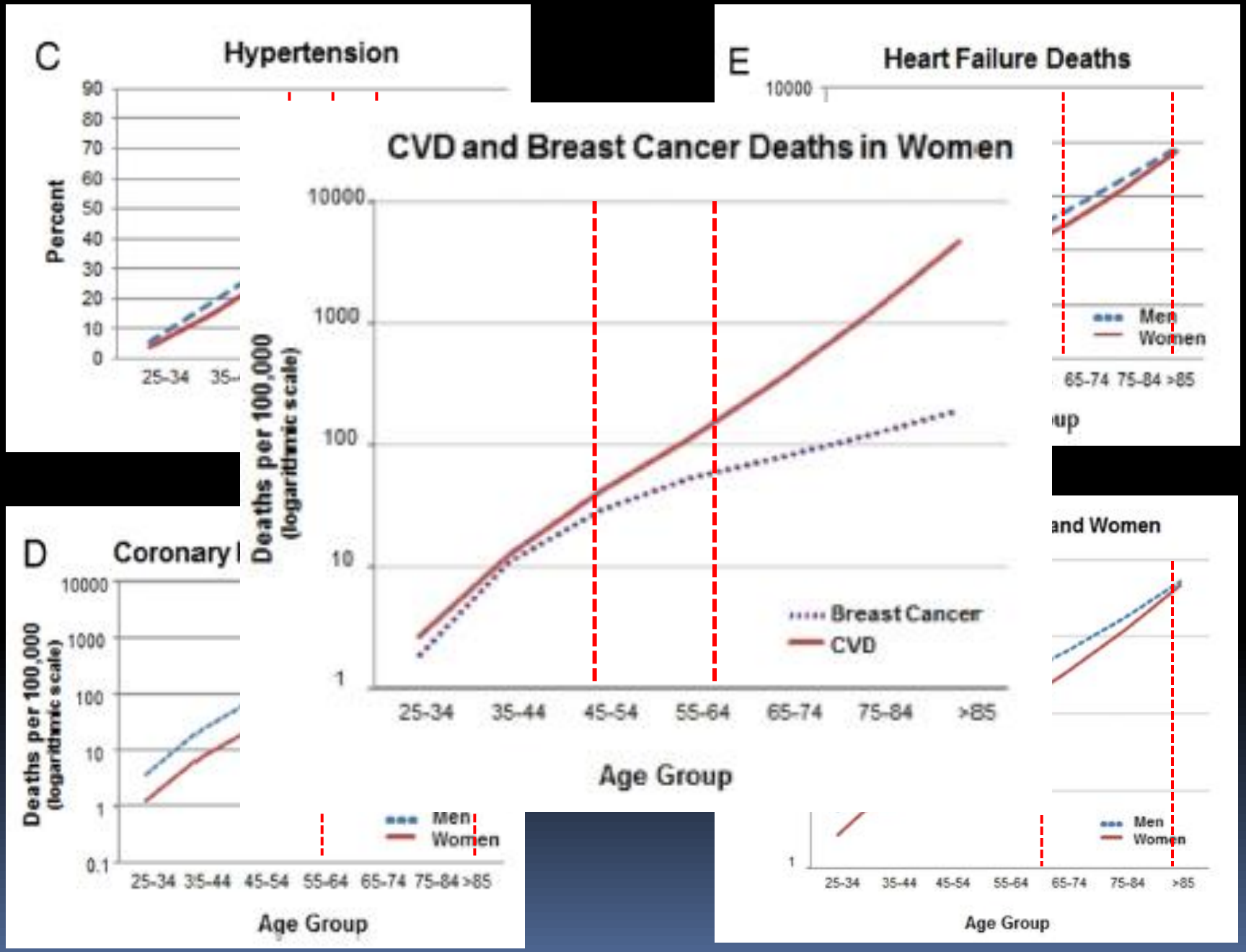
Disfunção endotelial

- **Vasoespasmo**
- **Aterosclerose (iniciação, progressão, complicação)**

Hipercoagulabilidade

Consequências

- **Risco aumentado de**
  - **AVC**
  - **TVP**
  - **TEP**
  - **IM**


C
Hypertension
Percent
90
80
70
60
50
40
30
20
10
0
25-34
35-
E
Heart Failure Deaths
10000
Men
Women
65-74 75-84 >85
up
CVD and Breast Cancer Deaths in Women
Deaths per 100,000
(logarithmic scale)
10000
1000
100
10
1
Breast Cancer
CVD
25-34 35-44 45-54 55-64 65-74 75-84 >85
Age Group
D
Coronary
Deaths per 100,000
(logarithmic scale)
10000
1000
100
10
1
0.1
Men
Women
25-34 35-44 45-54 55-64 65-74 75-84 >85
Age Group
and Women
1
Men
Women
25-34 35-44 45-54 55-64 65-74 75-84 >85
Age Group


OBRIGADO