

# **Hormones and your Heart**

## **What do we know?**

**Carol J. Grabowski, M.D. MBA**  
**MemorialCare Center for Women**  
**February 19, 2011**



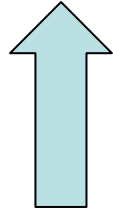
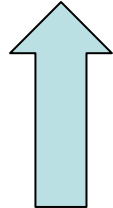
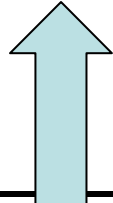
Long Beach Memorial

# Presentation Goals


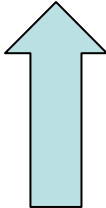
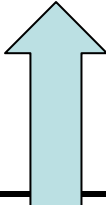
- To Understand:
  - Menopausal Hormones
  - Conflicting Information
- To Be Able To:
  - Interpret studies in the media
  - Get a proper perspective and balance multiple aspects of total healthcare

# Women's Health Initiative Estrogen + Progestin



<b>Outcome</b>	<b># Events Per 10,000 PLACEBO</b>	<b># Events Per 10,000 E + P</b>	<b>Difference in risk</b>	<b>% Difference in risk</b>	
Heart Attack	30	37	7	23	
Stroke	21	29	8	38	
VTE = Blood Clots	16	34	18	101	

# Women's Health Initiative (WHI): Estrogen

<b>Outcome</b>	<b># Events Per 10,000 PLACEBO</b>	<b># Events Per 10,000 E alone</b>	<b>Difference in risk</b>	<b>% Difference in risk</b>	
Heart Attack	54	49	5	10	
Stroke	32	44	12	37	
VTE = Blood Clots	21	28	7	33	

CALIFORNIA LOTTO PLUS



MEMORIALCARE<sup>®</sup>  
HEART & VASCULAR INSTITUTE

Long Beach Memorial

JACKPOT

\$10,000,000

CALIFORNIA LOTTO PLUS



MEMORIALCARE<sup>®</sup>  
HEART & VASCULAR INSTITUTE

Long Beach Memorial

\$10,000,000

CHANCES TO WIN  
JACKPOT + MEGA

**1**/41,416,353

CALIFORNIA LOTTO PLUS



MEMORIALCARE<sup>®</sup>  
HEART & VASCULAR INSTITUTE

Long Beach Memorial

\$10,000,000

CHANCES TO WIN  
JACKPOT + MEGA

**2/**41,416,353

CALIFORNIA LOTTO PLUS



MEMORIALCARE<sup>®</sup>  
HEART & VASCULAR INSTITUTE

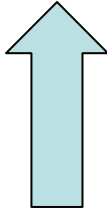
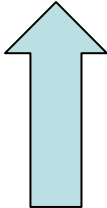
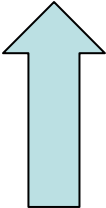
Long Beach Memorial

Group of 50 buys tickets together =

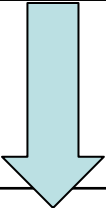
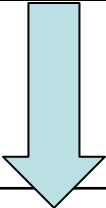
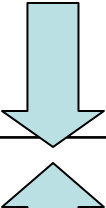
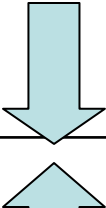
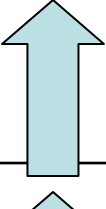
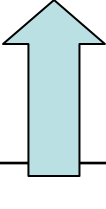
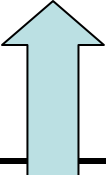

4900% increased chance to win

Still =  $50 / 41,416,353$

# WHI: Estrogen + Progestin

Outcome	# Events Per 10,000 PLACEBO	# Events Per 10,000 E + P	Difference in risk	% Difference in risk
Heart Attack	30	37	7	23 
Stroke	21	29	8	38 
VTE = Blood Clots	16	34	18	101 

# Estrogen Effect on Lipids

Lipid	Oral HT	Transdermal HT (Patch)
Total Cholesterol		
LDL		
HDL		
Triglycerides		

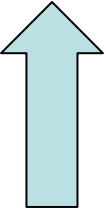
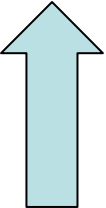
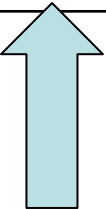
# WHI:

# Post Intervention

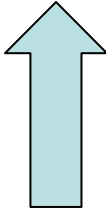
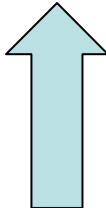


MEMORIALCARE<sup>®</sup>  
HEART & VASCULAR INSTITUTE

Long Beach Memorial

Outcome	# Events Per 10,000 PLACEBO	# Events Per 10,000 E + P	Difference in risk	% Difference in risk
Cardio-vascular	205	218	13	6 
Cancer	138	178	40	29 
Mortality	124	148	24	19 

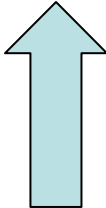
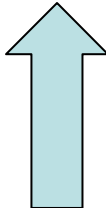
# Calcium Supplements & MI

Patient Data	# Events Per 8,151 PLACEBO	# Events Per 8,151 CALCIUM	Difference in risk	% Difference in risk
Heart Attack	111	143	32	31 
Trial Data	# Events Per 11,921 PLACEBO	# Events Per 11,921 CALCIUM	Difference in risk	% Difference in risk
Heart Attack	130	166	36	27 

# Osteoporosis

- Thinning of the bones leading to increased rate of fractures.
- **1/2** of all women after age 50 will be affected in their lifetime.
- 1.5 million fractures per year OUCH!!!!

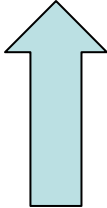
# Calcium Supplements & MI

Patient Data	# Events Per 8,151 PLACEBO	# Events Per 8,151 CALCIUM	Difference in risk	% Difference in risk
Heart Attack	111	143	32	31 
Trial Data	# Events Per 11,921 PLACEBO	# Events Per 11,921 CALCIUM	Difference in risk	% Difference in risk
Heart Attack	130	166	36	27 

# Breast Cancer & HRT Timing



MEMORIALCARE  
HEART & VASCULAR INSTITUTE  
Long Beach Memorial

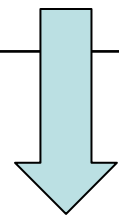
Hormone Use	# Women	# Women with Breast Cancer	Difference in risk	% Difference in risk
Never	513,000	6127		
Ever	615,753	9632	3605	57 

# Breast Cancer & HRT Timing



MEMORIALCARE  
HEART & VASCULAR INSTITUTE  
Long Beach Memorial

Hormone Use	Number of Women	Number of Women with Breast Cancer	Number of Women with Breast Cancer /10,000	Difference	% Difference
Never	513,000	6127	119	5	
Past	221,000	2525	114		1



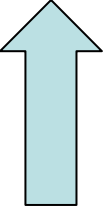
# Breast Cancer & HRT Timing



MEMORIALCARE  
HEART & VASCULAR INSTITUTE  
Long Beach Memorial

Hormone Use	Number of Women	Number of Women with Breast Cancer	Number of Women with Breast Cancer /10,000	Difference	% Difference
Never	513,000	6127	119		
Current	394,697	7107	180	61	51

# Breast Cancer & HRT Timing Estrogen

Hormone Use	# Women	# Women with Breast Cancer	Difference in risk	% Difference in risk
Early Start <5yrs	151,000	1924	1773	1275 
Late Start > 5yrs	151,000	151		

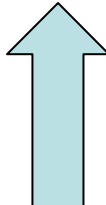
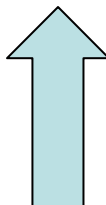
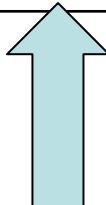
# WHI:

# Post Intervention

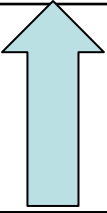
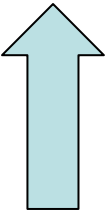


MEMORIALCARE<sup>®</sup>  
HEART & VASCULAR INSTITUTE

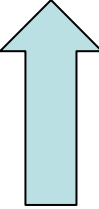
Long Beach Memorial

Outcome	# Events Per 10,000 PLACEBO	# Events Per 10,000 E + P	Difference in risk	% Difference in risk
Cardio-vascular	205	218	13	6 
Cancer	138	178	40	29 
Mortality	124	148	24	19 

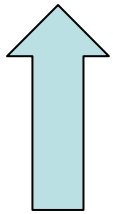
# Breast Cancer & HRT Timing

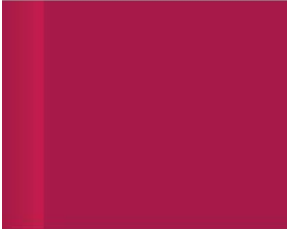
Hormone Use	# Women	# Women with Breast Cancer	Difference in risk	% Difference in risk
Never	513,000	6,127		
Current Estrogen	151,000	2,131		36 
Current Estrogen / Progestin	200,000	4,292		96 

# Breast Cancer & HRT Timing Estrogen + Progestin

Hormone Use	# Women	# Women with Breast Cancer	Difference in risk	% Difference in risk
Early Start <5yrs	200,000	3828	3464	1052 
Late Start > 5yrs	200,000	364		

# Breast Cancer & HRT Timing Estrogen

Hormone Use	# Women	# Women with Breast Cancer	Difference in risk	% Difference in risk
Early Start <5yrs	200,000	1924	1773	1174 
Late Start > 5yrs	200,000	151		



ns  
 zines  
 MS-like  
 n work.

thium,  
 ibitors  
 hrine

ese

yvider

Your  
 to help

u.

ms.  
 and

s

ider  
 you  
 q.  
 ou to  
 ni-  
 ire

may  
 rapy is  
 slowly to

a  
 he

difficulty  
 ur feet.  
 ng or  
 ere low  
 ave any

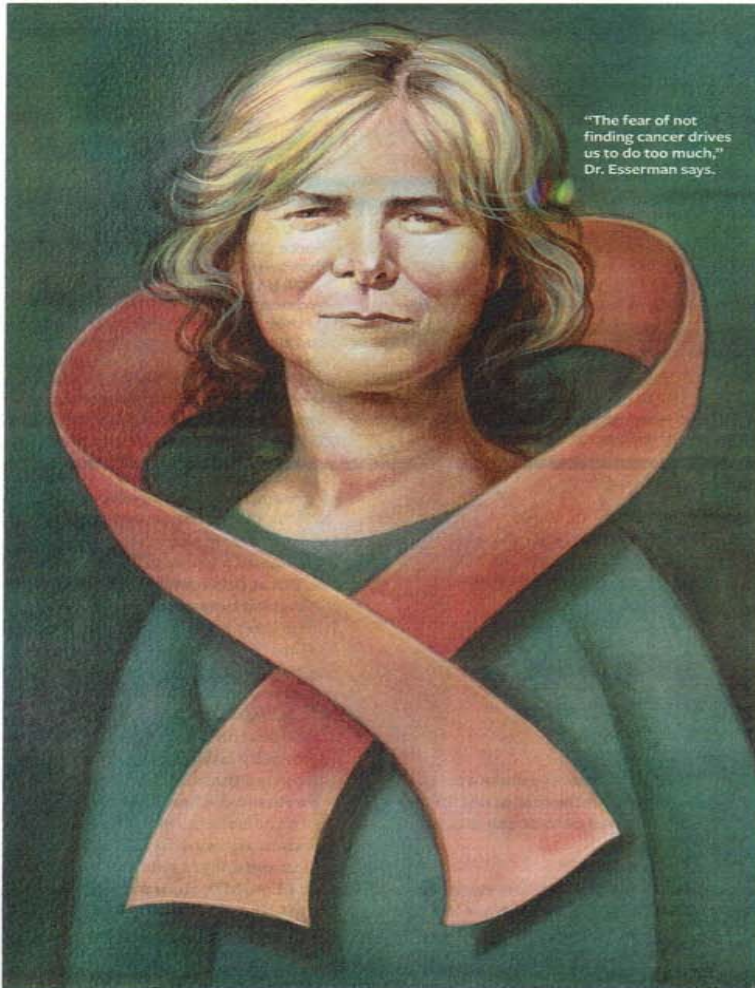
aculation

ider  
 for  
 ide  
 site at

rugs to

38-Pristiq  
 r current  
 r call our

wers



"The fear of not finding cancer drives us to do too much," Dr. Esserman says.

breast cancer update

**YOUR BREASTS 2010: Part 3**  
**Why You Might Not Need a Mammo**

The breast cancer doc who touched off last year's mammogram controversy argues that what we need is less routine screening and fewer biopsies. Confused? Keep reading. **By Ginny Graves**

**LAURA ESSERMAN IS RUNNING** behind. A conference call for the grant proposal she's working on lasted longer than expected, then her 15-year-old son burst unexpectedly into her office to use her computer and bum 75 cents for bus fare. Now she has lost her reading glasses. Again. "This is the sixth pair that has disappeared. I have no idea where they go," she says, looking under a book on the broad, paper-strewn desk in her sixth-floor office at the University of California, San Francisco (UCSF) Medical Center, where she is a nationally known breast surgeon. Despite the flurry of distractions, interruptions, and mysteriously vanishing eyewear, Dr. Esserman seems calm. Maybe it's her years of intensive surgical training, or the discipline she honed earning an MBA from the Stanford Graduate School of Business while working as a practicing surgeon. In any case, that equanimity has served her well of late.

Last October, she and a urology colleague published an article in the *Journal of the American Medical Association*



CARE'  
 LAR INSTITUTE  
 orial

# Mammograms

- Age 40-49
  - Need to do 1900 mammograms to save one life
  - Many women have mild abnormalities that require more testing to rule out cancer
  - Tumor tends to be more aggressive
    - Age <45 Five year survival = 81%
    - Age 45-65 Five year survival = 85%
    - Age > 65 Five year survival = 86%

# Mammograms

- After Age 50 chance of breast cancer is higher
  - 77% of breast cancers are diagnosed in women > 50yo
  - Chance of breast cancer:
    - By age 40 = 1/69
    - By age 50 = 1/42
    - By age 60 = 1/29
    - By age 70 = 1/27

# Mammograms

- US Preventative Services Task Force

Reccomendations:

No mammograms till 50 yo

Mammogram every two years from 50 – 75 and you won't die of breast cancer

Mammograms outside of these guidelines should be determined by the physician and patient if she is high risk (undefined)

# WHI: Recommendation



Treat symptomatic women with the **lowest** dose of Hormone Therapy for the **shortest** amount of time as necessary to relieve her symptoms.

Estrogen should be balanced with progestin for women who have a uterus.

# Osteoporosis Prevention



- Premenopausal Women:
  - 1000 mg Calcium / day
  - Vitamin D 400-800mg / day
  - Weight bearing exercise

- Postmenopausal Women:
- 1500 mg Calcium / day
  - Vitamin D 400-800mg / day
  - Weight bearing exercise

# Mammograms

- Talk with your doctor and make a decision
- I am still using the American Cancer Society Guidelines:
  - Mammogram every 1-2 yrs Age 40-50
  - Mammogram every year >Age 50