

A randomized double-blind placebo controlled, Phase II/III, study of aromatase inhibitors and transdermal testosterone in the adjuvant treatment of postmenopausal women with aromatase inhibitor induced arthralgias: A221102

Stephen Birrell, M.D. Ph.D.

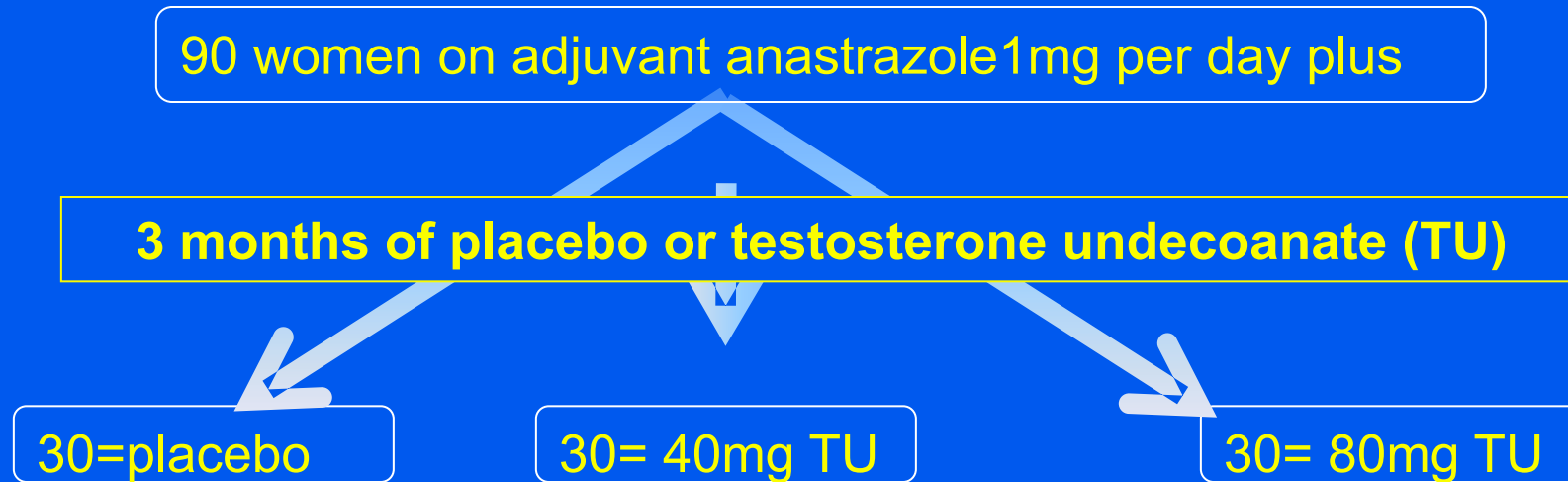
Charles Loprinzi, M.D.

Testosterone undecanoate treatment reduces joint morbidities induced by anastrozole therapy in postmenopausal women with breast cancer: results of a double-blind, randomized phase II trial

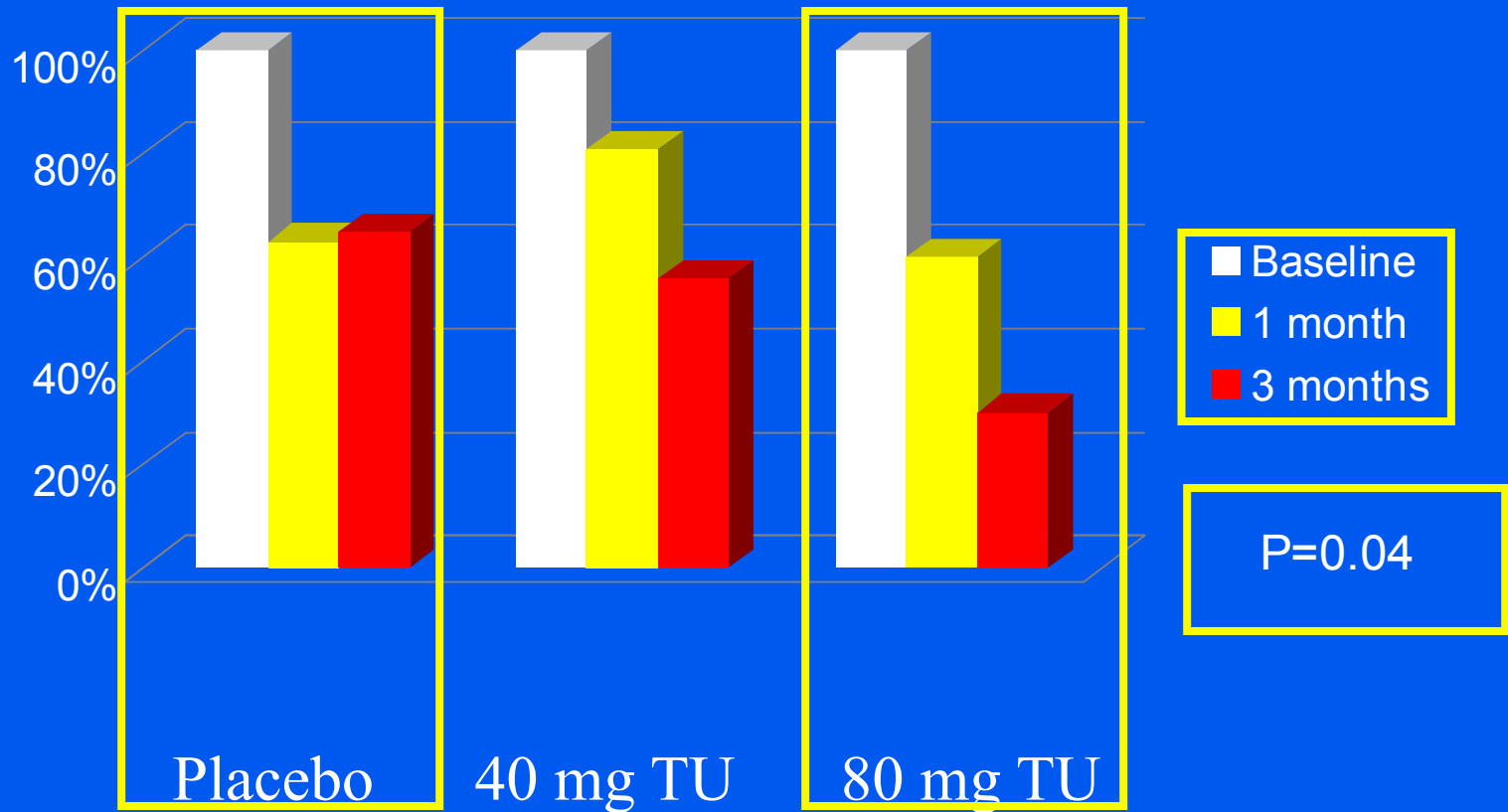
Birrell SN and Tilley WD.

Australia

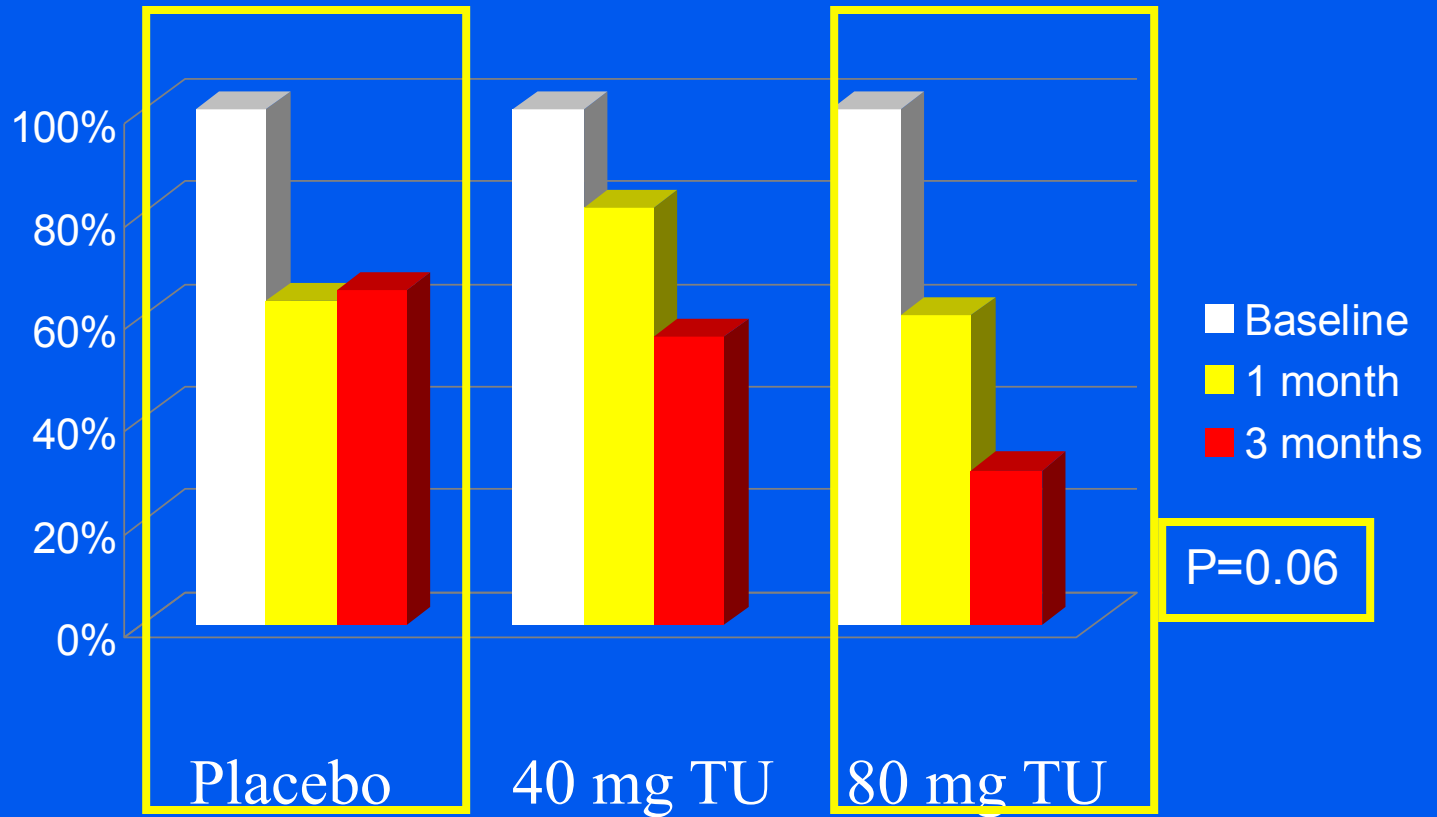
# Trial Design



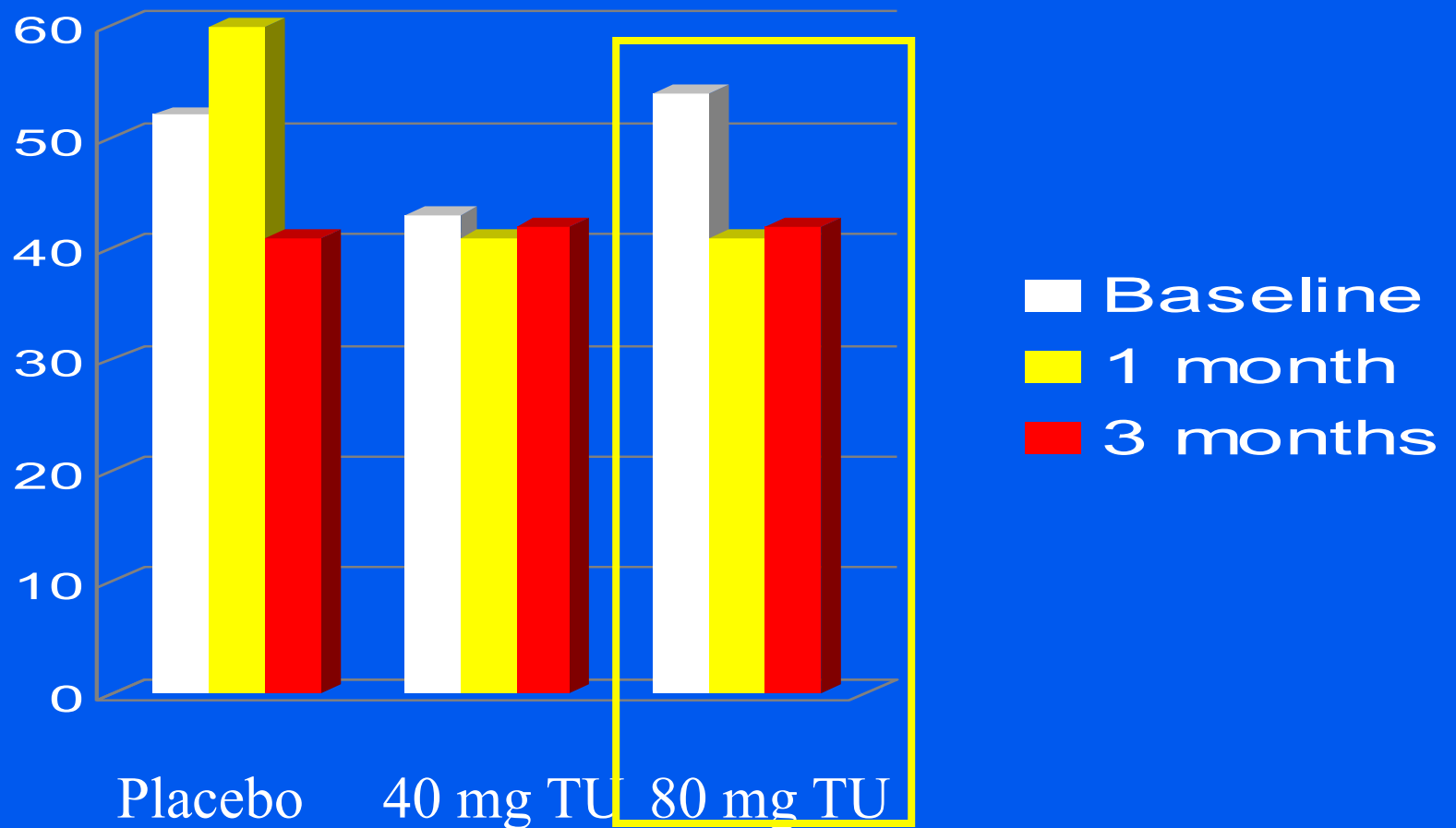
# Percentage of patients with a PAIN VAS >50mm



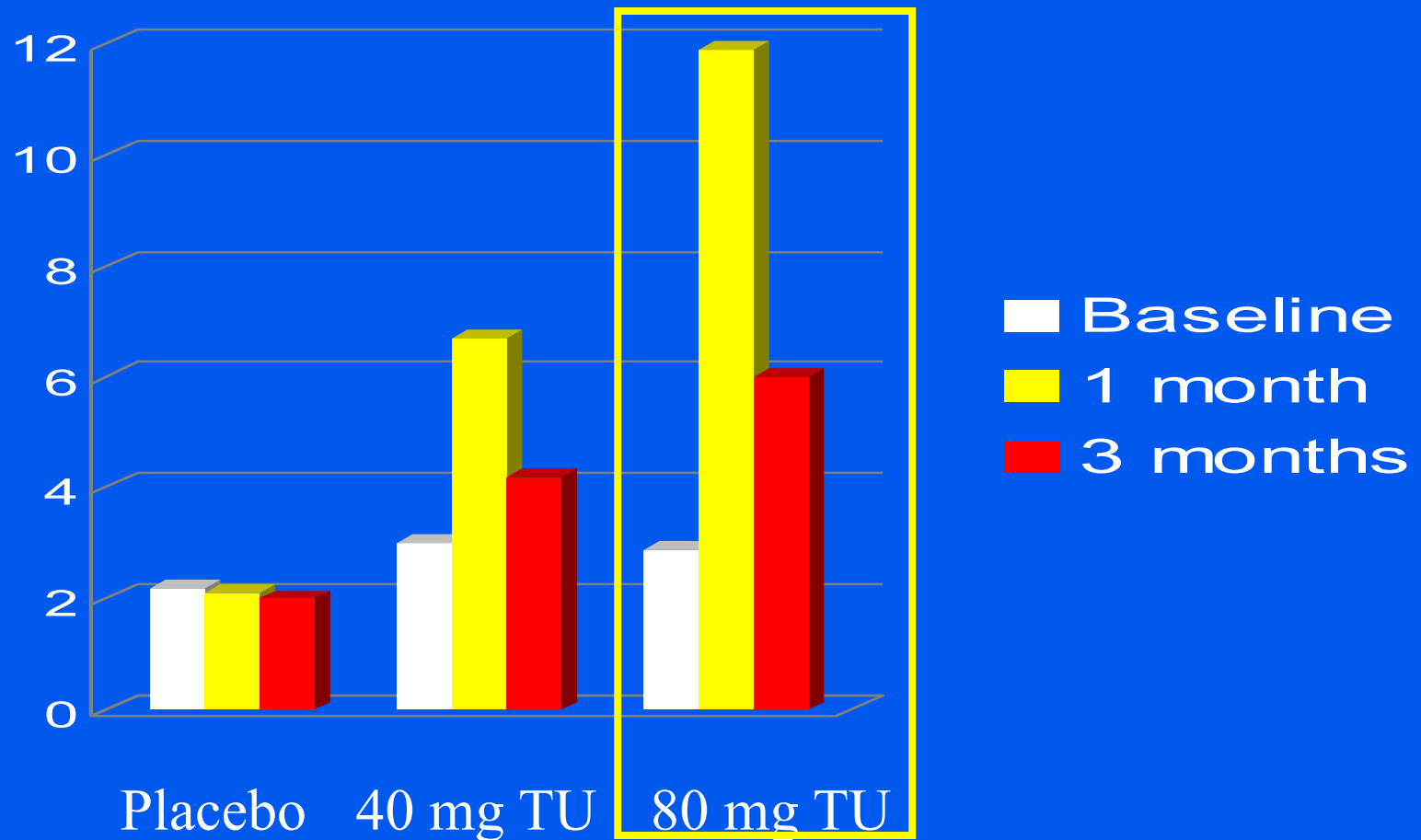
# Percentage of patients with a Stiffness VAS >50mm



# Estradiol concentrations



# Free Testosterone Concentrations



# Randomized Placebo-Controlled Trial of Testosterone for AI-related Joint Symptoms

## Eligibility:

- Postmenopausal
- Adjuvant AI
- Worst joint pain score  $\geq 5/10$

R  
A  
N  
D  
O  
M  
I  
Z  
E

Transdermal  
Testosterone

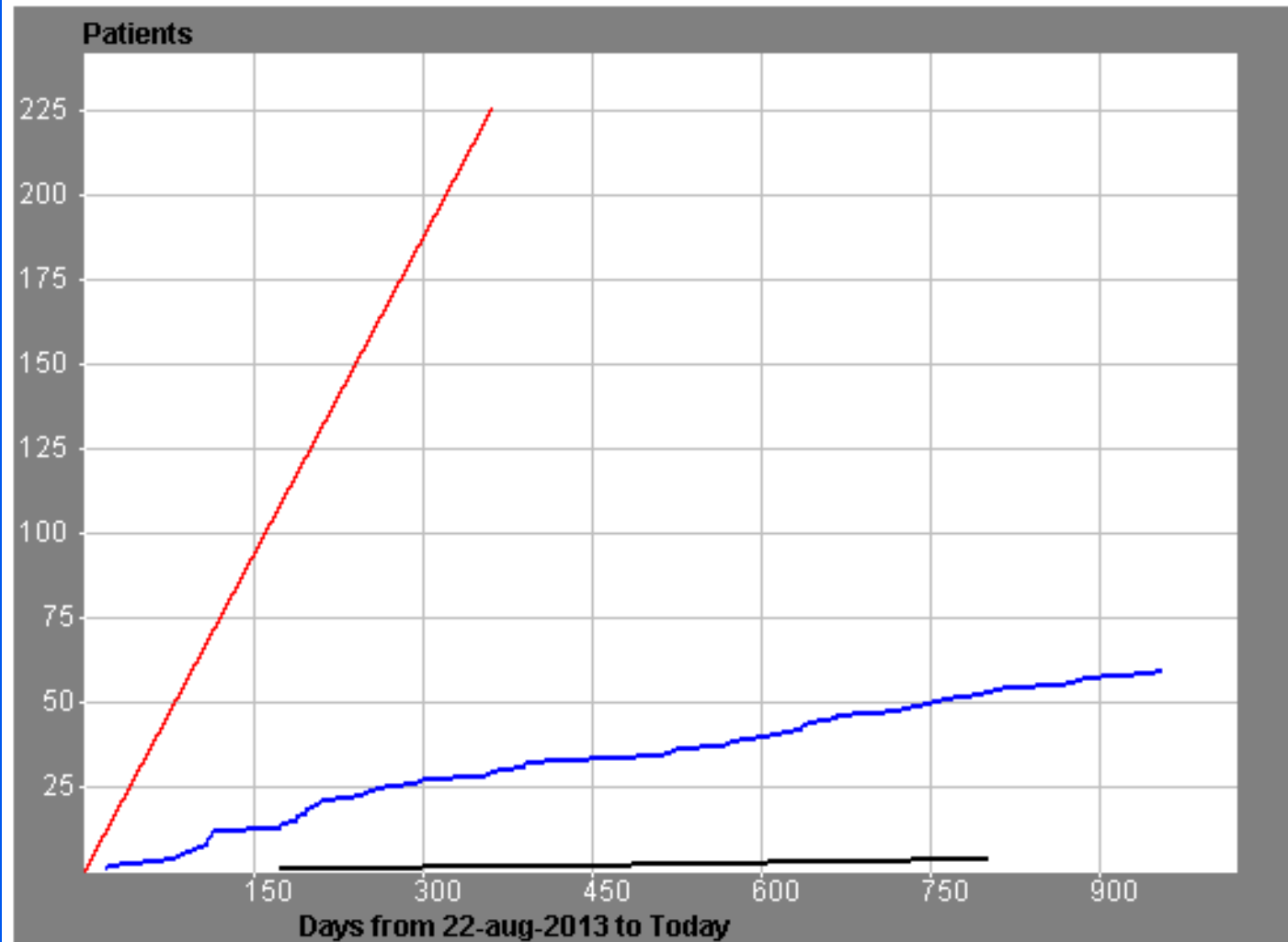
Placebo

**Primary Outcome:** Change in joint pain score at 3 mos

**N=226**



Study = A221102



# Other Eligibility Factors

- Receiving anastrozole or letrozole
- Body Mass Index (BMI) between 18 and 35 kg/m<sup>2</sup>
- Must have **BOTH** ER and PR receptor-positive tumors and BOTH must be  $\geq 26\%$  positive. Alternatively, if ER and PR are determined by Allred score, the score needs to be 5 or higher
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# Recent Protocol Modification

- Change from SubQ preparation to a topical daily preparation