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- Questions will be addressed during the 'Question and Answer' portion of the program using the Q&A feature.
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In partnership with:

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Northeast Ohio Medical University

University of Cincinnati College of Medicine

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Ohio Department of Medicaid

Primary and Secondary Prevention of Cardiovascular Disease in Women

Statewide Webinar

December 4, 2024

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Welcome

Michael W. Konstan, MD
Principal Investigator, Cardi-OH

Shari Bolen, MD, MPH
Co-Principal Investigator, Cardi-OH

Case Western Reserve University School of Medicine

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About Cardi-OH

Founded in 2017, the mission of Cardi-OH is to improve cardiovascular and diabetes health outcomes and eliminate disparities in Ohio's Medicaid population.

WHO WE ARE: An initiative of health care professionals across Ohio's seven medical schools.

WHAT WE DO: Identify, produce, and disseminate evidence-based cardiovascular and diabetes best practices to primary care teams.

HOW WE DO IT: Online library of best practices resources available at Cardi-OH.org and via our web app, including monthly newsletters, podcasts, webinars, and quality improvement using the Project ECHO® virtual training model.

Learn more at Cardi-OH.org

Special Thanks

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  - The survey link will be shared at the end of today's webinar and also sent by email.
  - Please complete by COB Wednesday, December 11.

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- The following speaker has a relevant financial interest or affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of their presentation*:
  - Leslie Cho, MD
- The following speakers have no relevant financial interest or affiliation with any organizations that could be perceived as a real or apparent conflict of interest in the context of the subject of their presentation:
  - Shari Bolen, MD, MPH; Michael W. Konstan, MD; Amy Zack, MD
- The following members of the planning committee do not have any disclosures or financial relationships from any ineligible companies:
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- 1.0 AMA PRA Category 1 Credit™ is available for this webinar.
- Attendees who indicated on the registration form that they were interested in claiming CME credit for this webinar will receive an email from CloudCME next week with more information.
- Complete CME Evaluation and claim credits by Friday, December 20, 2024.
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Agenda

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Topics	Presenter(s)	Timing
Welcome and Overview	Michael W. Konstan, MD Shari Bolen, MD, MPH	5 mins.
Primary and Secondary Prevention of Cardiovascular Disease in Women	Leslie Cho, MD	40 mins.
Audience Question and Answer	Amy Zack, MD (Moderator) Leslie Cho, MD	10 mins.
Next Steps and Wrap Up	Shari Bolen, MD, MPH	5 mins.

Leslie Cho, MD
Case Western Reserve University
School of Medicine
Cleveland Clinic

Amy Zack, MD (Moderator)
Case Western Reserve University
School of Medicine
Cleveland Clinic

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Primary and Secondary Prevention of Cardiovascular Disease in Women

Leslie Cho, MD, FACC, FSCAI, FESC

Professor of Medicine, Cleveland Clinic Lerner College of Medicine of Case Western Reserve University

Section Head, Preventive Cardiology and Rehabilitation

Director, Women's Cardiovascular Center

Cleveland Clinic

Objectives

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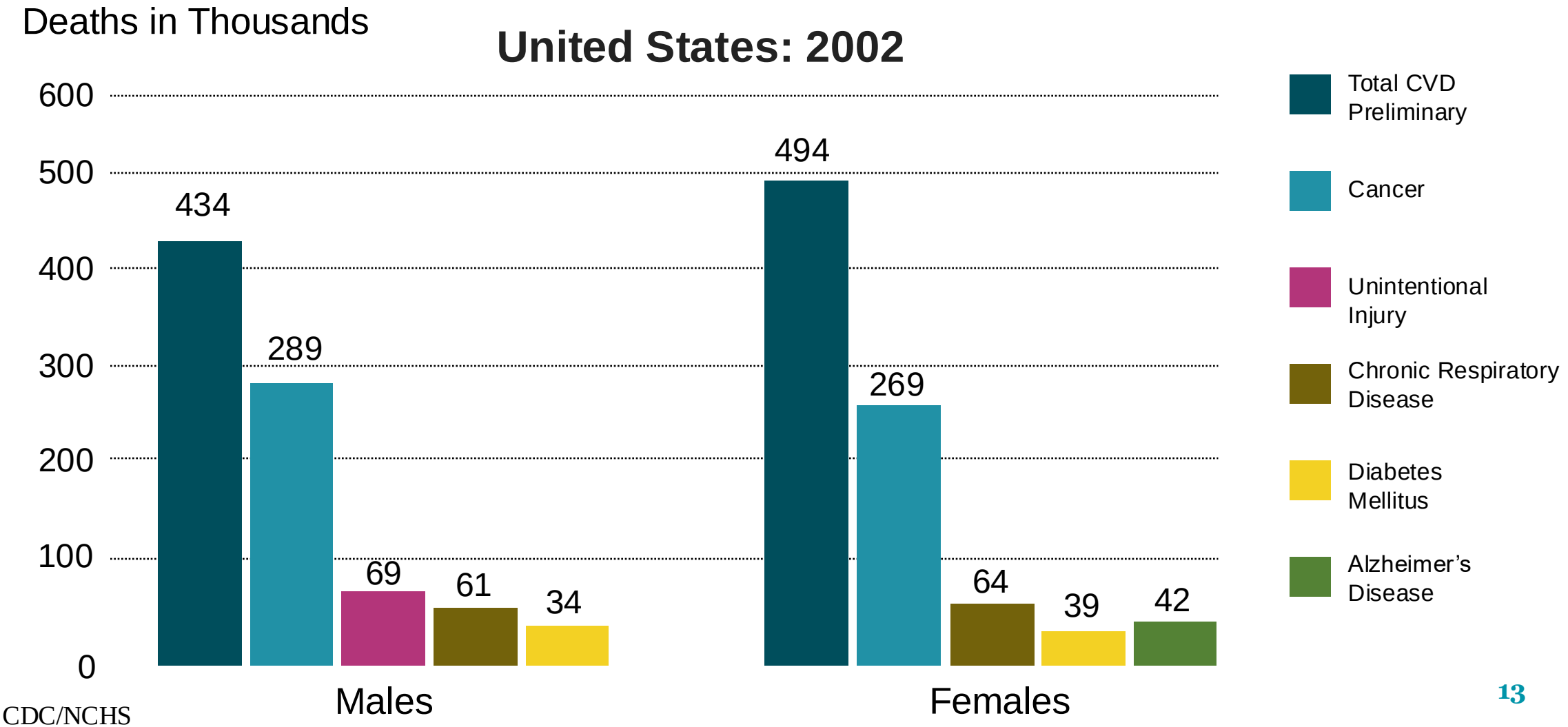
- Identify cardiovascular risk considerations unique to women.
- Provide evidence-based patient education on the prevention and risk management of cardiovascular disease.
- Screen and treat cardiovascular disease risk factors in women.

Leading Causes of Death for All Males and Females



CDC/NCHS

Issues

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- Are there gender differences in:
  - Risk factors?
  - Clinical manifestation of cardiovascular disease?
  - Cardiac testing?
  - Treatment and outcome?

Risk Factors

Risk Factors

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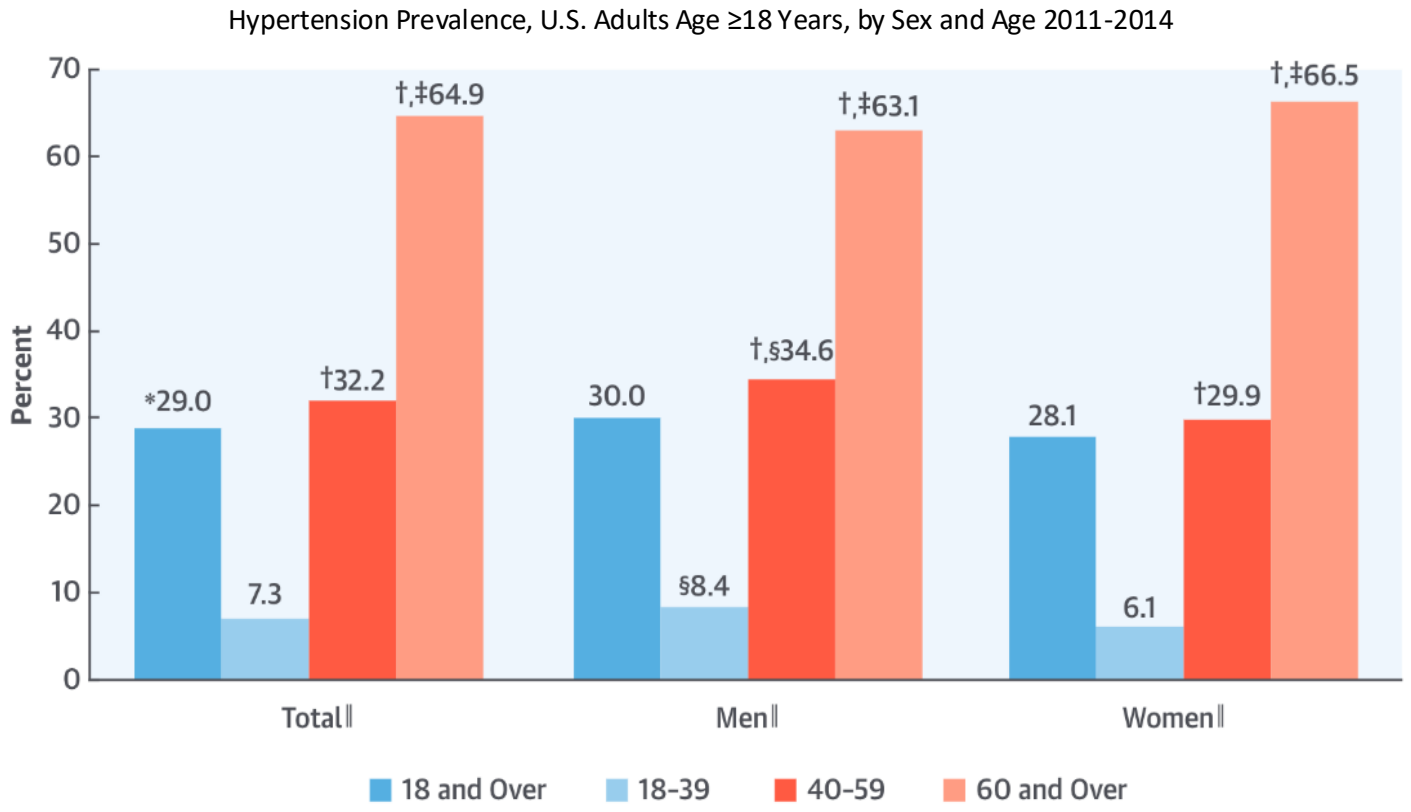
- Hypertension (HTN)
- Hyperlipidemia
- Diabetes
- Smoking
- Family history

HTN Prevalence

Data from the National Health and Nutrition Examination Survey (NHANES) shows that the prevalence of HTN is lower among pre-menopausal women and increases after menopause.



Wenger NK, Arnold A, Bairey Merz CN, et al. J Am Coll Cardiol. 2018 Apr 24;71(16):1797-1813.

HTN Risk Factors

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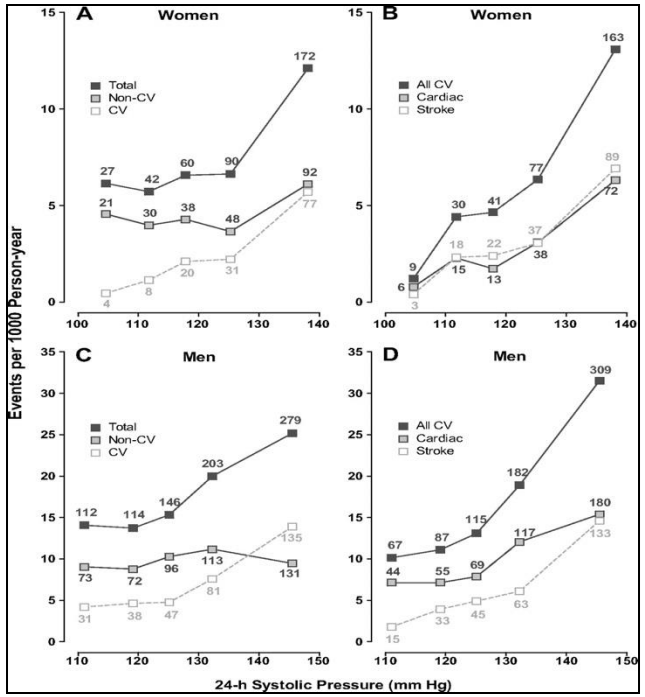
- Analysis of Nurses' Health Study including ~89,000 healthy women
- Followed for 15 years for incident HTN

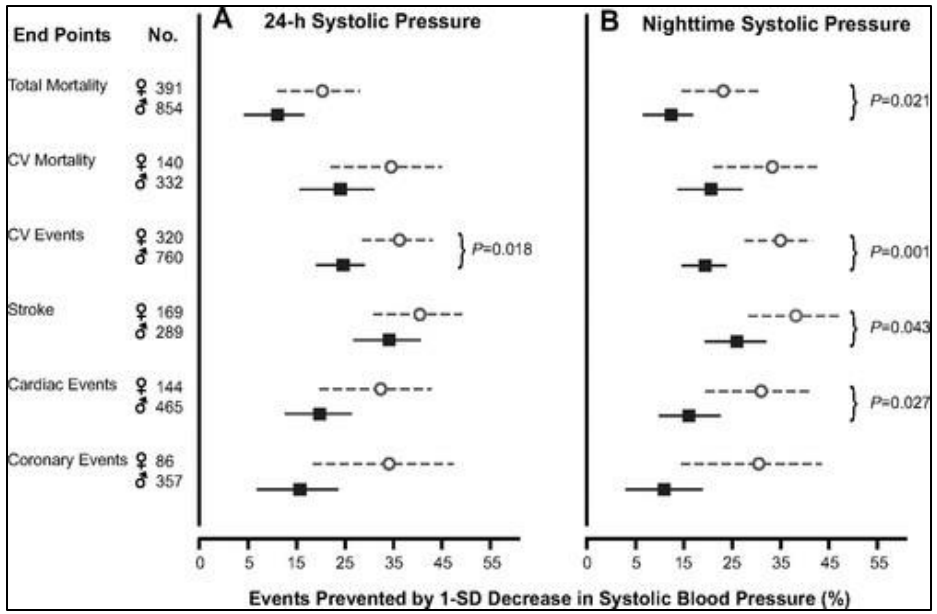
Risk Factor	PAR of incident HTN (95% CI)
BMI > 30	**40% (38-41%)**
Not following DASH diet	14% (9-19%)
Physical inactivity	10% (8-12%)
Excessive alcohol intake	4% (1-7%)

Forman JP, Stampfer MJ, Curhan GC. JAMA. 2009;302(4):401-411.

HTN Screening

- Women, especially post-menopausal, are more likely to have a non-dipping nighttime BP pattern.
- Women are more likely to experience CV events related to nighttime BP.





Boggia J, Thijs L, Hansen TW, et al. Hypertension. 2011;57(3):397-405.

Fibromuscular Dysplasia (FMD)

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- 90% of patients with FMD are women.
- Of FMD patients, 75-80% have renal artery involvement.
  - First line of treatment in medical therapy
  - If resistant or renal dysfunction, balloon angioplasty
- Time of diagnosis: 40-60 years of age.

Diabetes

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- 26 million people in the U.S. with DM.
- 12.8 million women with DM.
- Women have higher rates of type 2 DM in youth, while men have higher prevalence in midlife.
- Women with type 2 DM have 25-50% greater excess risk of cardiovascular events vs. men.
- Eliminates 10-year gender protection.

Meta-Analysis 49 Studies 5 Million Patients

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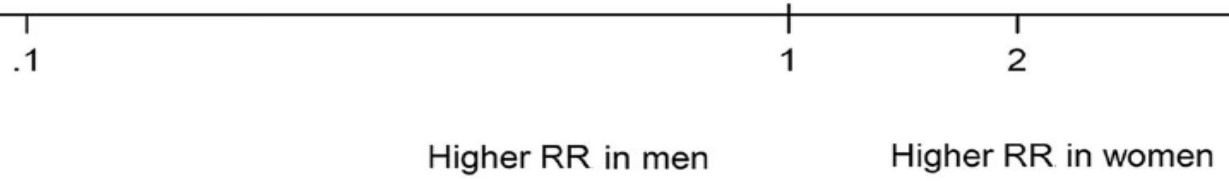
Outcomes	N	Individuals	RRR(95% CI)	P value
All-cause mortality	28	3,887,565	1.13 (1.07, 1.19)	P<0.001
Cancer mortality	14	4,482,501	1.02 (0.99, 1.06)	P=0.60
CVD mortality	23	2,067,486	1.30 (1.13, 1.49)	P<0.001
CHD mortality	23	2,050,929	1.58 (1.32, 1.90)	P<0.001
Stroke mortality	15	2,292,387	1.08 (1.01, 1.15)	P=0.02
Respiratory mortality	4	1,633,520	1.08 (0.95, 1.23)	P=0.26
Infection mortality	3	1,638,651	1.11 (0.90, 1.38)	P=0.33



Wang Y, O'Neil A, Jiao Y, et al. BMC Med. 2019;17(1):136.

Most Risk Factors for Nonfatal Myocardial Infarction (MI) are the Same in Men and Women - NOT DIABETES

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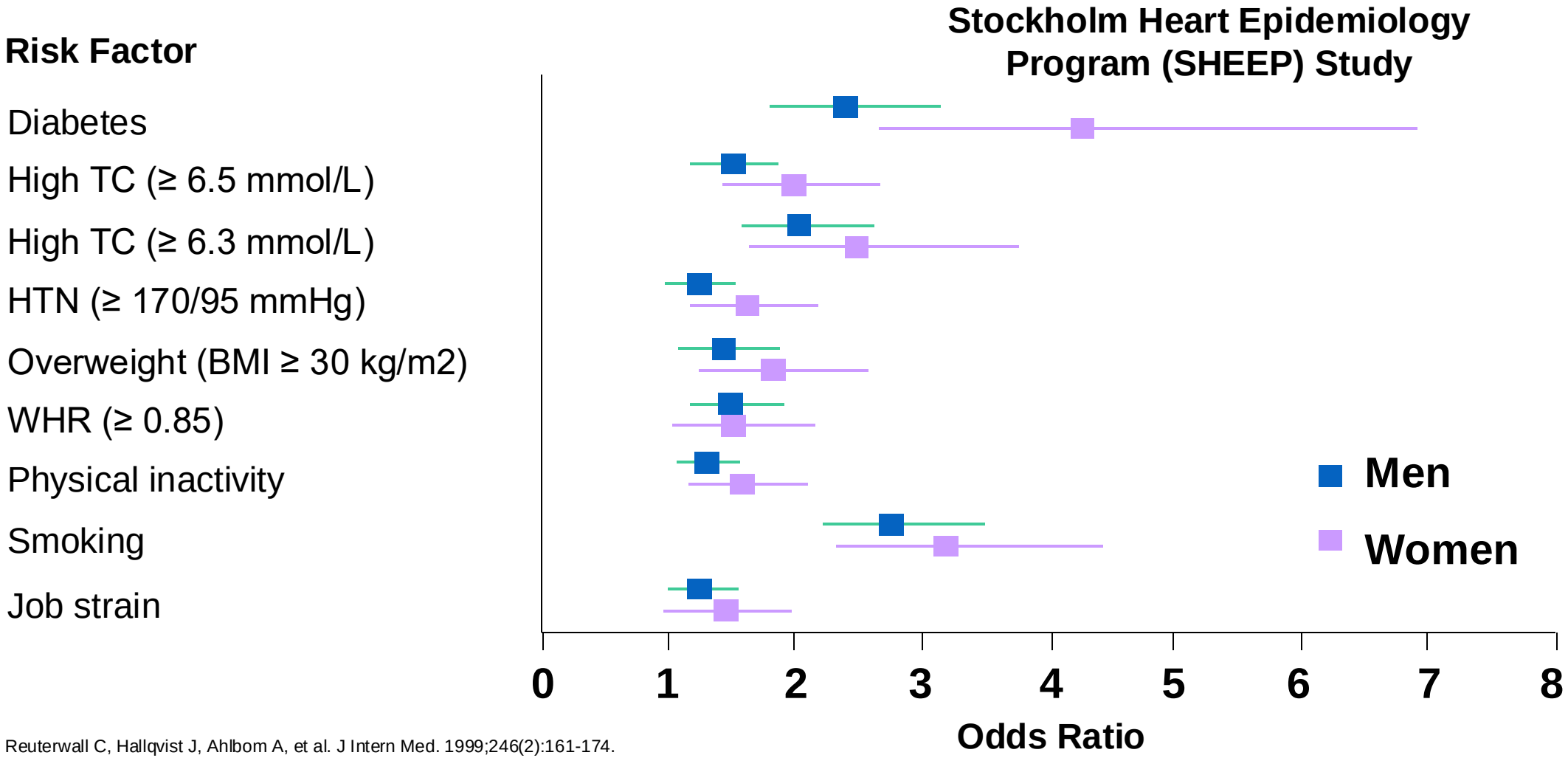

Reuterwall C, Hallqvist J, Ahlbom A, et al. J Intern Med. 1999;246(2):161-174.

DM and Congestive Heart Failure (CHF)

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- DM increases the risk for CHF in women
- UK Biobank study (n = 468,941 people)
- F/U for 9 years
- CHF incidence HR 1.73 (95% CI 1.34-2.24, p < 0.0001)
- CHF mortality HR 1.92 (95% CI 1.25-2.94, p = 0.003)

Smoking and Women

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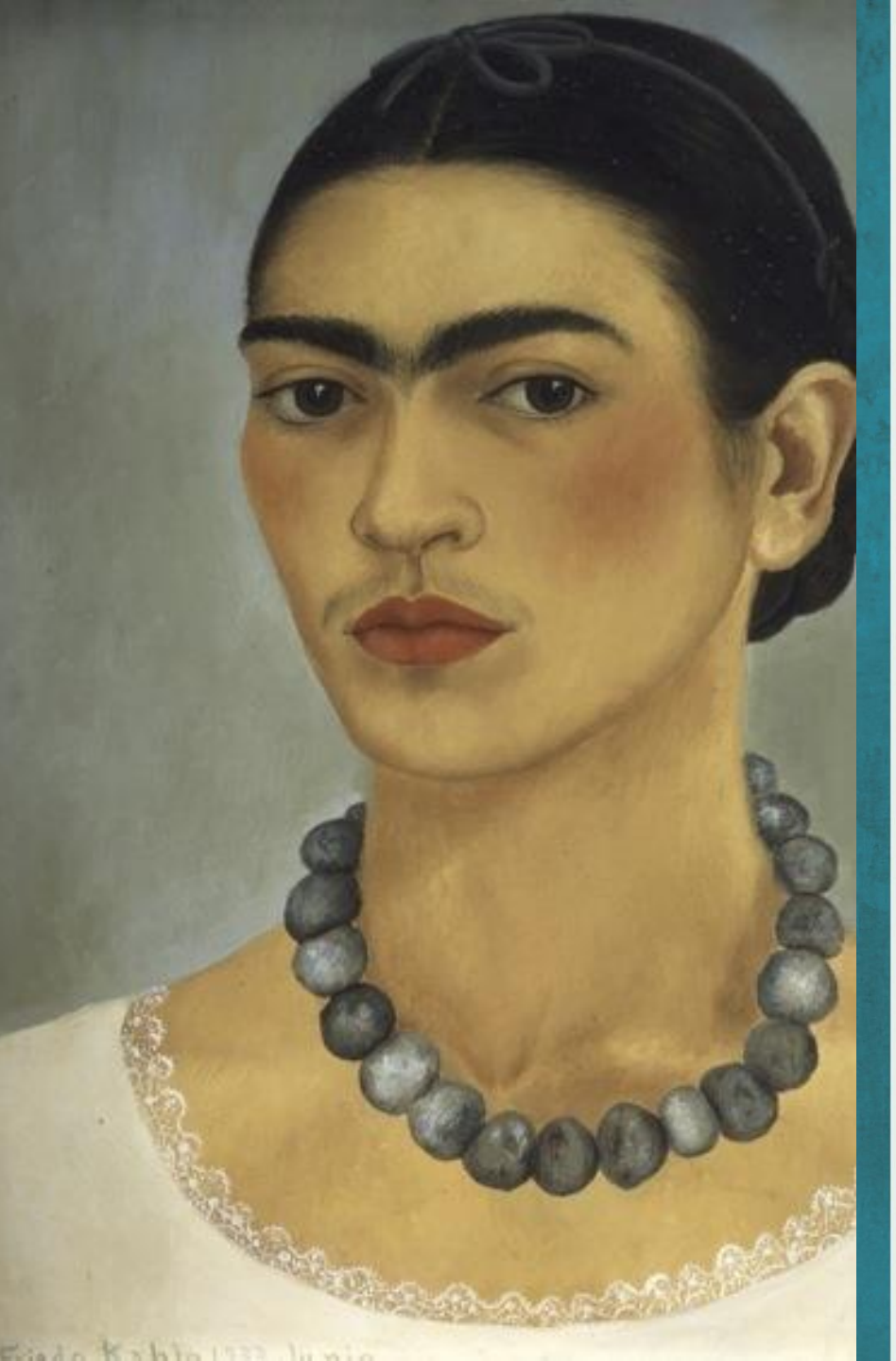
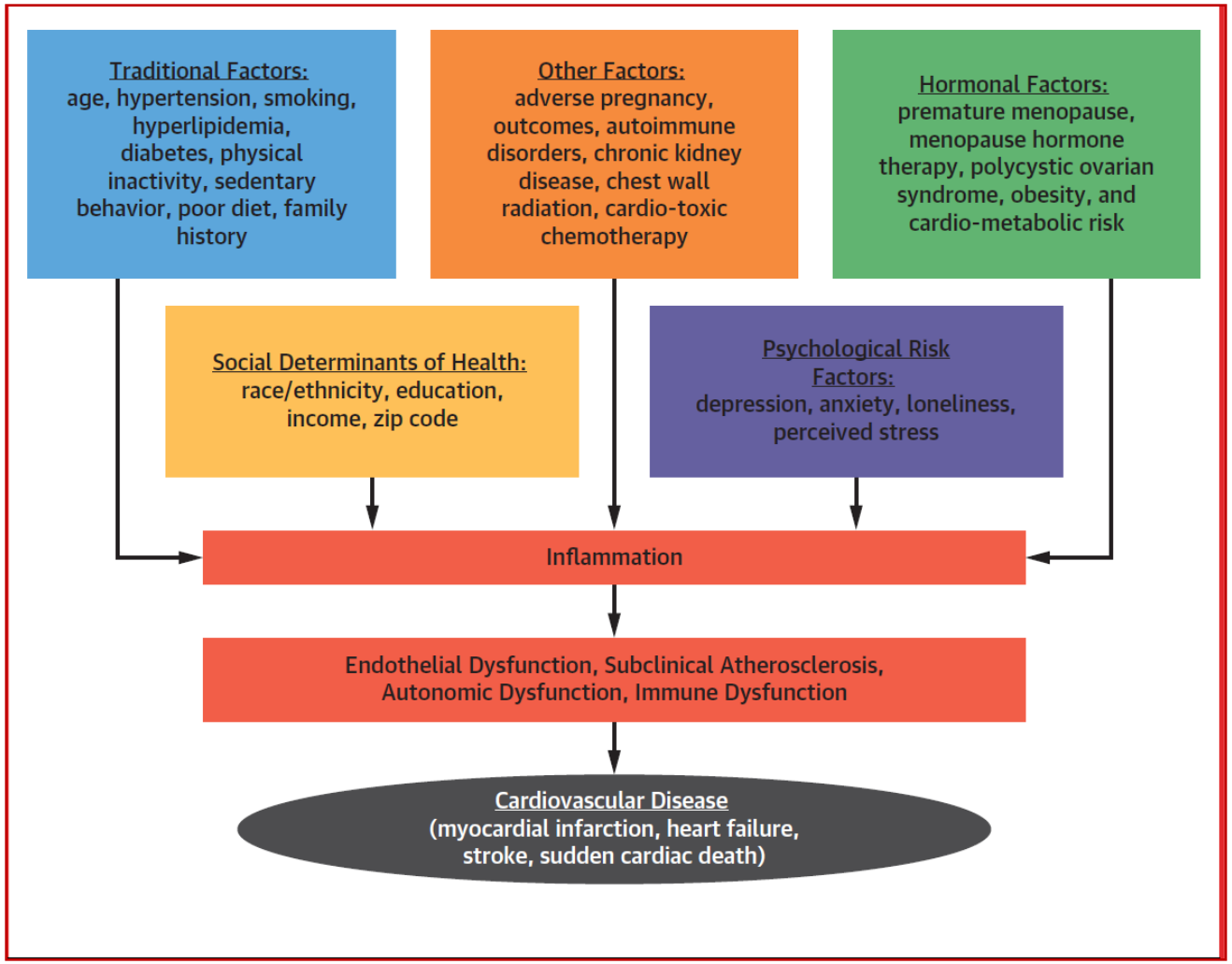
- Smoking is associated with half of all CV events in women.
- Smoking is a more potent risk factor for MI in women than in men.
- The Nurses' Health Study cohort showed a strong causal relation between smoking and stroke in women.



Are There Risk Factors Unique to Women?

CVD Risk Factors in Women



Cho L, Davis M, Elgendy I, et al. J Am Coll Cardiol. 2020;75(20):2602-2618.

Unique Risk Factors

- Preeclampsia
- Gestational diabetes
- Polycystic ovary syndrome (PCOS)
- Early menopause
  - Natural
  - Surgically induced
  - Chemically induced (breast cancer)

Ness RB, Hubel CA. Ann Epidemiol. 2005 Oct;15(9):726-33.
Diab Res Clin Pract 2007.
McBride NM. Ann Intern Med. 1997 Sep 15;127(6):491.
Gohlke-Bärwolf C. Basic Res Cardiol. 2000;95 Suppl 1:I77-83.

Hypertensive Disorders of Pregnancy

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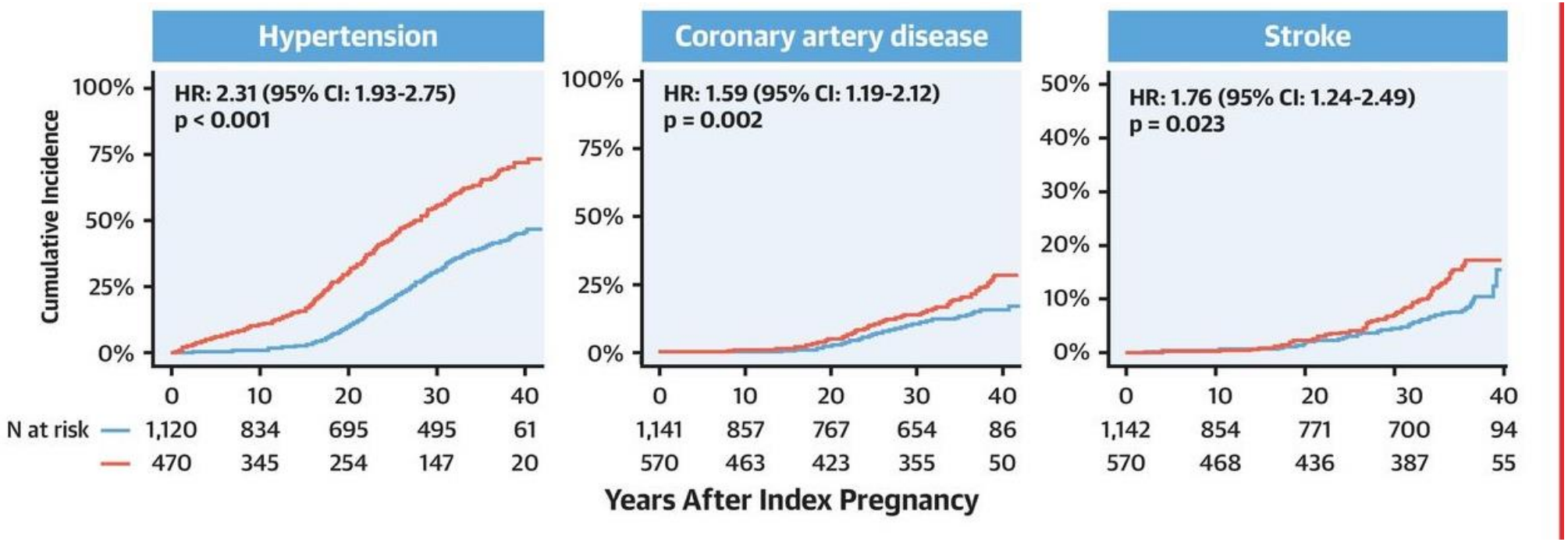
2.3-fold risk HTN

1.6-fold risk CAD

1.8-fold risk stroke



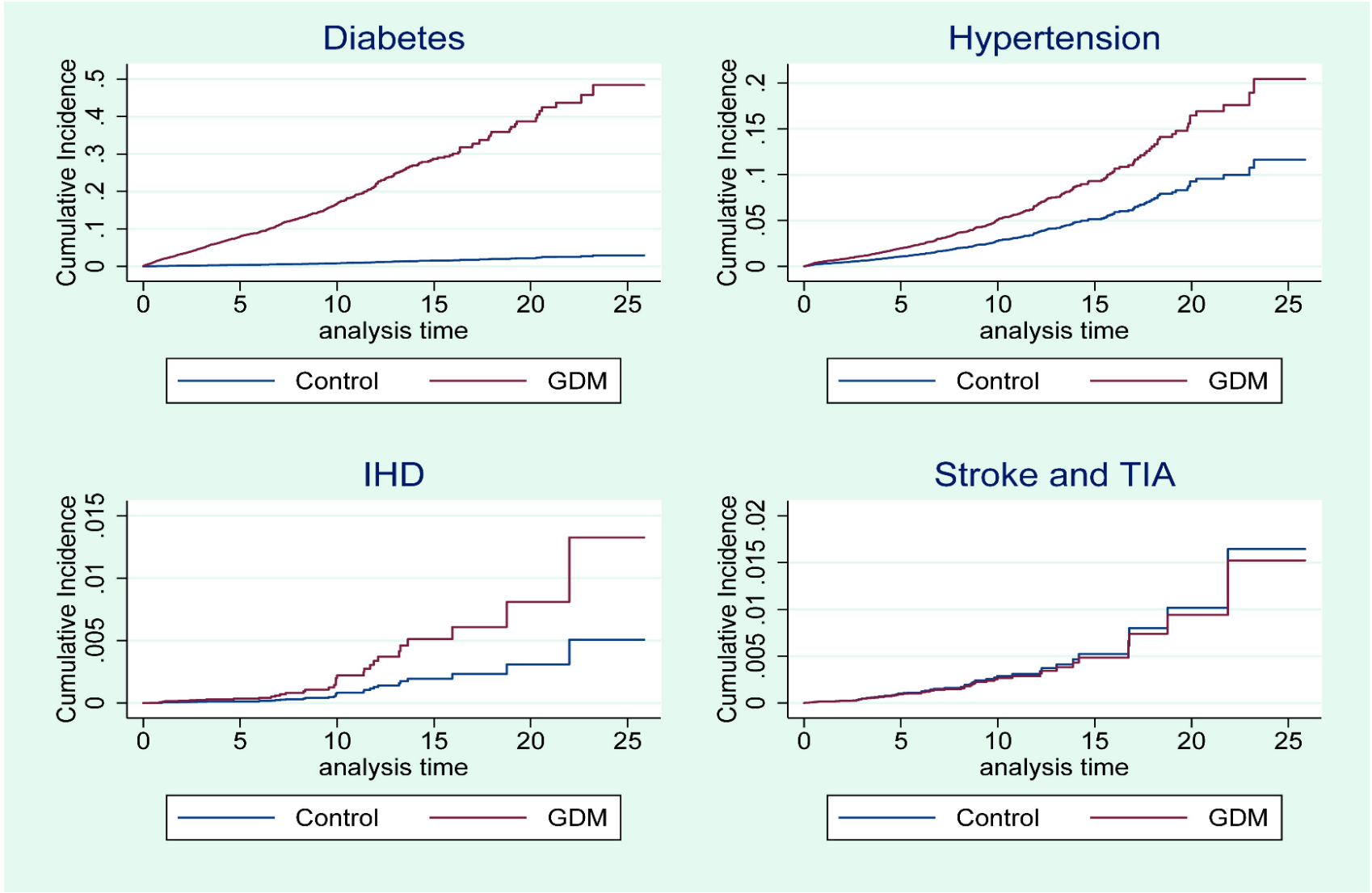
1.7-fold risk heart failure
2.9-fold risk aortic stenosis

1.6-fold risk arrhythmias
2.4-fold risk chronic kidney disease

Honigberg MC, Zekavat SM, Aragam K, et al. J Am Coll Cardiol. 2019 Dec 3;74(22):2743-2754.

Garovic VD, White WM, Vaughan L, et al. J Am Coll Cardiol. 2020 May 12;75(18):2323-2334.

Gestational Diabetes



Daly B, Toulis KA, Thomas N, et al. PLoS Med. 2018 Jan 16;15(1):e1002488.

IHD=ischemic heart disease
TIA= transient ischemic attack

Pregnancy Adverse Outcome

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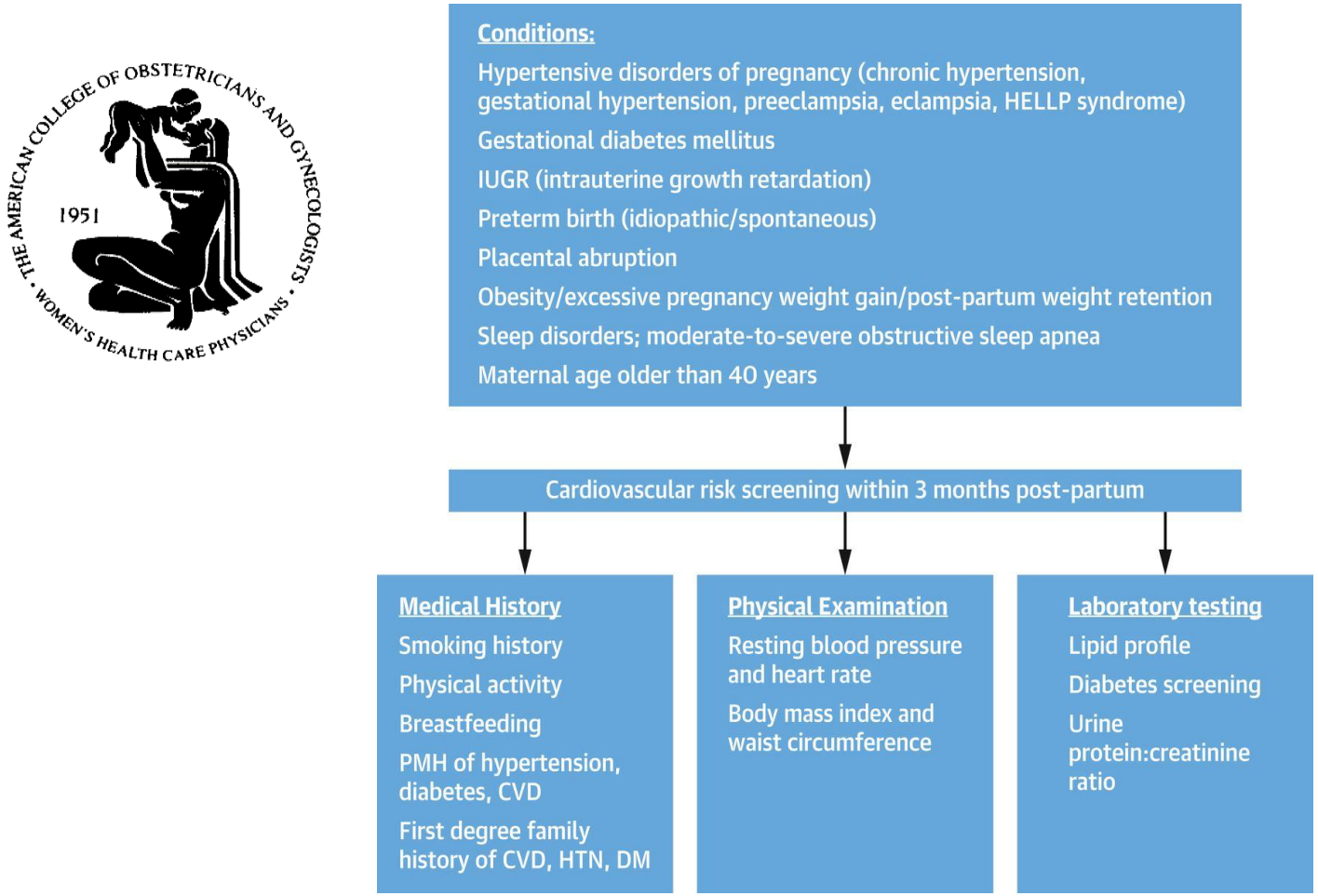

Cho L, Davis M, Elgendy I, et al. J Am Coll Cardiol. 2020 May 26;75(20):2602-2618.

Premature Menopause

Estrogen withdrawal

- Body fat distribution
- Reduced glucose tolerance
- Abnormal lipids
- Higher BP
- Increased sympathetic tone
- Endothelial dysfunction
- Vascular inflammation

- Premature menopause (< 40y): HR 1.55
- Early menopause (40-45y): HR 1.30
- Relatively early menopause (45-49y): HR 1.12

Zhu D, Chung HF, Dobson AJ, et al. Lancet Public Health. 2019 Nov;4(11):e553-e564.

Other Risk Factors

- PCOS
- Autoimmune disease
  - 80% of autoimmune patients are women
  - Rheumatoid arthritis (RA)
  - Systemic lupus erythematosus (SLE)
  - Psoriasis

Solomon DH, Karlson EW, Rimm EB, et al. Circulation. 2003 Mar 11;107(9):1303-7.
Am J Epi 1997;148:408-15.
Gelfand JM, Neimann AL, Shin DB, et al. JAMA. 2006 Oct 11;296(14):1735-41.

Clinical Manifestation

CAD Presentation in Women

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- 450,000 patient registry, women less likely to have chest pain (♂27.4% vs. ♀37.5%)
- Silent MI similar in overall group (27% vs. 26%)
- Age difference in silent MI

Canto JG, Goldberg RJ, Hand MM, et al. Arch Intern Med. 2007;167(22):2405-2413.

Myocardial Infarction (MI) Without Chest Pain or Discomfort and Unrecognized MI by Age and Sex

Characteristic	All Patients: Women, %	All Patients: Men, %	Age Group, Odds Ratio (Women vs Men)			
National Registry of Myocardial Infarction 2[28]						
MI without chest pain or discomfort	(n=155 565) 37	(n=229 313) 28	30-59 y 1.52	60-69 y 1.32	70-79 y 1.15	80-89 y 1.04
Framingham Heart Study[74]						
Unrecognized MI	(n=2818) 34	(n=2252) 27	45-54 y 2.55 (M, 18%; W, 46%)	55-64 y 1.73 (M, 26%; W, 45%)	65-74 y 0.81 (M, 36%; W, 29%)	75-84 y 1.11 (M, 36%; W, 40%)

Abbreviations: M, men; W, women.

[a] An odds ratio greater than 1.0 means that women have greater odds to present with MI without chest pain or discomfort or unrecognized MI compared with men. Men = reference group.

Canto JG, Goldberg RJ, Hand MM, et al. Arch Intern Med. 2007;167(22):2405-2413.

Gender Differences in Atherosclerosis

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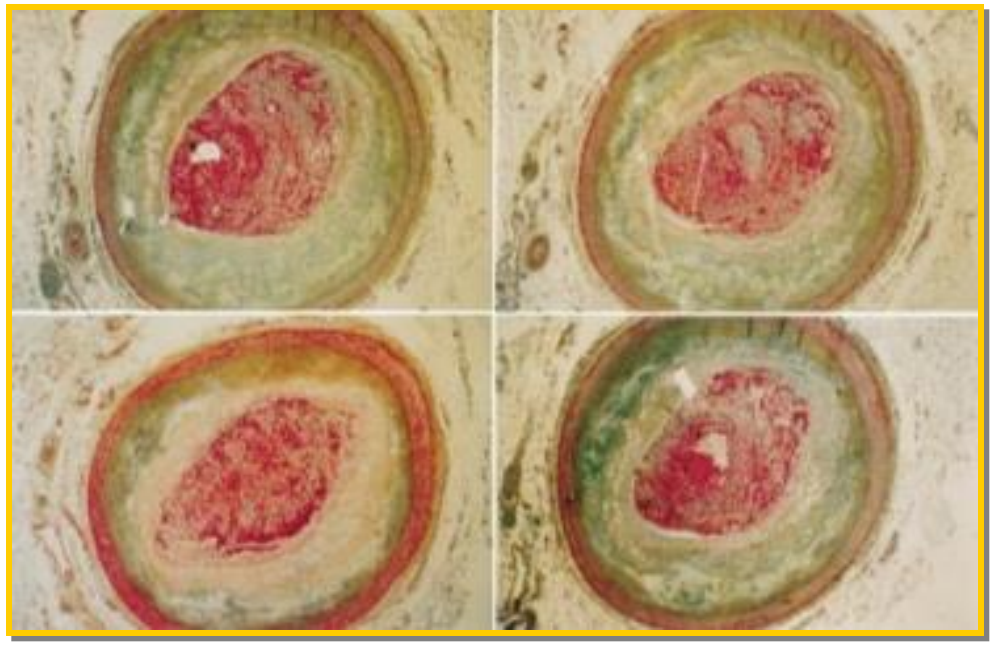
- Plaque erosion as the etiology of coronary thrombosis and AMI occurs at a higher frequency in women than in men.
- In an autopsy study of 291 patients who died of AMI and had coronary thrombosis, the prevalence of plaque erosions was 37% in women and 18% in men.



Arbustini E, Dal Bello B, Morbini P, et al. Heart. 1999 Sep;82(3):269-72.

Spontaneous Coronary Artery Dissection (SCAD)

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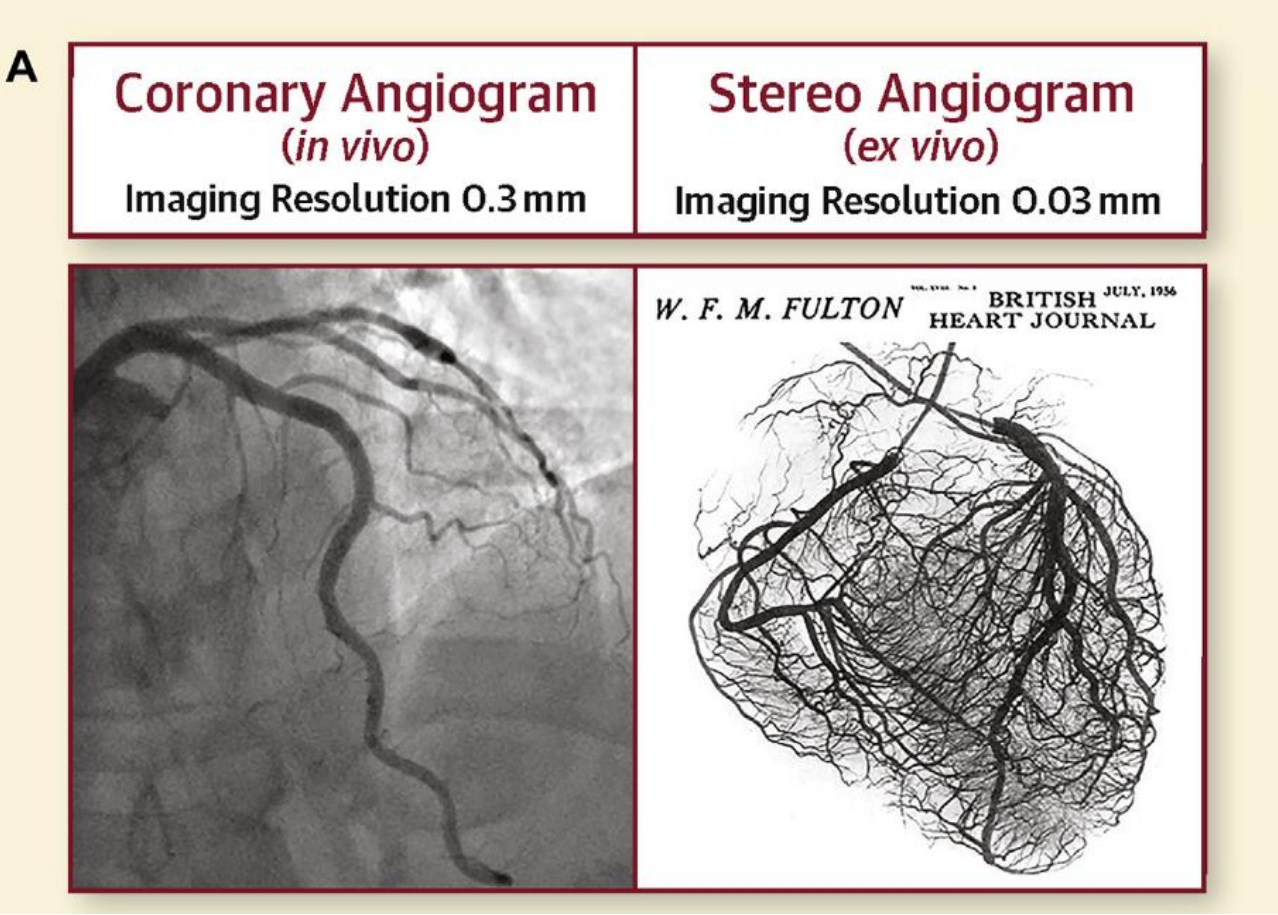
- Increasing awareness
- #1 cause of MI in young women (< 60 years of age)
- 30% with FMD
- Recurrence rate of 30%
- HR/BP control

MINOCA


A
Coronary Angiogram
(in vivo)
Imaging Resolution 0.3 mm
Stereo Angiogram
(ex vivo)
Imaging Resolution 0.03 mm
W. F. M. FULTON
BRITISH HEART JOURNAL
JULY, 1956

Microvessel Disease

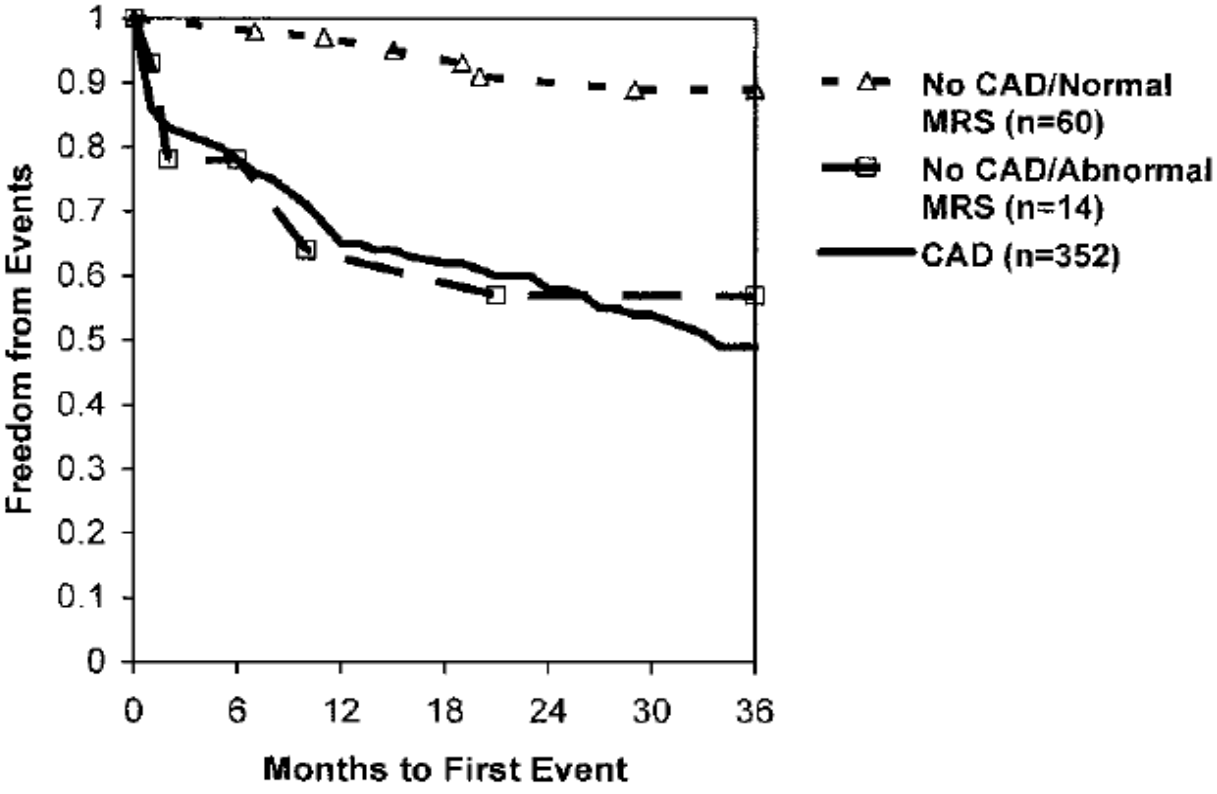


Figure 2. Freedom from events by diagnostic category.

Johnson BD, Shaw LJ, Buchthal SD, et al; Circulation. 2004 Jun 22;109(24):2993-9.

Treatment for Microvessel Disease

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Treating Endothelial Dysfunction

- Aspirin
- Statins
- Ace inhibitors
- Exercise

Treating Symptoms

- Ranolazine or nitroglycerin
- Beta blockers
- Calcium channel blockers

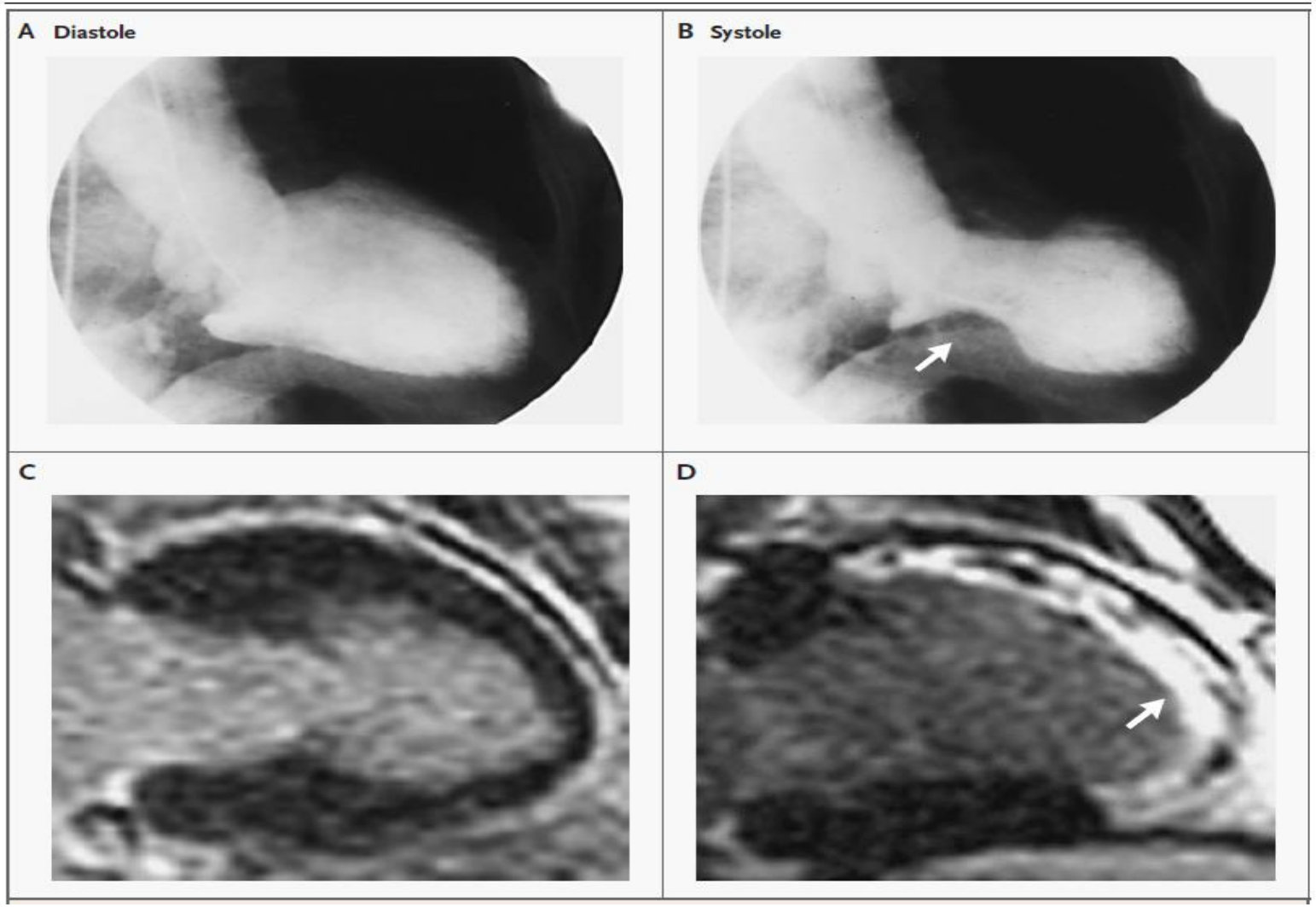
Vasculopathy of Women with CAD:
Coronary Structure and Function vs. Men

- Structural
  - Macro / Microvessels
    - Smaller size
    - Increased stiffness (fibrosis, remodeling)
    - More diffuse disease
    - Erosion > Rupture
    - Microemboli, rarefaction (drop out), disarray
- Functional
  - Macro / Microvessels
    - Endothelial dysfunction
    - Smooth muscle dysfunction (Raynaud's migraines, CAS)
    - Inflammation
      - Plasma makers
      - Vasculitis (SLE)

Other Disease

- Stressed induced cardiomyopathy (90% ♀)
- Diastolic heart failure – HFpEF (50-60% ♀)
- Peripartum cardiomyopathy

Stress Induced Cardiomyopathy



Cardiac Tests

Cardiac Tests

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- Electrocardiogram (ECG) exercise test
- Stress test with imaging modality
  - Stress echo vs. stress nuclear
- Cardiac CT scan
- Cardiac catheterization

ECG Stress Test

- Advantages
  - Functional assessment (Duke Treadmill Score and activity index)
  - Heart rate recovery
  - Cheap, works well in most people

- Disadvantages
  - Lower sensitivity than other modalities
  - Test nondiagnostic in patients with left bundle branch block (LBBB), left ventricular hypertrophy (LVH), on digoxin, or who have a pacemaker
  - Lower sensitivity in women

Why the Lower Accuracy With Exercise ECG in Women?

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- Low prevalence
- Lower QRS voltage in women
- ST segment abnormality vary by menstrual cycle

Stress Echocardiogram

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- Advantages
  - Good sensitivity and specificity
  - Assess valves and pressures
  - Portable, less time
  - No radiation
- Disadvantages
  - Poor image in certain patients
  - Reader dependent, tech dependent
  - Hard to read in patients with multiple resting wall motion abnormalities

Nuclear Study

- Advantages
  - Safe in patients
  - Good for overweight patients
- Disadvantages
  - Not portable, longer test time
  - Breast artifact
  - Women with smaller hearts
  - Radiation

Cardiac CT

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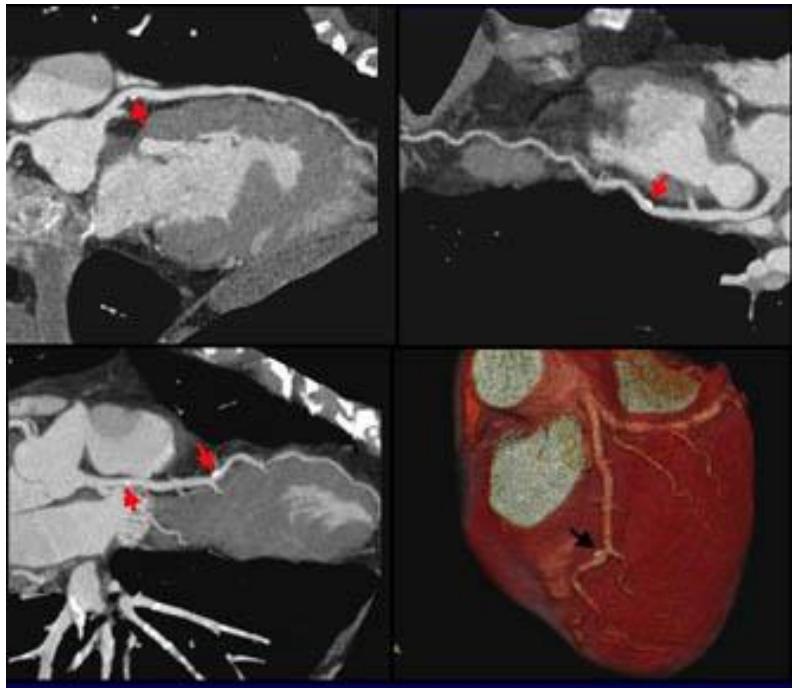

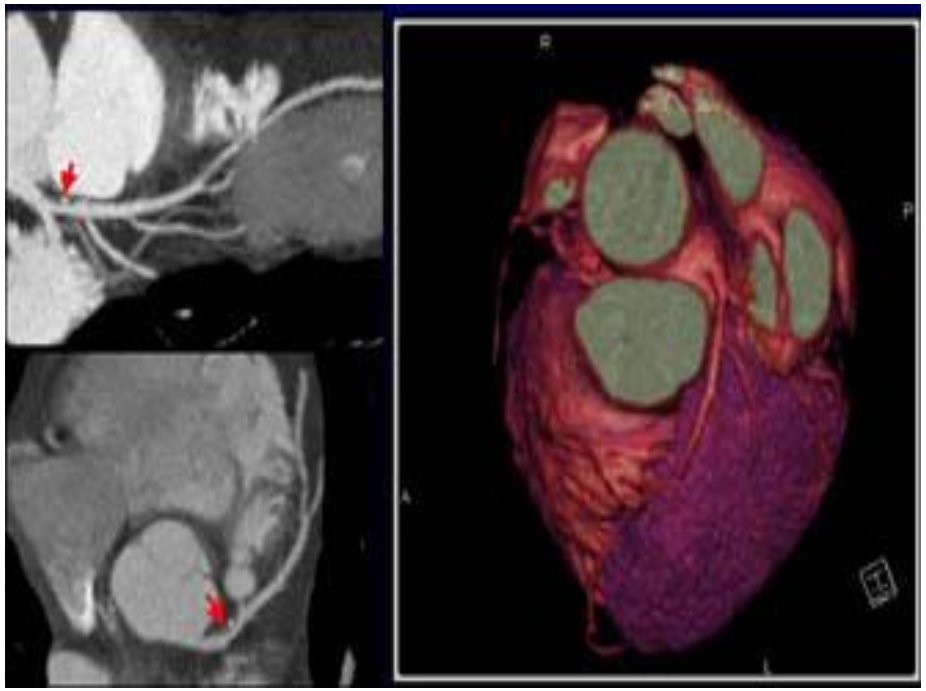

Cardiac Catheterization

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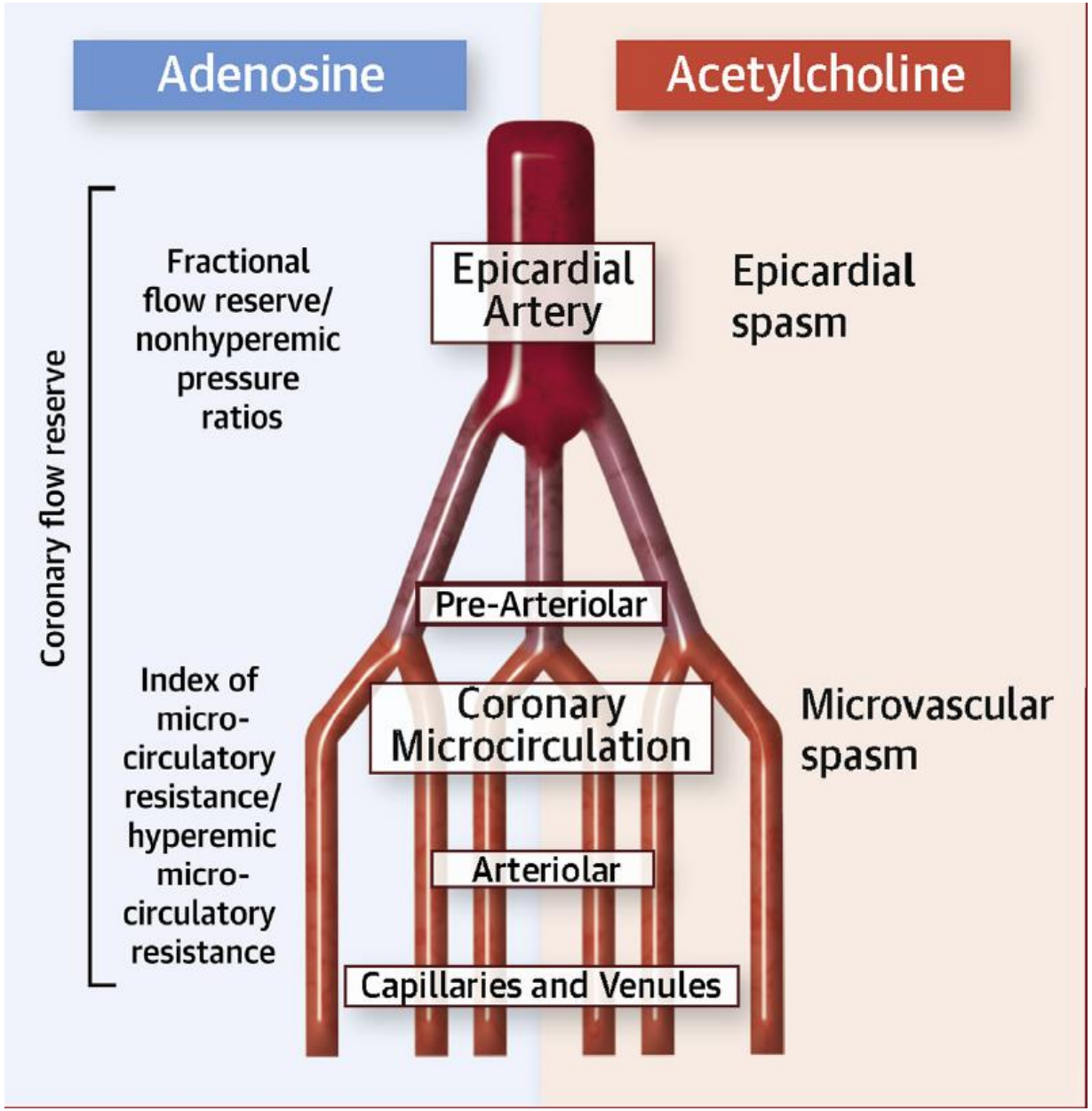
- Gold standard
- Invasive
- Coronary physiology study



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INOCA

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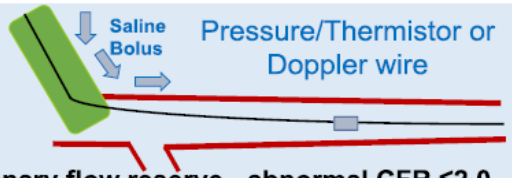
Invasive Coronary Assessment in INOCA

1 Coronary Angiography

- Consider:
  - Obstructive CAD
  - Myocardial bridging
  - 'Flush' ostial branch occlusion

2 Guidewire (adenosine)

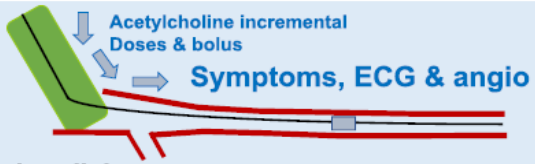


Coronary flow reserve - abnormal CFR ≤2.0

Microvascular resistance - IMR ≥25 or HMR >2.4

*

3 Vasoreactivity (acetylcholine)



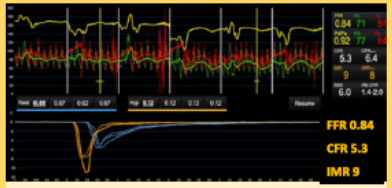
- Epicardial vasospasm
- Microvascular vasospasm

4 Diagnosis & Management

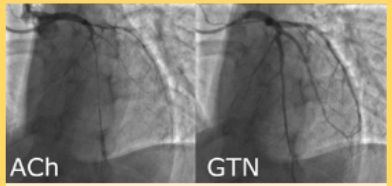
1. Microvascular angina
2. Vasospastic angina
3. Mixed angina
4. Non-Cardiac (normal IDP)

Vasospastic Angina

No Obstructive CAD



Normal adenosine physiology (FFR 0.84, CFR 5.3, IMR 9)



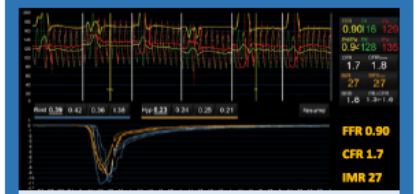
Occlusive vasospasm with ACh (resolves with nitrate)

Vasospastic Angina

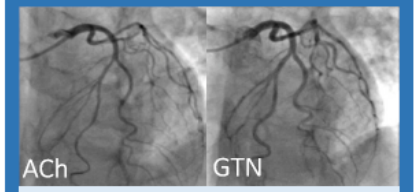
- 1 - Calcium channel blocker
- 2 - Long-acting Nitrate
- Avoid beta-blockers
- Event prevention: ACEi, Statin
- Lifestyle and cardiac rehabilitation

Microvascular Angina

No Obstructive CAD



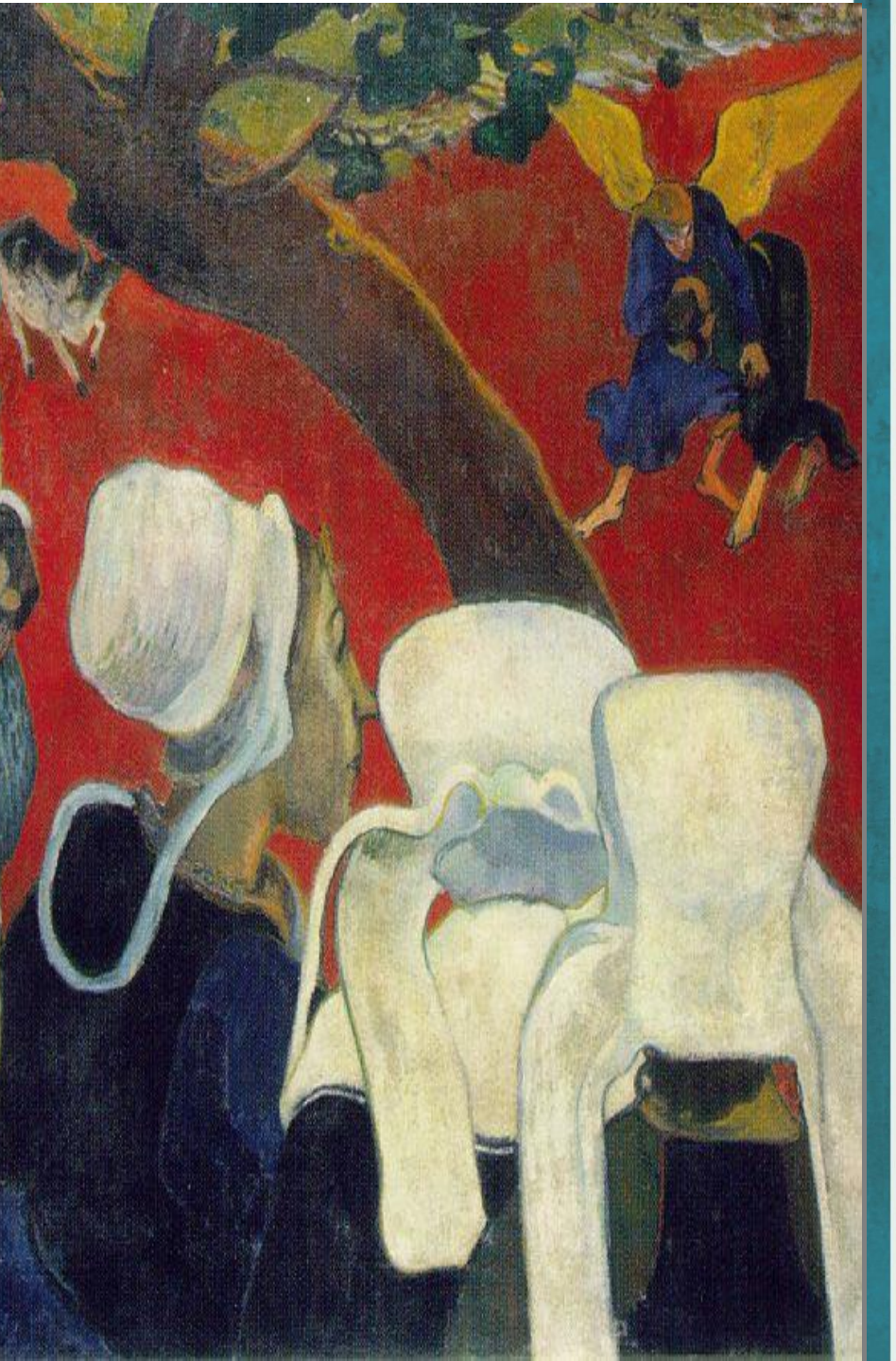
Microvascular Dysfunction (FFR 0.90, CFR 1.7, IMR 27)



Endothelial dysfunction but no gross vasospasm to ACh

Microvascular Angina

- 1 – Beta-blocker
- 2 – Calcium channel blocker
- Avoid long acting nitrates
- Event prevention: ACEi, Statin
- Weight loss and cardiac rehabilitation



Treatment & Gender

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Aspirin for Primary Prevention of CVD in Women?

Aspirin in Primary Prevention: the Challenge in Women

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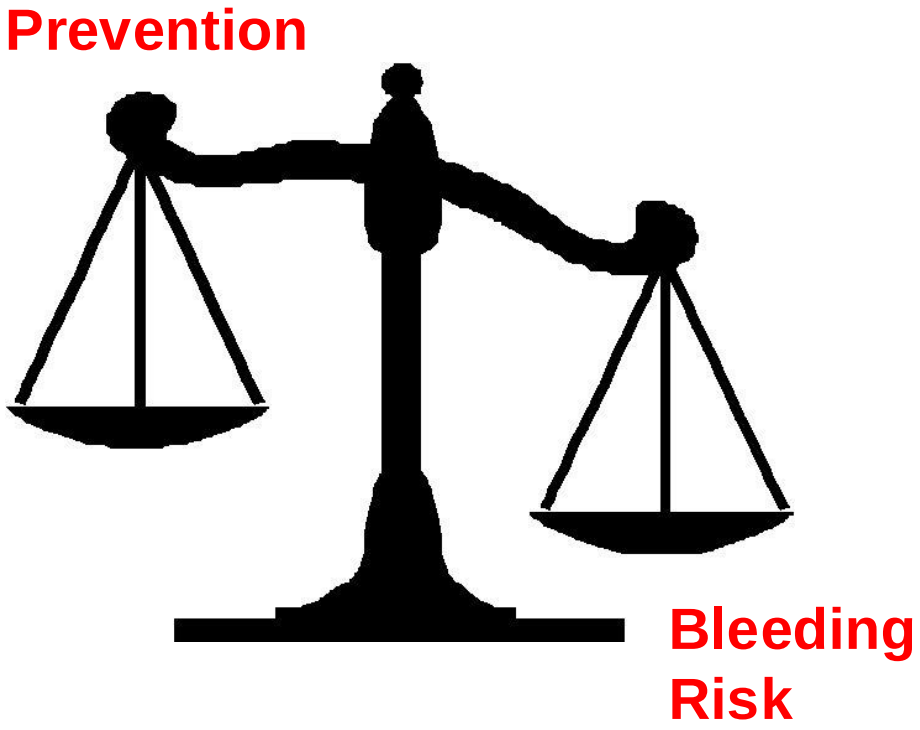
- Absolute risks of vascular events are lower than in secondary prevention.
- Complication rates (bleeding) are comparable.



Pivotal Primary Prevention Aspirin Trials in 2018

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ARRIVE

Moderate Risk
Estimated ASCVD risk 17%

↔ MACE
↑ Bleeding

ASCEND

Diabetes

↓ MACE
↑↑ Bleeding

ASPREE

Age >70

↔ MACE
↑ Bleeding
↑ Mortality

2019 Meta-Analysis: Aspirin Use for Primary Prevention With MACE and Bleeding Events

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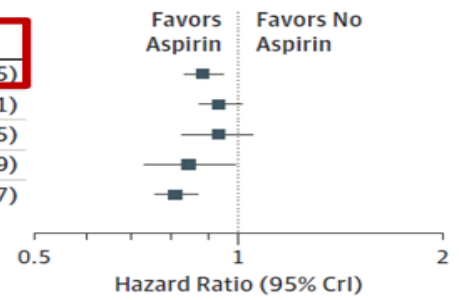
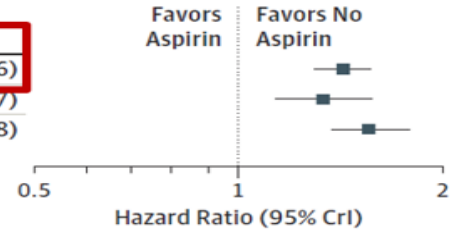
Cardiovascular Outcomes	No. of Studies	Aspirin No. of Events	Aspirin No. of Participants	No Aspirin No. of Events	No Aspirin No. of Participants	Absolute Risk Reduction, % (95% CI)	HR (95% CrI)
Composite CV outcome	11	2911	79717	3072	78147	0.38 (0.20 to 0.55)	0.89 (0.84-0.95)
All-cause mortality	13	3622	81623	3588	80057	0.13 (-0.07 to 0.32)	0.94 (0.88-1.01)
CV mortality	13	995	81623	997	80057	0.07 (-0.04 to 0.17)	0.94 (0.83-1.05)
Myocardial infarction	13	1469	81623	1599	80057	0.28 (0.05 to 0.47)	0.85 (0.73-0.99)
Ischemic stroke	10	831	65316	942	63752	0.16 (0.06 to 0.30)	0.81 (0.76-0.87)

11%



Bleeding Outcomes	No. of Studies	Aspirin No. of Events	Aspirin No. of Participants	No Aspirin No. of Events	No Aspirin No. of Participants	Absolute Risk Increase, % (95% CI)	HR (95% CrI)
Major bleeding	11	1195	74715	834	73143	0.47 (0.34 to 0.62)	1.43 (1.30-1.56)
Intracranial bleeding	12	349	80985	257	79419	0.11 (0.04 to 0.18)	1.34 (1.14-1.57)
Major GI bleeding	10	593	70336	380	70465	0.30 (0.20 to 0.41)	1.56 (1.38-1.78)

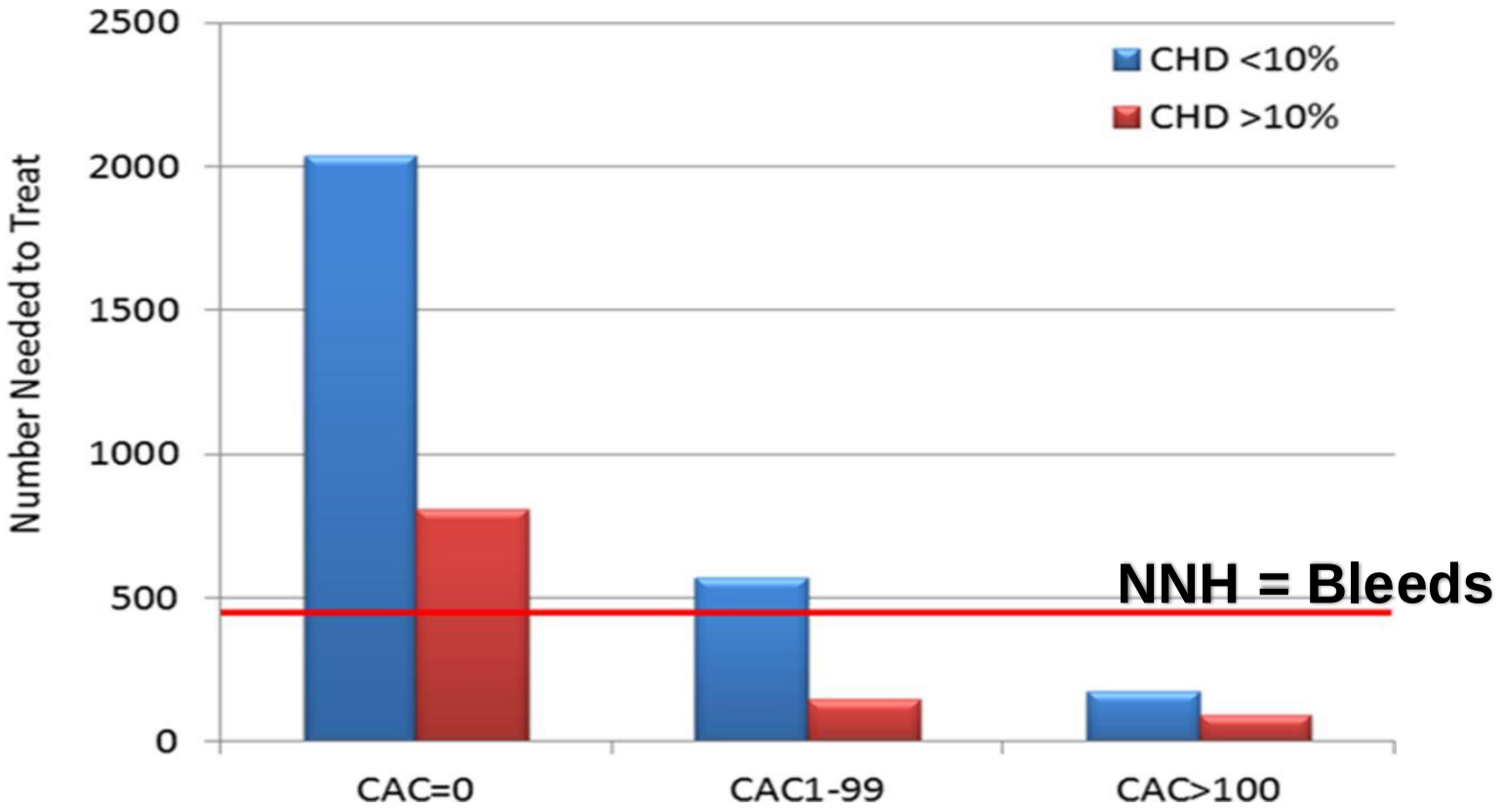
43%



CVD prevention: Number Needed to Treat: 265
Major Bleeding: Number Needed to Harm: 210

Zheng SL, Roddick AJ. JAMA. 2019 Jan 22;321(3):277-287.

Can CAC Inform Aspirin Decision?
(modeling from MESA observational study)



Miedema MD, Duprez DA, Misialek JR, et al. Circ Cardiovasc Qual Outcomes. 2014 May;7(3):453-60.

Aspirin in Patients with Elevated Lipoprotein(a) [Lp(a)]

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- A Women's Health Initiative substudy reported that patients with a genetically confirmed SNP for elevated Lp(a):
  - Had increased cardiovascular risk with a hazard ratio of 2.11 (95% CI 1.39-2.52).
  - This risk was reduced by use of aspirin, HR 0.44, (95% CI 0.20-0.94) with a statistically significant interaction between genetic status and aspirin efficacy.

Making Sense of Aspirin for CV Prevention

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- **Aspirin still strongly indicated for secondary prevention.**
- Most healthy people should not take daily aspirin.
- These recommendations differ from prior AHA guidelines recommending that aspirin is considered for patients with 10-year ASCVD risk ≥ 10%.
- There may be **select** patients age 40 to 70 who have a very high risk of ASCVD who may benefit if low risk for bleeding.

Aspirin for ASCVD Prevention in Women

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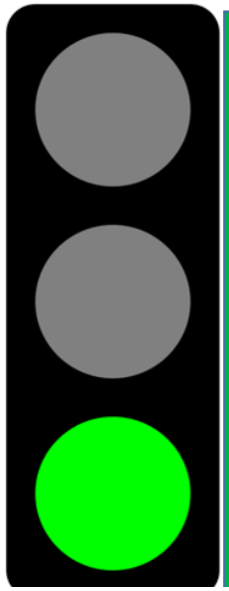
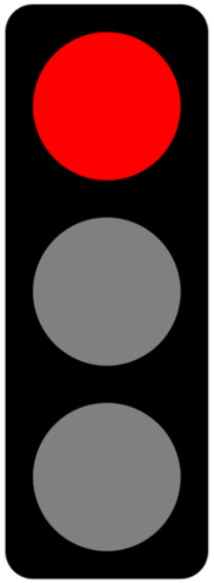
Yes



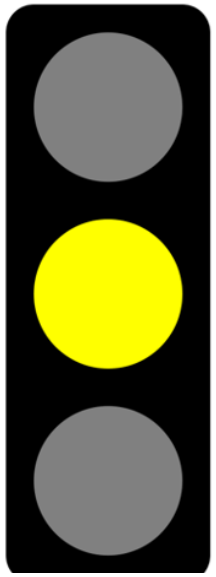
Secondary Prevention
- Coronary Heart Disease
- Prior TIA/Stroke
- Peripheral Artery Disease

No



Primary Prevention
- Healthy women with no major CVD risk factors
- Routine use after age 70
- Prior bleeding or at risk for bleeding

Maybe



Primary Prevention
- Current smokers
- Elevated CAC score ≥100 or carotid plaque
- Strong FHx of premature ASCVD
- Suboptimal controlled lipids or blood pressure
- High ASCVD risk

AND low risk for bleeding

Cho L, Davis M, Elgendy I, et al. J Am Coll Cardiol. 2020 May 26;75(20):2602-2618.

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Blood Cholesterol Management in Women

Blood Cholesterol Management

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2018 AHA/ACC Multisociety Guideline on the Management of Blood Cholesterol

2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease

- Emphasize importance of lipid management for reduction of ASCVD risk.
- Include sex-specific risk-enhancing factors to help further identify women at increased ASCVD risk.
- Statins recommended as the mainstay of therapy.

Grundy SM, Stone NJ, Bailey AL, et al. J Am Coll Cardiol. 2019 Jun 25;73(24):e285-e350.
Arnett DK, Blumenthal RS, Albert MA, et al. J Am Coll Cardiol. 2019 Sep 10;74(10):1376-1414.

Intermediate Risk Patients

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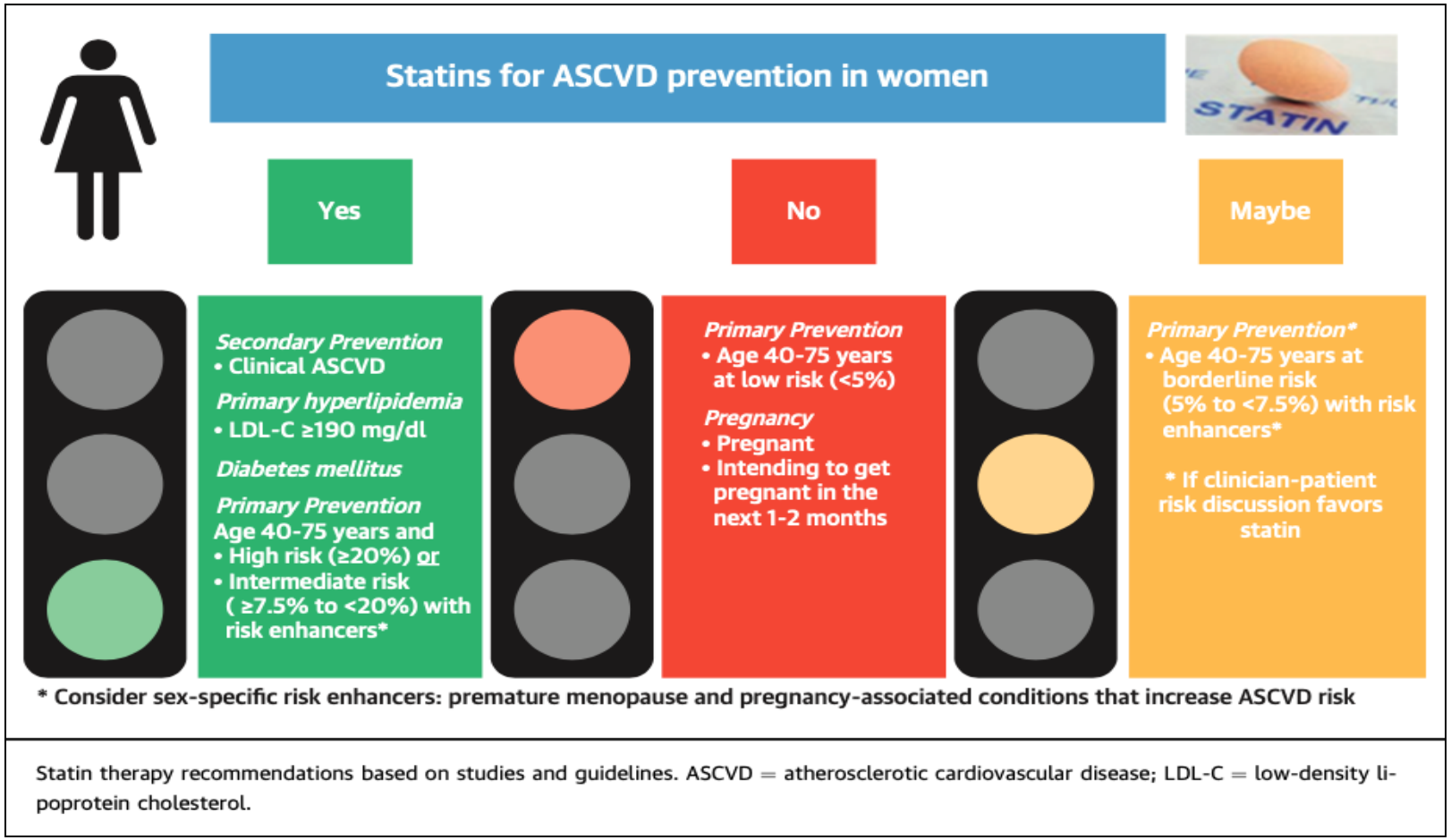
- Use risk enhancers
  - Reproductive history
  - Autoimmune disease
  - Lp(a)
- Coronary artery calcium score
- Shared decision making

Recommendations for Statin for ASCVD Prevention in Women



Statin therapy recommendations based on studies and guidelines. ASCVD = atherosclerotic cardiovascular disease; LDL-C = low-density lipoprotein cholesterol.

Cho L, Davis M, Elgendy I, et al; ACC CVD Womens Committee Members. J Am Coll Cardiol. 2020 May 26;75(20):2602-2618.

Disparities in Care: PALM Registry

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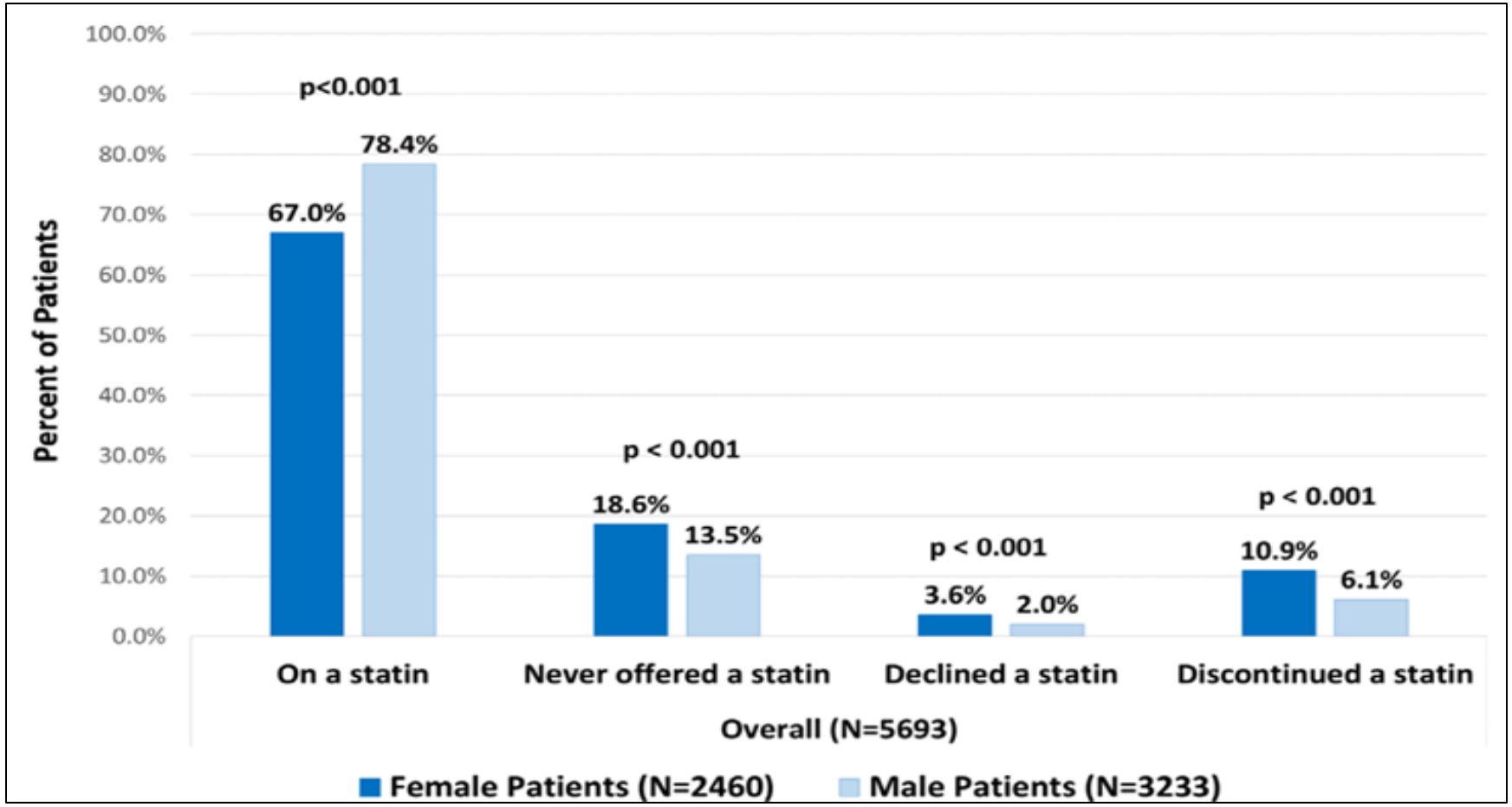
Women less likely to receive guideline-recommended statin therapy



Nanna MG, Wang TY, Xiang Q, et al. Circ Cardiovasc Qual Outcomes. 2019 Aug;12(8):e005562.

Good & Bad News

- Women derive similar benefit as men
  - HTN (RCT)
  - DM RCT (SGLT -2 inhibitors, GLP 1-RA)
- However, women get less aggressive care

Under Treatment

- 2019 Circulation Wright AK et al.
  - 79,000 DM patients in UK.
  - Women with DM more likely to be obese, HTN, and have hyperlipidemia.
  - Women with type 2 DM less likely to have been on lipid-lowering agent or ACE inhibitor, especially if they have CAD.

Women & Revascularization

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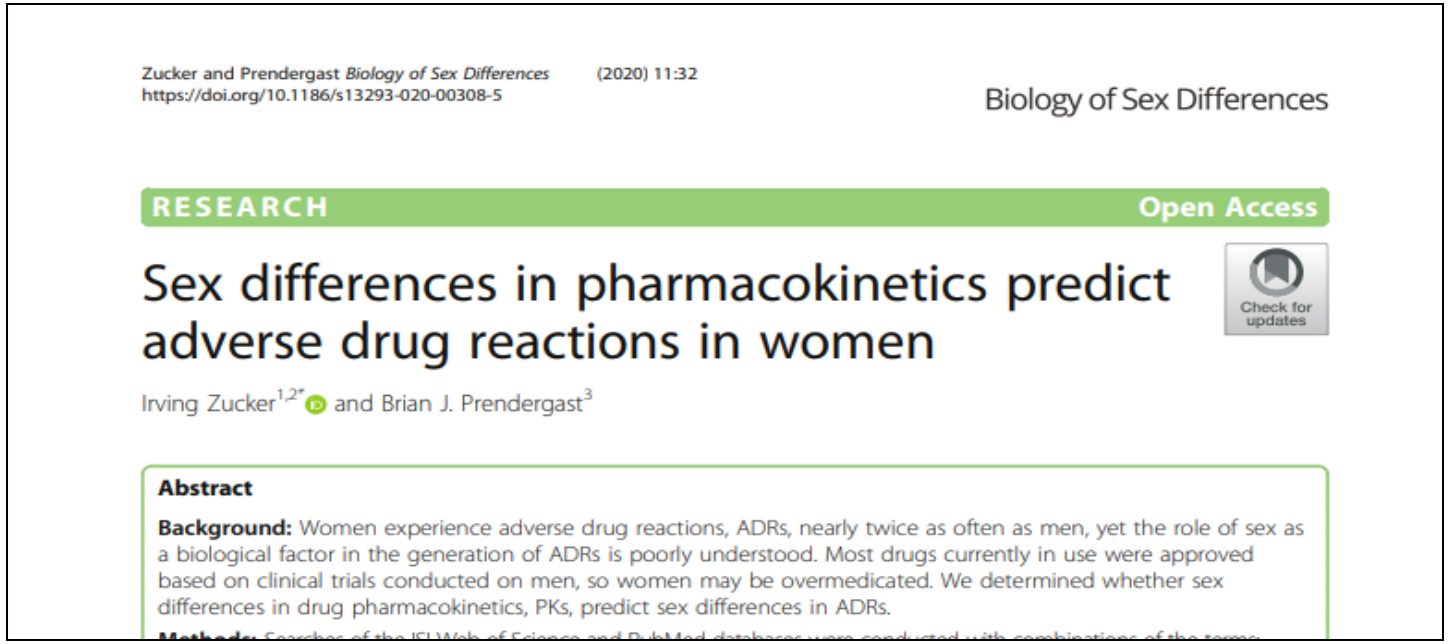
- Similar treatment benefits
- Higher complication rates with procedure
  - Less bleeding with radial access
  - Dual antiplatelet therapy (DAPT) duration

Women and CAD

- Older
- More comorbidities
- Delayed presentation
- More complications from the procedure
- Less use of standard and state-of-the-art therapies

Do Women Have More Side Effects?

Sex Differences in PK & ADR



Zucker and Prendergast *Biology of Sex Differences* (2020) 11:32
https://doi.org/10.1186/s13293-020-00308-5

Biology of Sex Differences

RESEARCH Open Access

Sex differences in pharmacokinetics predict adverse drug reactions in women

Check for updates

Irving Zucker[1,2*] and Brian J. Prendergast[3]

Abstract

Background: Women experience adverse drug reactions, ADRs, nearly twice as often as men, yet the role of sex as a biological factor in the generation of ADRs is poorly understood. Most drugs currently in use were approved based on clinical trials conducted on men, so women may be overmedicated. We determined whether sex differences in drug pharmacokinetics, PKs, predict sex differences in ADRs.

- Women experience ADR 2x more than men.
- Most clinical trials are done in men (70% men, 30% women in CAD trials).
- 86 drugs – higher blood concentration and longer elimination time in women.

Women and Medications

- Smaller body size
- Higher body fat content
- Low body-water volume

Conclusion

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- Risk factors – traditional and unique
- More awareness
- Aggressive treatment of women with CVD

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Audience Question and Answer

Amy Zack, MD

Case Western Reserve University School of Medicine

Speakers

REMINDER:
Submit questions using the 'Q&A' feature

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Leslie Cho, MD
Case Western Reserve University School of Medicine
Cleveland Clinic

Amy Zack, MD (Moderator)
Case Western Reserve University School of Medicine
Cleveland Clinic

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Next Steps and Wrap Up

Shari Bolen, MD, MPH
Case Western Reserve University School of Medicine

CME Reminder

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- Registration is required for CME credit:

URL in chat window **OR** Use QR Code

We Want to Hear from You!

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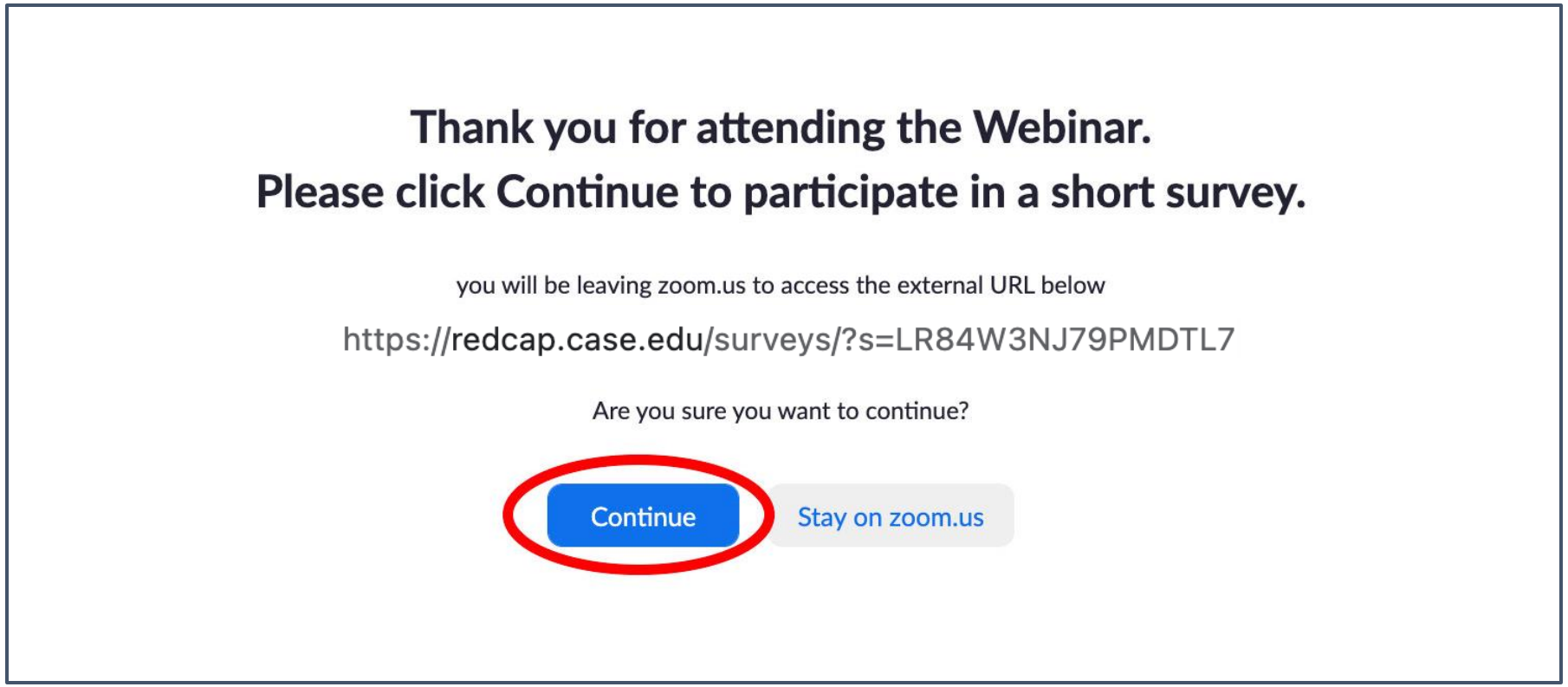
Please complete a brief evaluation of the webinar.



Hit the Continue button in your new browser tab to access the evaluation survey.
The survey link will also be emailed to you.

THANK YOU!

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