



ACC Latin America Conference 2017



MEXICO CITY
JUNE 22 – 24, 2017

GLOBAL EXPERTS, LOCAL LEARNING



ACC Latin America
Conference 2017

Women's Heart Health: Risk, Diagnosis and Management Differences MANAGEMENT

C. Noel Bairey Merz MD

Medical Director and

Barbra Streisand Women's Heart Center

Preventive Cardiac Center

Cedars-Sinai Heart Institute

Los Angeles, California USA

merz@cshs.org

Presenter Disclosure Information

Women's Heart Health: Management (Bailey Merz)

DISCLOSURE INFORMATION:

The following relationships exist related to this presentation (*paid to CSMC):

Grant support*: NHLBI, FAMRI, SWHR, Gilead, NIH-CTSI

Consulting*: Abbott-Diagnostics, Sanofi

Honorarium*: Gilead, Pri-Med

Stocks: None



40-year-old female new patient referred for second opinion re: risk factor management by OB-GYN.

HX: Five years ago, she was diagnosed with systemic lupus with a positive ANA. She is a para 2 gravida 2, and had hypertension postpartum with both of her sons.

EXAM: BP 145/93 otherwise WNL

LABS: TC 185 TG 125 HDL 50 LDL 110

CURRENT MEDICATIONS: Brimonidine 0.5% eyedrops, BuSpar orally 10 mg p.o. b.i.d, enteric coated aspirin 81 mg p.o. daily, Nexium 40 mg taken once daily, Ativan as needed, Zofran as needed, Plaquenil 100 mg p.o. b.i.d., Pravachol 40 mg p.o. at bedtime, verapamil 120 mg p.o. daily.

How should she be treated?

1. Current treatment is fine
2. Intensify hypertension therapy
3. Stop the statin and aspirin

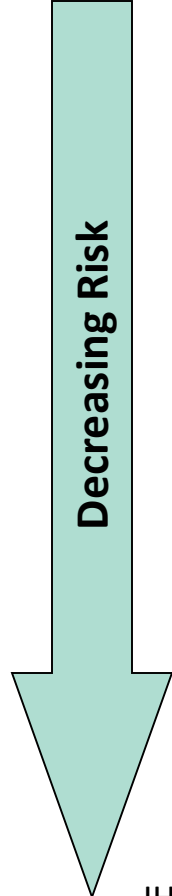
Women's Heart Health: Management



ACC Latin America
Conference 2017

- 1. Traditional CVD Risk Factors in Women**
- 2. Non-traditional CVD Risk Factors: APOs**
- 3. Preventive CVD Interventions in Women**

Traditional Risk Factors in Women - Population Attributable Risk of AMI in INTERHEART LA vs INTERHEART

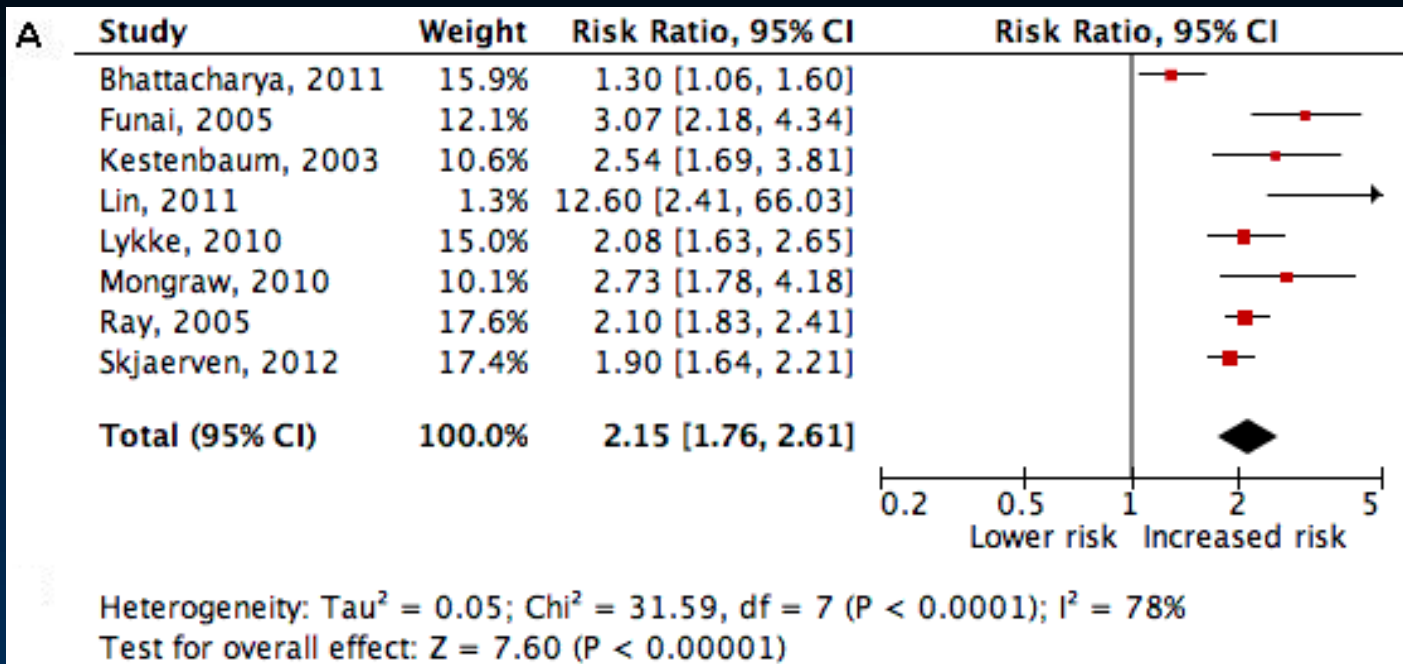


Risk Factor	PAR	
	Latin America	IH-Rest of World
Abdominal obesity*	48.5	30.2
ApoB/ApoA-1 [†]	40.8	44.2
Smoking [‡]	38.4	35.3
Hypertension	32.9	22.0
Permanent stress [§]	28.1	7.8
Regular exercise	28.0	24.8
Diabetes Mellitus	12.9	12.2
Daily fruits and/or vegetables	6.9	4.1
Depression	4.7	8.4
Alcohol	-3.2	16.3

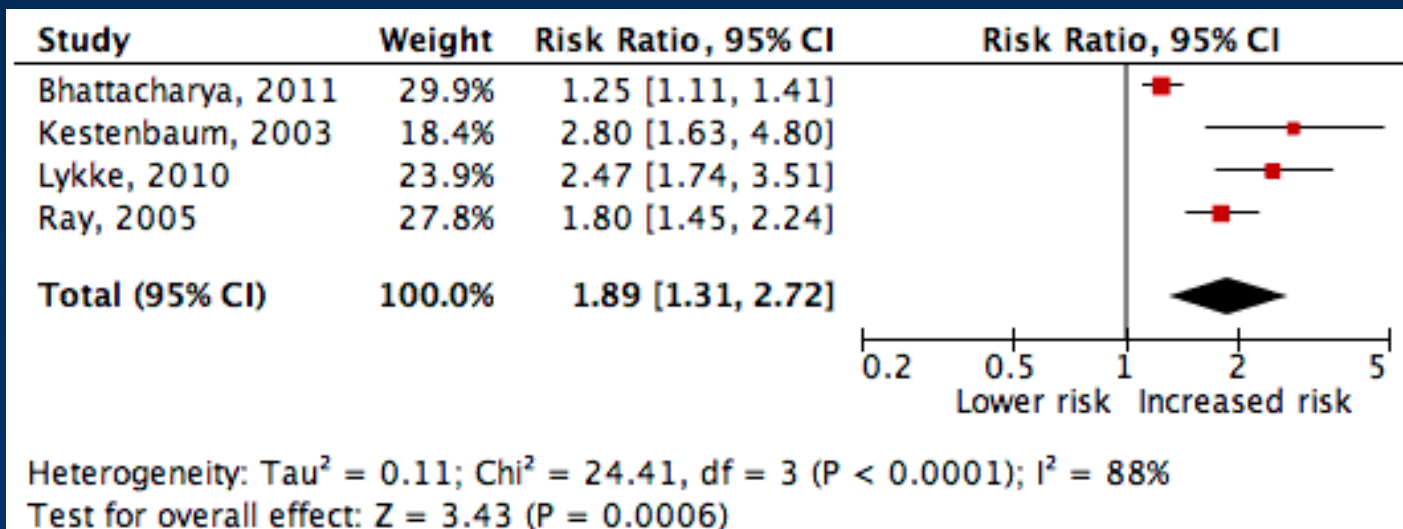
IH-Rest of World indicates subjects in INTERHEART overall sample from the rest of the world, excluding LA; *As measured by waist to hip ratio; [†] First vs third tertile; [‡] Never vs current and former; [§] Never vs permanent

Non-Traditional Risk Factors – Adverse Pregnancy Outcomes (APOs) – All CVD

Pre-Eclampsia



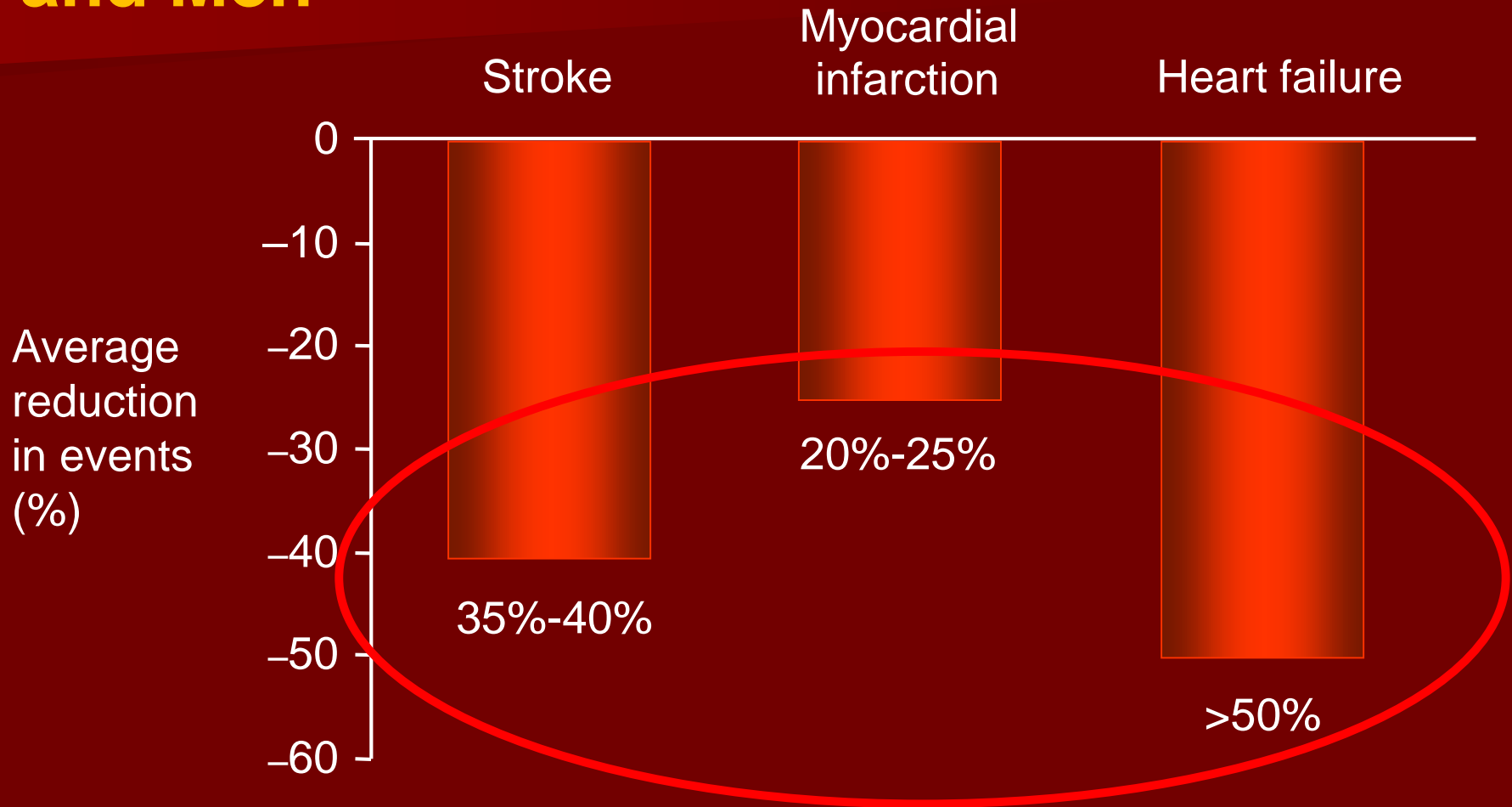
Gestational HTN



Guideline Management Therapy for CVD Prevention and Management in Women

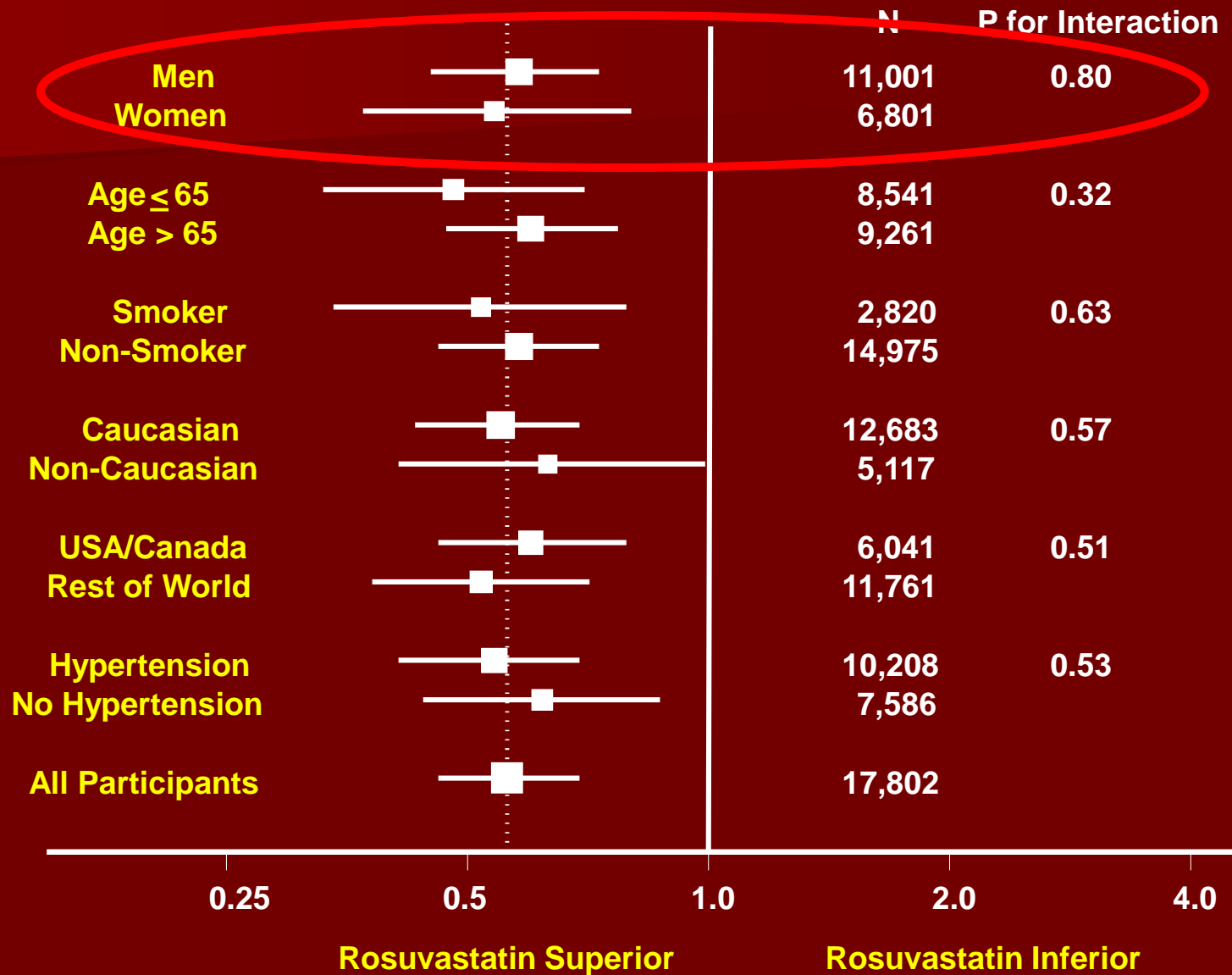
- Therapeutic Lifestyle Change (TLC) of nutrition, exercise and smoking cessation/avoidance
- Optimal Medical Therapy (OMT) management of hypertension, dyslipidemia and diabetes
- Low dose aspirin (81 mg) daily
- Hypertension, statin and low dose aspirin medications are effective and safe for CVD prevention
- One-third of women are eligible for this preventive treatment, yet less than half are advised to take it

Long-Term Antihypertensive Therapy Significantly Reduces CV Events in Women and Men

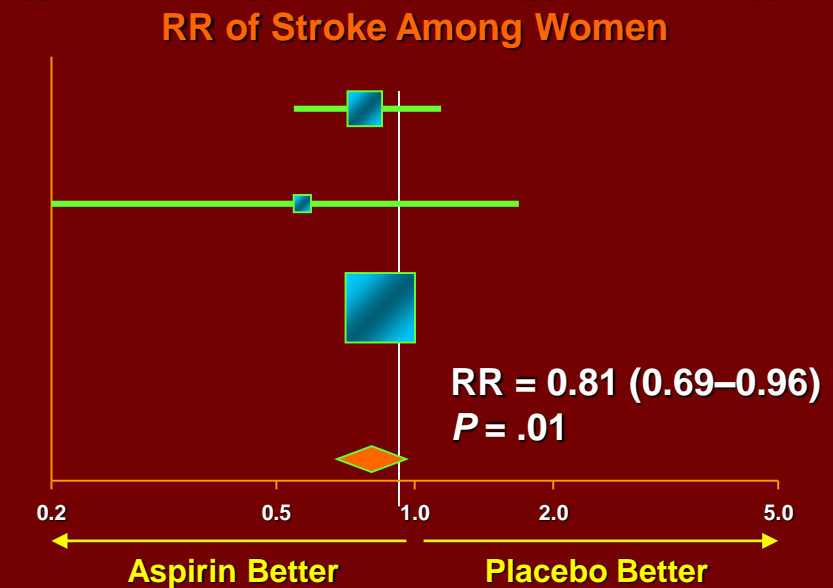
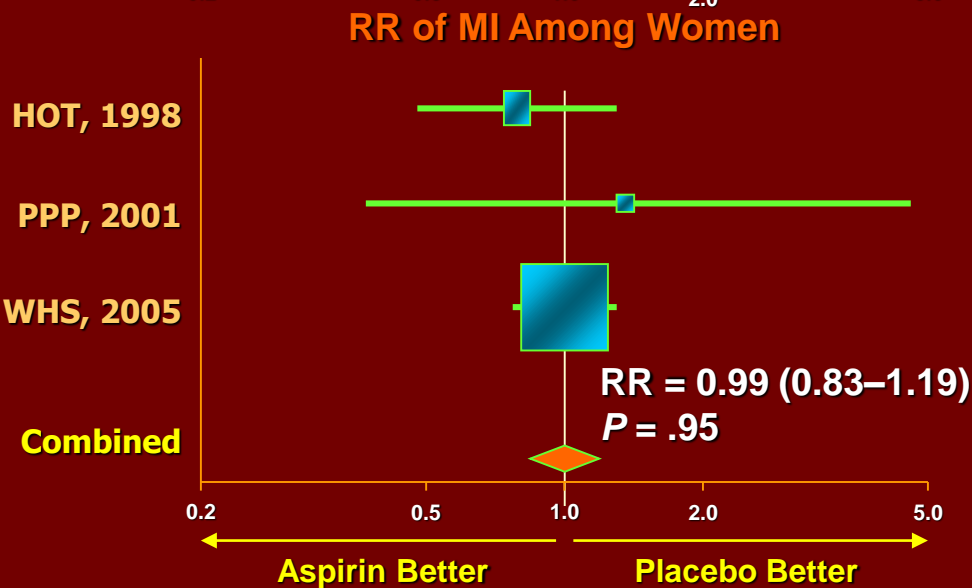
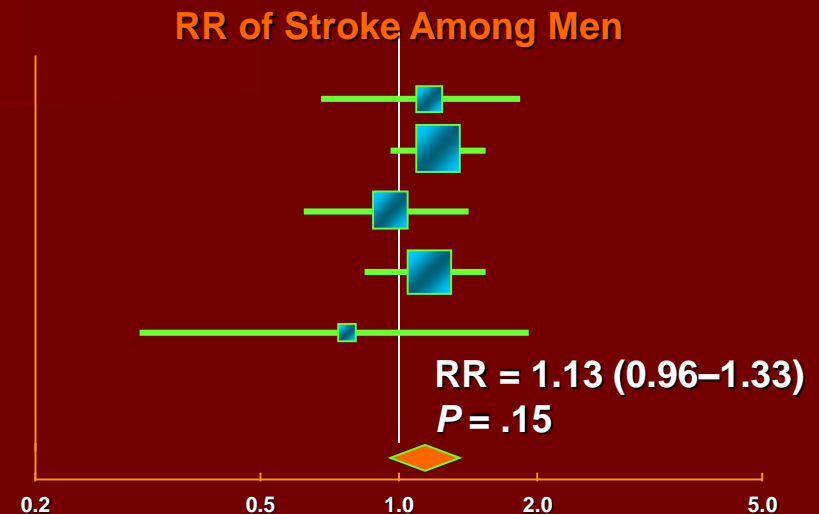
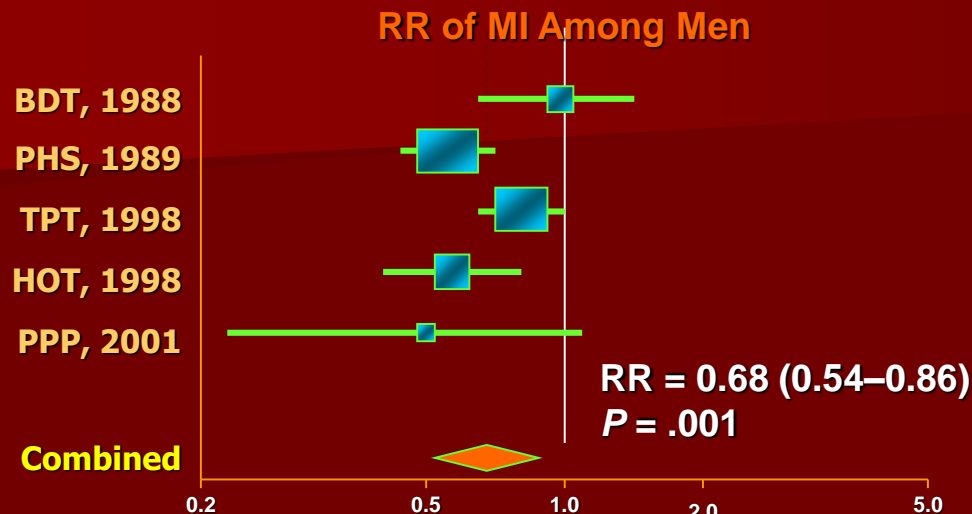




JUPITER: Statin Therapy Reduces CVD in Women and Men



Aspirin in Primary Prevention in Women



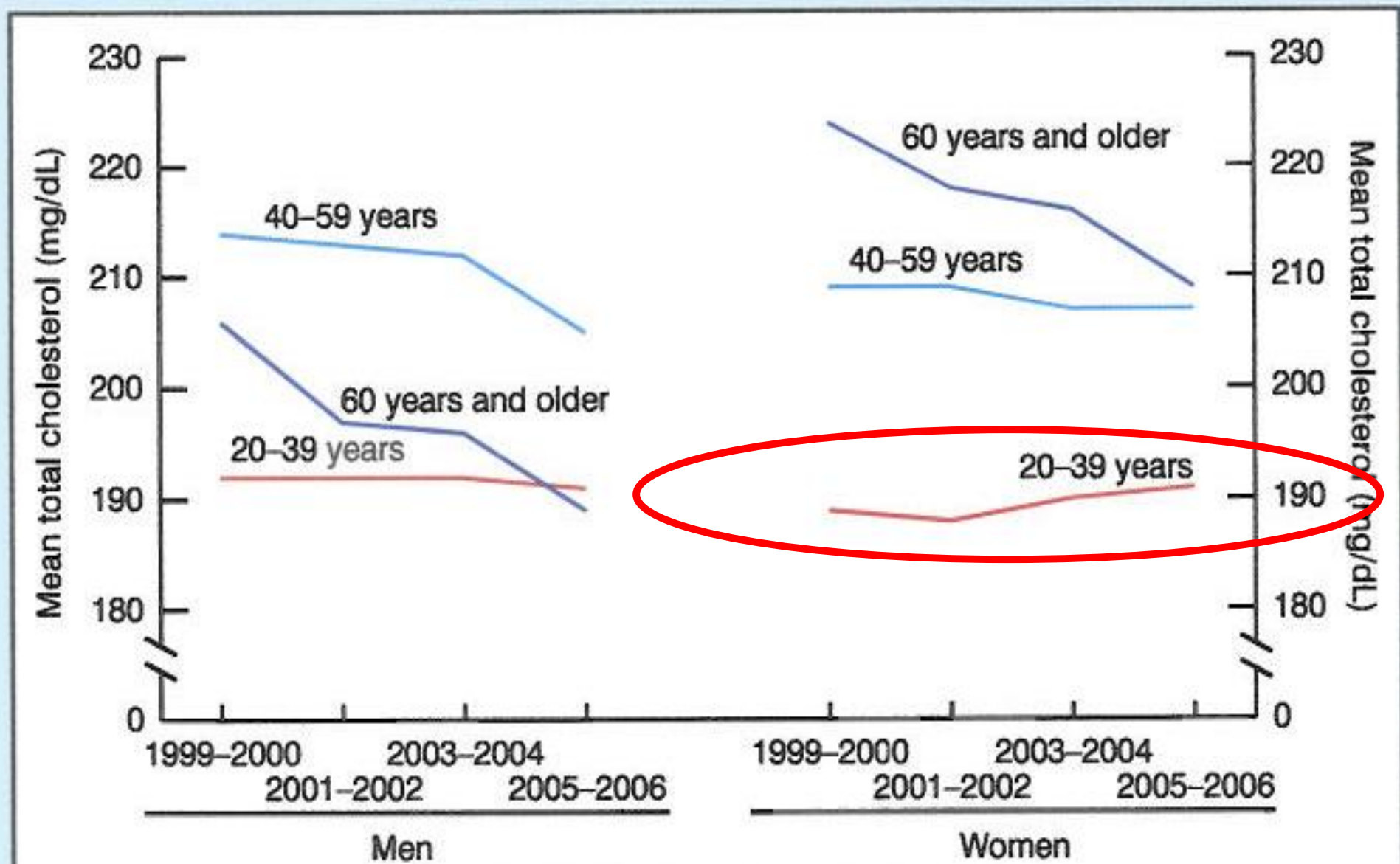
Women's Risk is Under-recognized

Predictors of Physician's Assignment of Increased Risk Level Among True Intermediate-Risk Cases

	Physician Specialty		
	PCP, OR (95% CI)	OB-Gyn, OR (95% CI)	CARD, OR (95% CI)
Intermediate-Risk Cases			
Age	1.40 (1.10-1.77)	1.77 (1.13-2.75)	1.60 (1.05-2.43)
Sex	0.62 (0.49-0.78)	0.88 (0.57-1.37)*	0.71 (0.47-1.08)*
Race/ethnicity	1.48 (1.17-1.87)	1.20 (0.77-1.86)*	0.84 (0.55-1.28)*
LDL	5.98 (4.66-7.69)	8.97 (5.49-14.66)	8.65 (5.45-13.71)
Blood pressure	12.92 (9.79-17.06)	50.81 (27.71-93.16)	14.05 (8.53-23.14)

*Nonsignificant logit coefficient. Mosca et al. *Circulation*. 2005;111:499-510.

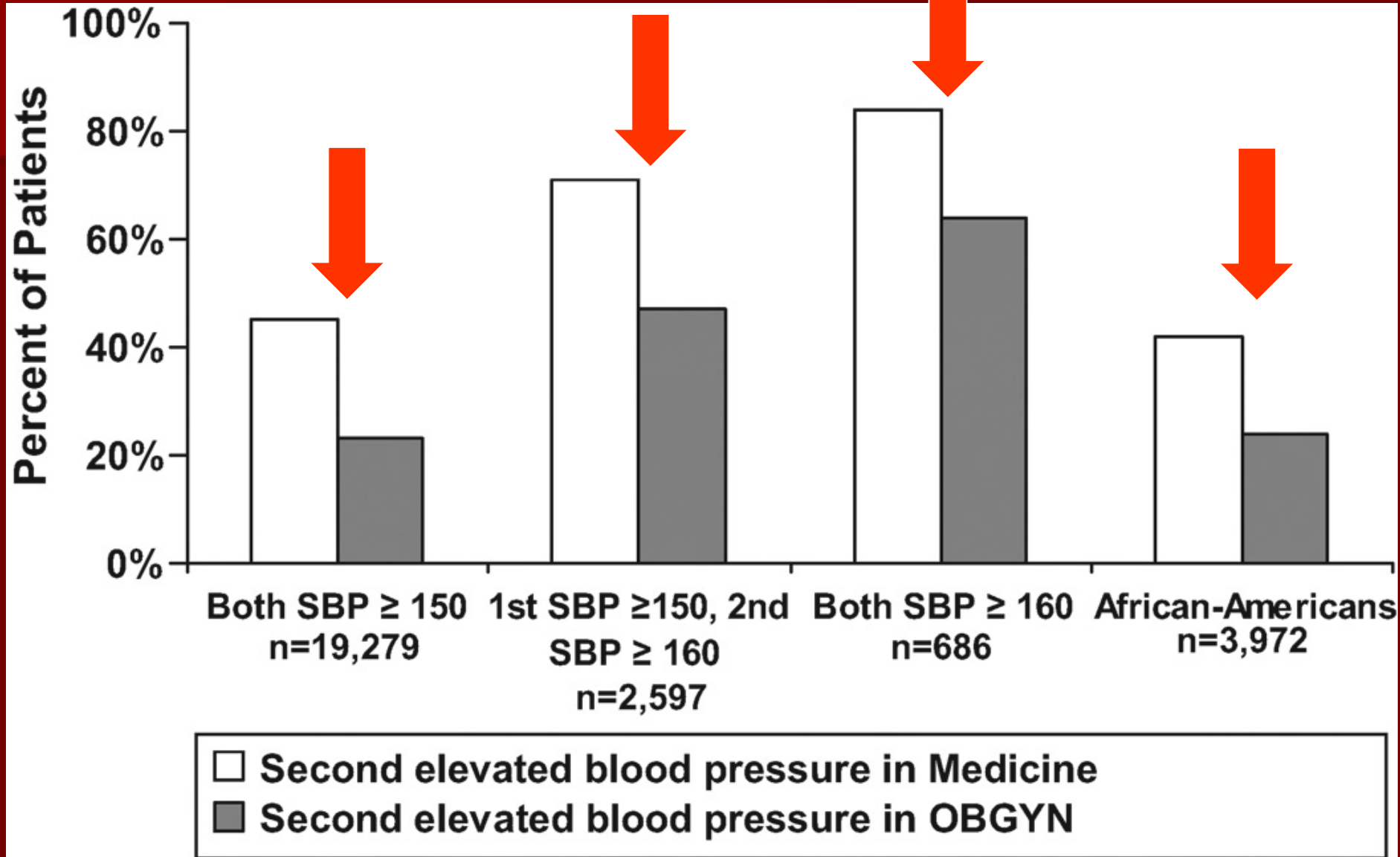
Figure 1. Mean serum total cholesterol levels of adults aged 20 years and older by age and sex, United States, 1999–2006



SOURCE: CDC/NCHS, National Health and Nutrition Examination Surveys, 1999–2006.

MISSED OPPORTUNITIES IN CVD PREVENTION? LOW RATES OF HTN RECOGNITION FOR WOMEN UNDER 50 YRS AT MEDICINE AND OBGYN CLINICS

Hypertension. 2011 Apr; 57(4): 717–722. <http://dx.doi.org/10.1161/HYPERTENSIONAHA.110.168195>



$p < .001$ for all comparisons

A true story

- 48 year old internist at her family's Thanksgiving
- 46 year old brother states he has hypertension
- She says "You can't have hypertension!" and takes his blood pressure – he has hypertension
- She checks her own blood pressure – she has hypertension
- She looks in her OB-GYN medical records – she had gestational hypertension with both pregnancies (37 and 39 yrs) and has been hypertensive (140/90) in her OB-GYN annual checkups for years without notice or action

Barbra Streisand Women's Heart Center Cedars-Sinai Medical Center Los Angeles, CA, USA



Postpartum Heart Health Program

Barbra Streisand Women's Heart Center

The primary purpose of the Postpartum Heart Health Program is to identify women with high blood pressure, diabetes and or previous heart disease and to provide them with screening, nutritional and exercise counseling. The Barbra Streisand Women's Heart Center is a leading center along with cardiovascular risk screening.

Who directs the program?

Margo Minissian, PhD, ACNP, will be the primary provider for this practice. As an experienced cardiology nurse practitioner, she has the skill set to administer the risk factor screening and evaluation and to help women reduce their long-term risk of heart disease. Ms. Minissian is a doctor of philosophy candidate in biological and biobehavioral research at UCLA. She will work in collaboration with cardiologist Janet Wei, MD, and maternal fetal medicine specialist Sarah J. Kilpatrick, MD, PhD.

Who's eligible?

Postpartum women who had one or more of the following:

- Gestational hypertension
- Preeclampsia
- Postpartum hypertension
- Gestational diabetes
- Spontaneous preterm delivery < 36 weeks

How to Schedule an Appointment

310-423-9680 (press option 2)

Request Postpartum Heart Health Program

www.cedars-sinai.edu/womensheart

Women's Heart Health: Management

- CVD is the leading lifetime health threat to younger and older women – *it is time to take action.*
- Both traditional and non-traditional risk factors are modifiable with existing preventive and intervention therapies – *the evidence is robust.*
- Traditional medical care, either General Medicine or Ob-Gyn does not address CVD screening, diagnosis and treatment for the majority of younger women – *is this acceptable?*
- Non-traditional APO followup clinics provide postpartum risk factor screening, lifestyle counseling and treatment affordably using allied healthcare providers – *it is time to nationally implement guideline strategies to reduce CVD morbidity and mortality in young and older women.*

40-year-old female new patient referred for second opinion re: risk factor management by OB-GYN.

HX: Five years ago, she was diagnosed with systemic lupus with a positive ANA. She is a para 2 gravida 2, and had hypertension postpartum with both of her sons.

EXAM: BP 145/93 otherwise WNL

LABS: TC 185 TG 125 HDL 50 LDL 110

CURRENT MEDICATIONS: Brimonidine 0.5% eyedrops, BuSpar orally 10 mg p.o. b.i.d, enteric coated aspirin 81 mg p.o. daily, Nexium 40 mg taken once daily, Ativan as needed, Zofran as needed, Plaquenil 100 mg p.o. b.i.d., Pravachol 40 mg p.o. at bedtime, verapamil 120 mg p.o. daily.

How should she be treated?

1. Current treatment is fine
2. Intensify hypertension therapy
3. Stop the statin and aspirin