



*Developing clinical stage small molecule
therapeutics to treat hormonal and reproductive
system disorders*

Repros Disclaimer

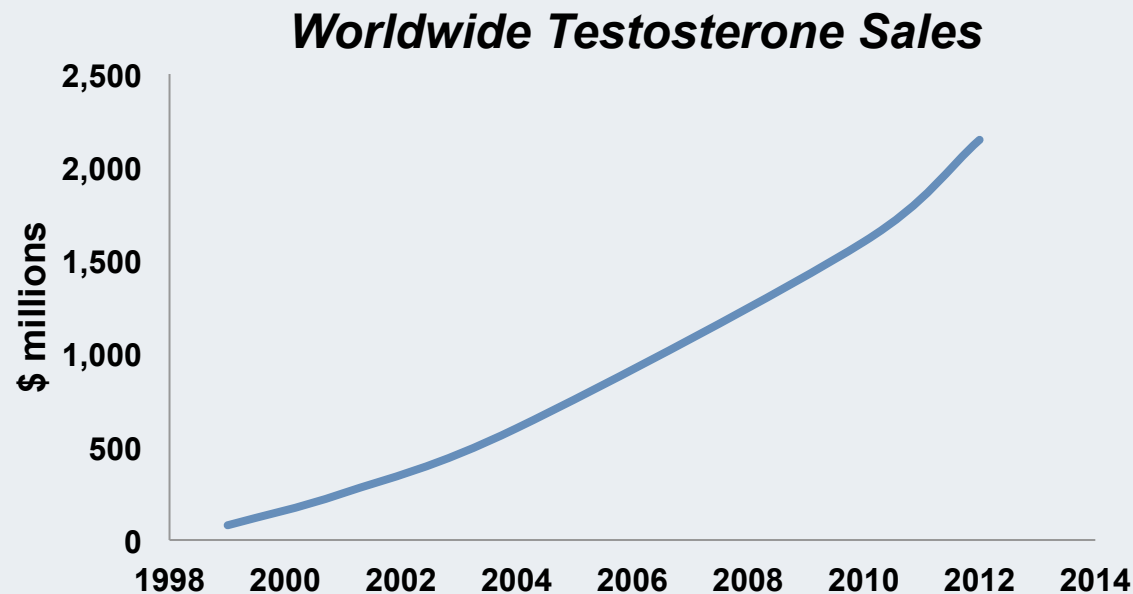
Any statements made by the Company that are not historical facts contained in this release are forward-looking statements that involve risks and uncertainties, including the ability to raise additional needed capital on a timely basis in order for it to continue to fund development of its Androxal[®] and Proellex[®] programs, have success in the clinical development of its technologies, the reliability of interim results to predict final study outcomes, and such other risks which are identified in the Company's most recent Annual Report on Form 10-K and in any subsequent quarterly reports on Form 10-Q. These documents are available on request from Repros Therapeutics or at www.sec.gov. Repros disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Investment Highlights

- **Focused strategy: small molecule therapeutics for reproductive disorders**
- **Two late stage clinical programs each with +\$1B sales potential**
- **Androxal® : PHASE 3 (SPA) oral treatment for Low Testosterone with pending patent/ patent life to the mid 2020's(growing +\$2B market)**
 - *Restoration of testicular function and testosterone levels in treatment of 2° hypogonadism (most common cause of low T)*
- **Proellex: PHASE 2 treatment for uterine fibroids and endometriosis with pending patent/ patent life to the mid 2020's (+ \$5B market)**
 - Chronic relief of uterine fibroid symptoms
 - Fibroid de-bulking
 - Chronic relief of the symptoms associated with endometriosis
 - Potential breast cancer intervention
- **Key late stage clinical & regulatory events driven news flow in 2013**

Testosterone Market Continues to Grow

- *2012 worldwide sales >\$2.1B*
- *US accounts for nearly 75% of global sales*
- *Major pharmaceutical companies have moved to capture 83% of US opportunity*



Excerpt: FDA SPA Minutes

1) *Proportion of subjects with average serum concentration (C_{avg}) for T in the normal range (i.e. serum T of 300 ng/dL – 1040 ng/dL).*

2) *Proportion of subjects with a 50% or greater decrease in sperm concentration from baseline to endpoint.*

To demonstrate efficacy with regards to the first endpoint, at least 75% of subjects in the Androxal group should achieve a C_{avg} for T in the normal range with the lower bound of the 95% confidence interval not below 67%. At least 100 Androxal subjects would be required to demonstrate a point estimate of 75% or better.

For the second endpoint, Androxal should be non-inferior to placebo with respect to the difference in responder rates. We have found a 20% non-inferiority margin to be acceptable in prior similar trials.

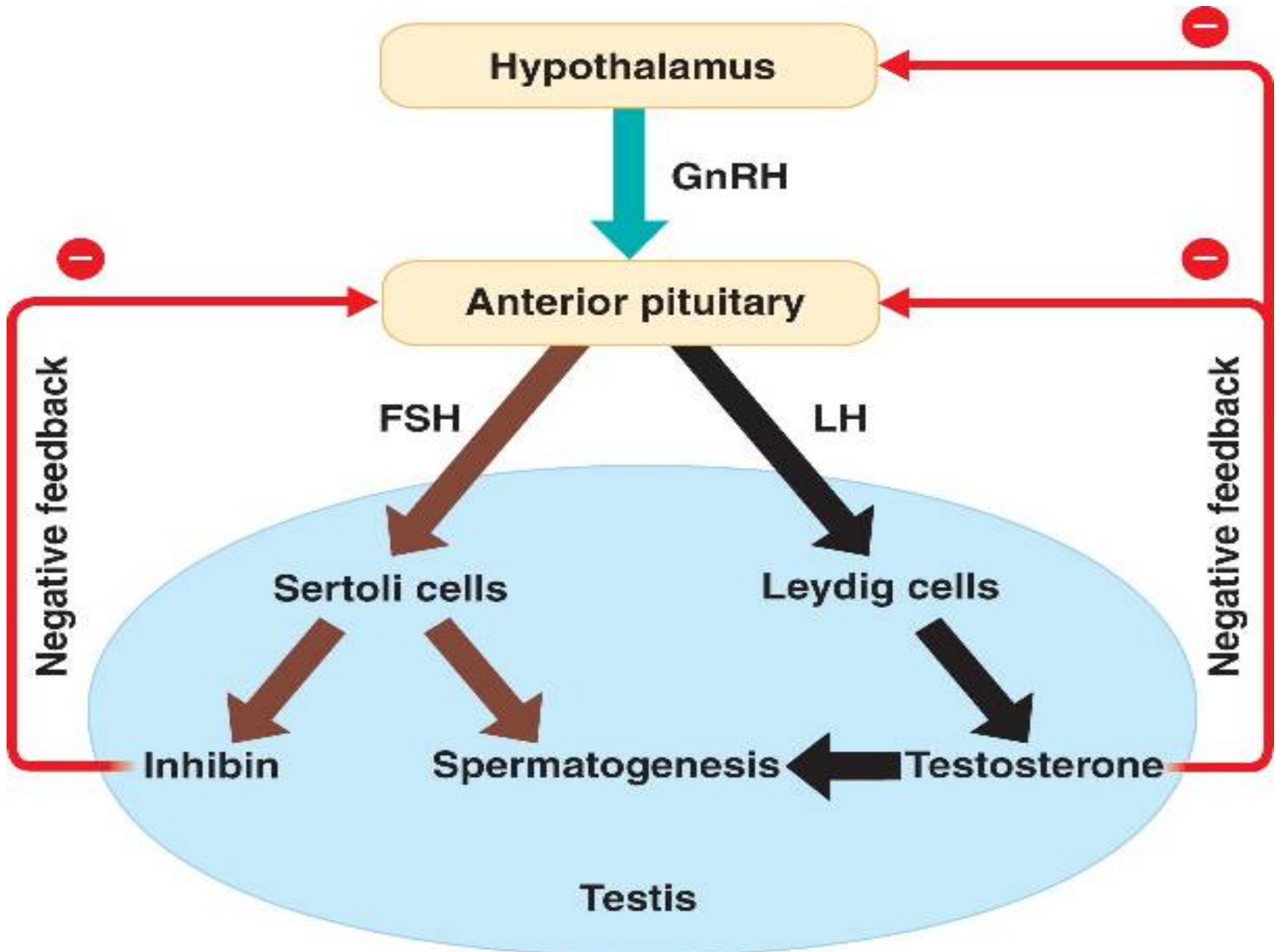
Values for serum T and sperm concentration at baseline and endpoint should be based on at least two assessments. Semen sampling at each time point (baseline and endpoint) should be separated by at least 48 hours.

C_{max} is an important safety issue. The percentage of patients with C_{max} above the following three pre-determined limits (listed below) should be a secondary endpoint:

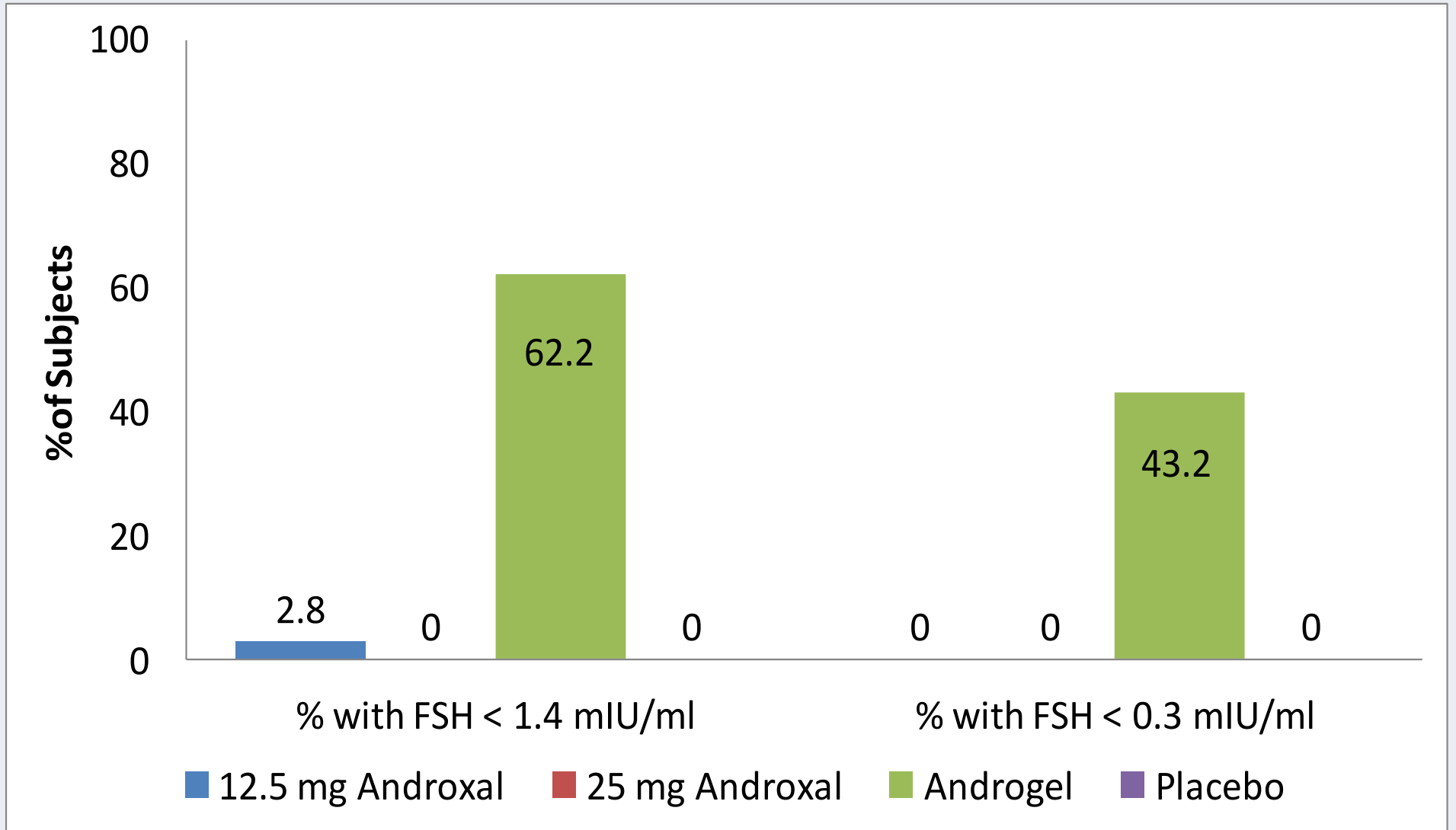
- $C_{max} > 1500$ ng/dL*
- $C_{max} > 1800$ ng/dL and < 2499 ng/dL*
- $C_{max} > 2500$ ng/dL*

How to Impact Sperm Concentration While Treating for Hypogonadism

- **Suppress FSH**
 - Administration of exogenous testosterone
 - Reduces sperm counts to azoospermic or oligospermic levels
 - Infertility or impaired fertility
- **Significant increase in sexual activity**
 - In general fertility unaffected

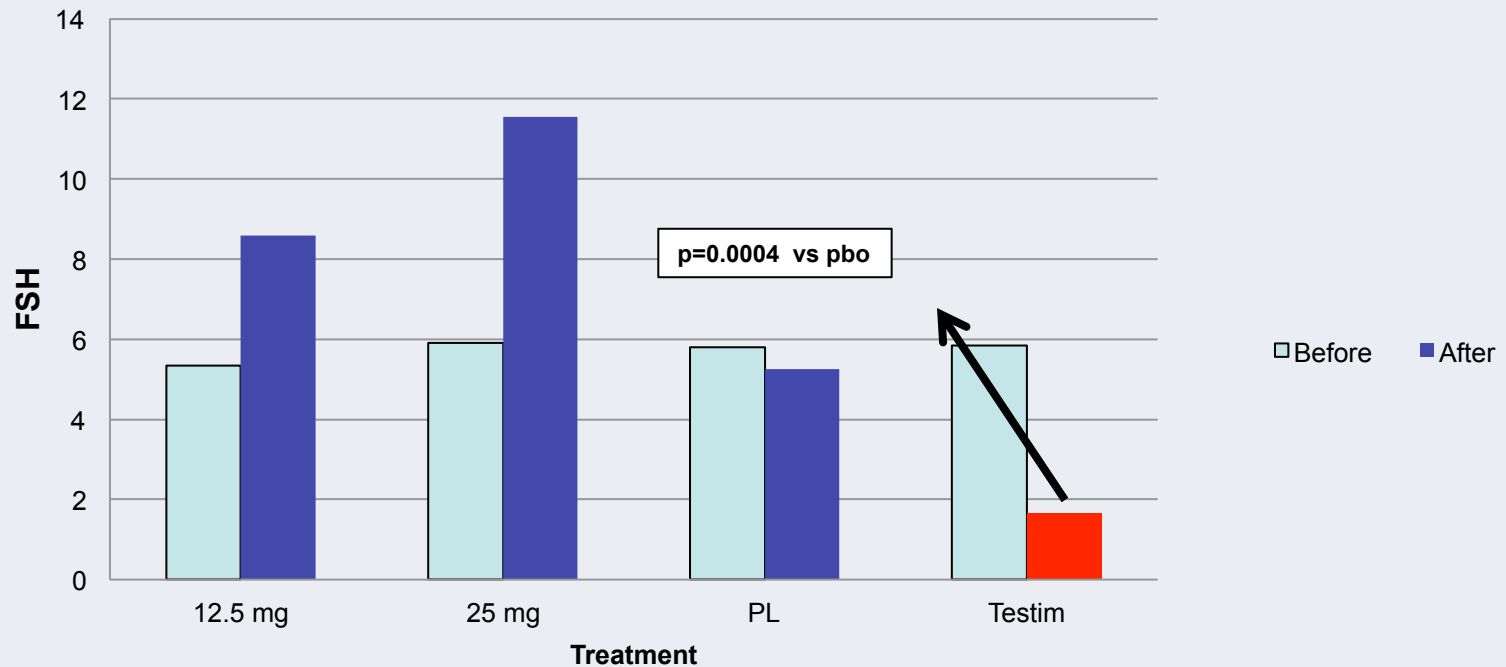


% of Subjects with FSH Below the Lower Limit of Normal and Below the Lower Limit of Detection (0.3 mIU/ml) after 3 months ZA-003 “Completer” Analysis



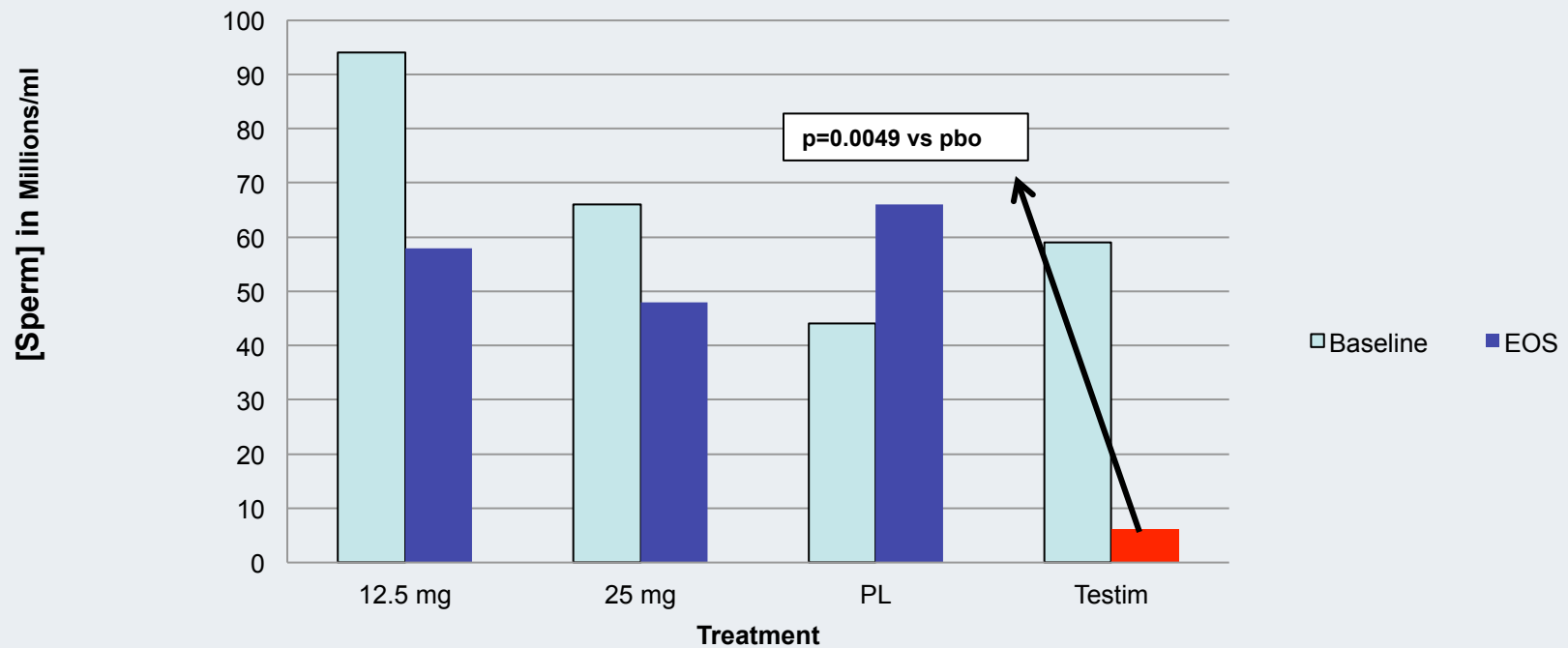
FSH Effects ZA-203 (3 month study)

Effect of Treatment on Median FSH p versus Testim

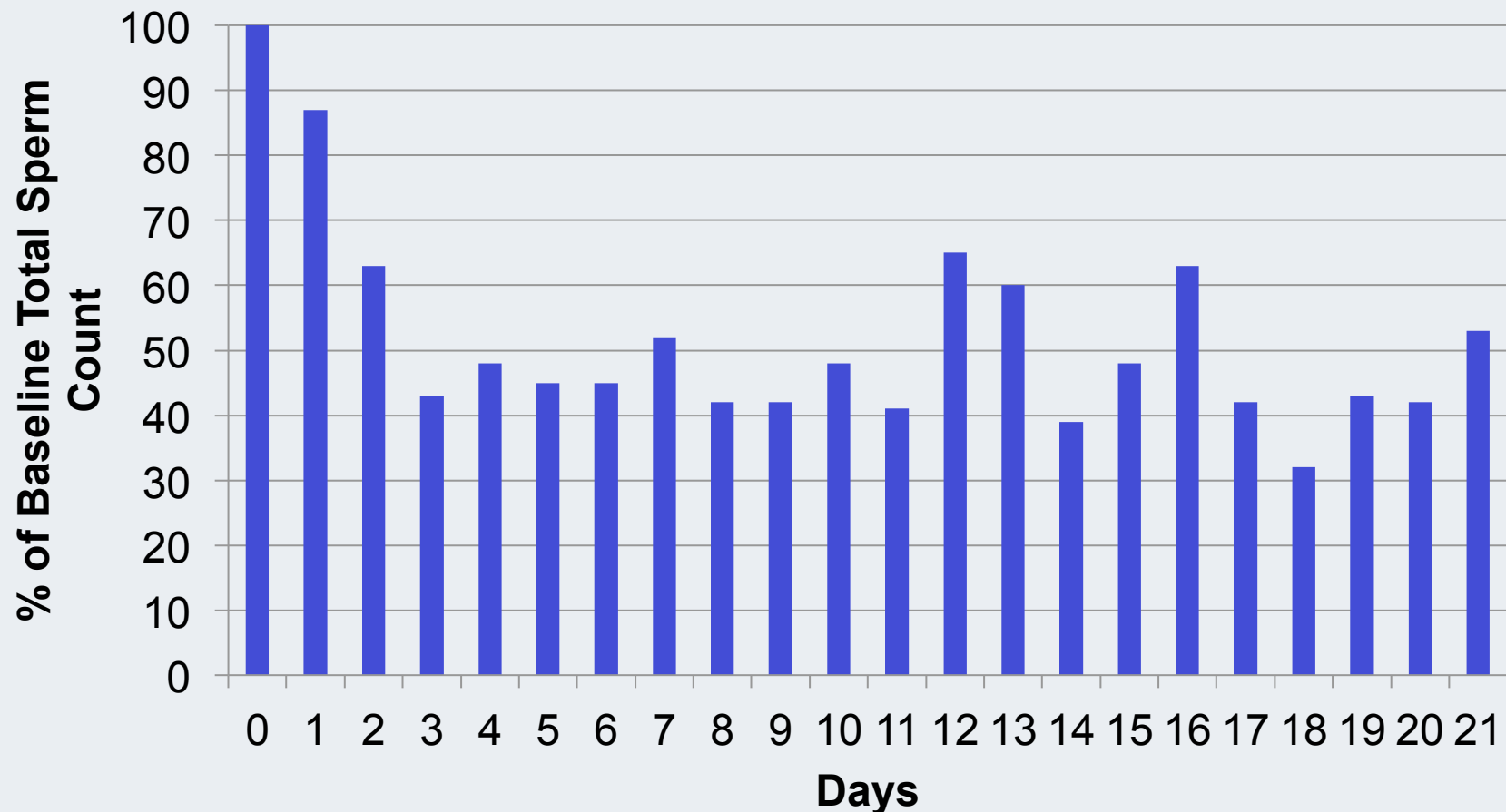


Sperm Concentration ZA-203

Effect of Treatment on Median Sperm Concentration p versus Testim

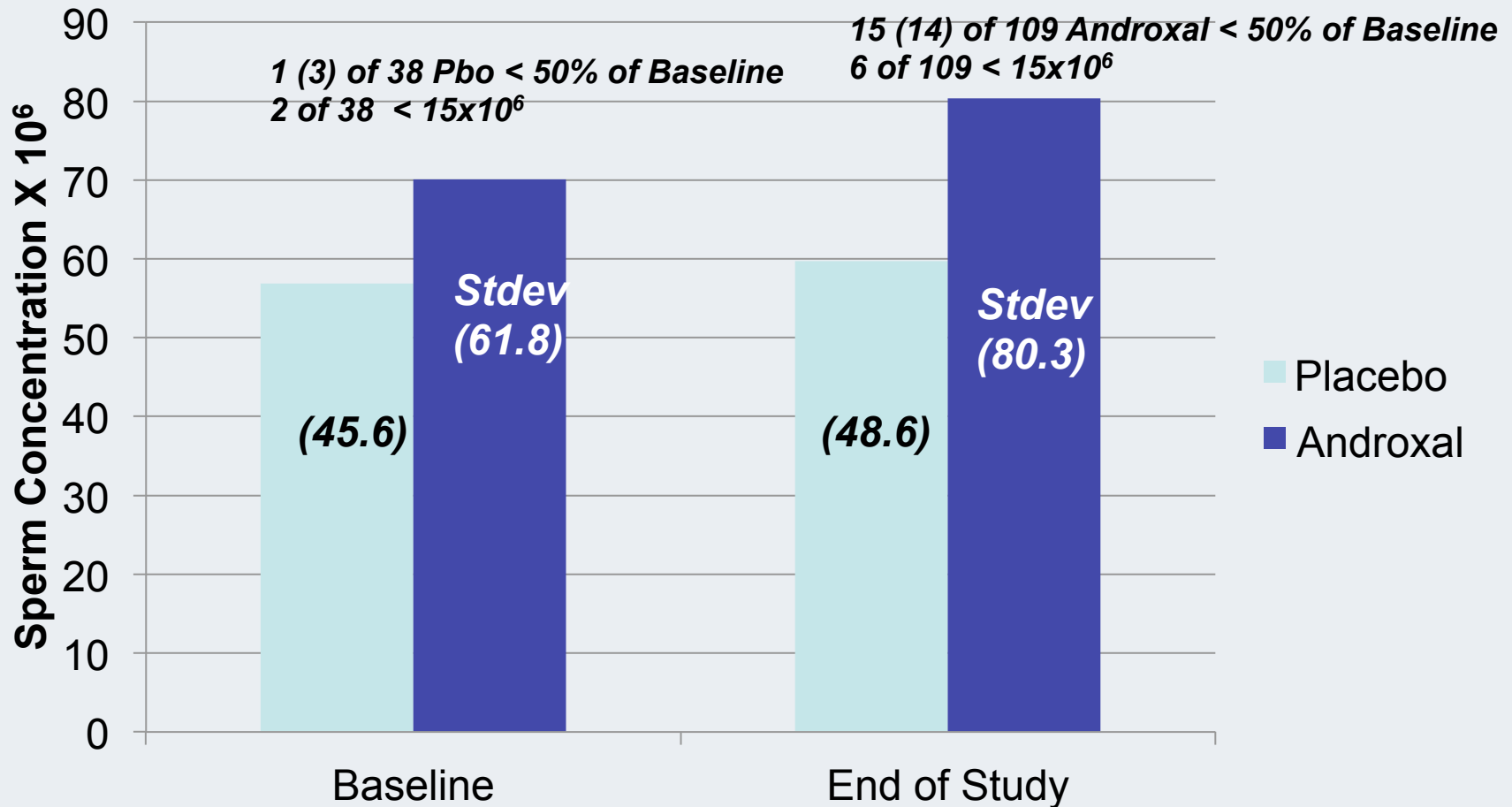


Ejaculation Frequency Reduces Sperm Numbers (n=12 subjects (age 18-25))

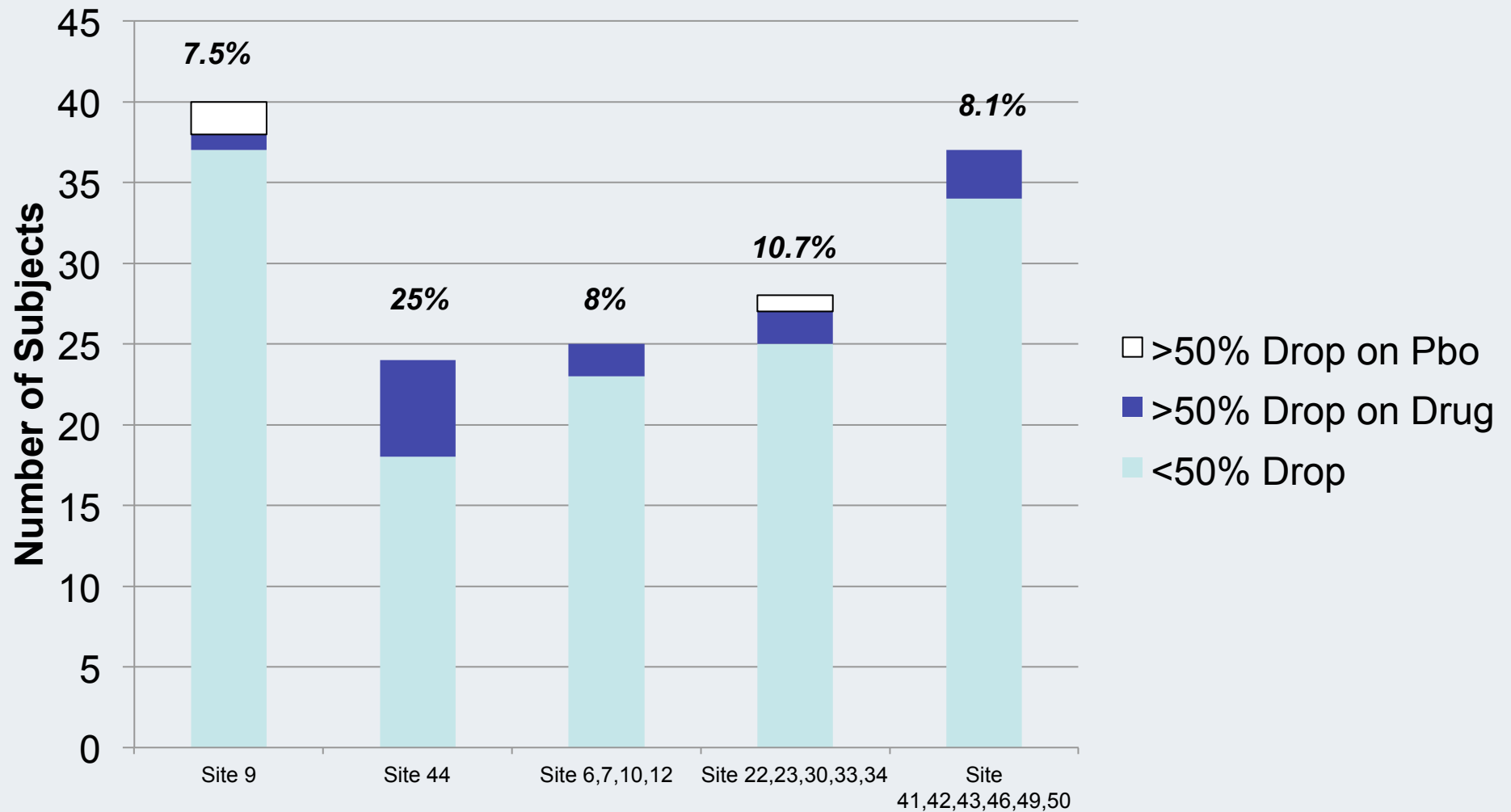


*Fertility and Sterility, Levine et al
Vol.5, No. 5, May 1986*

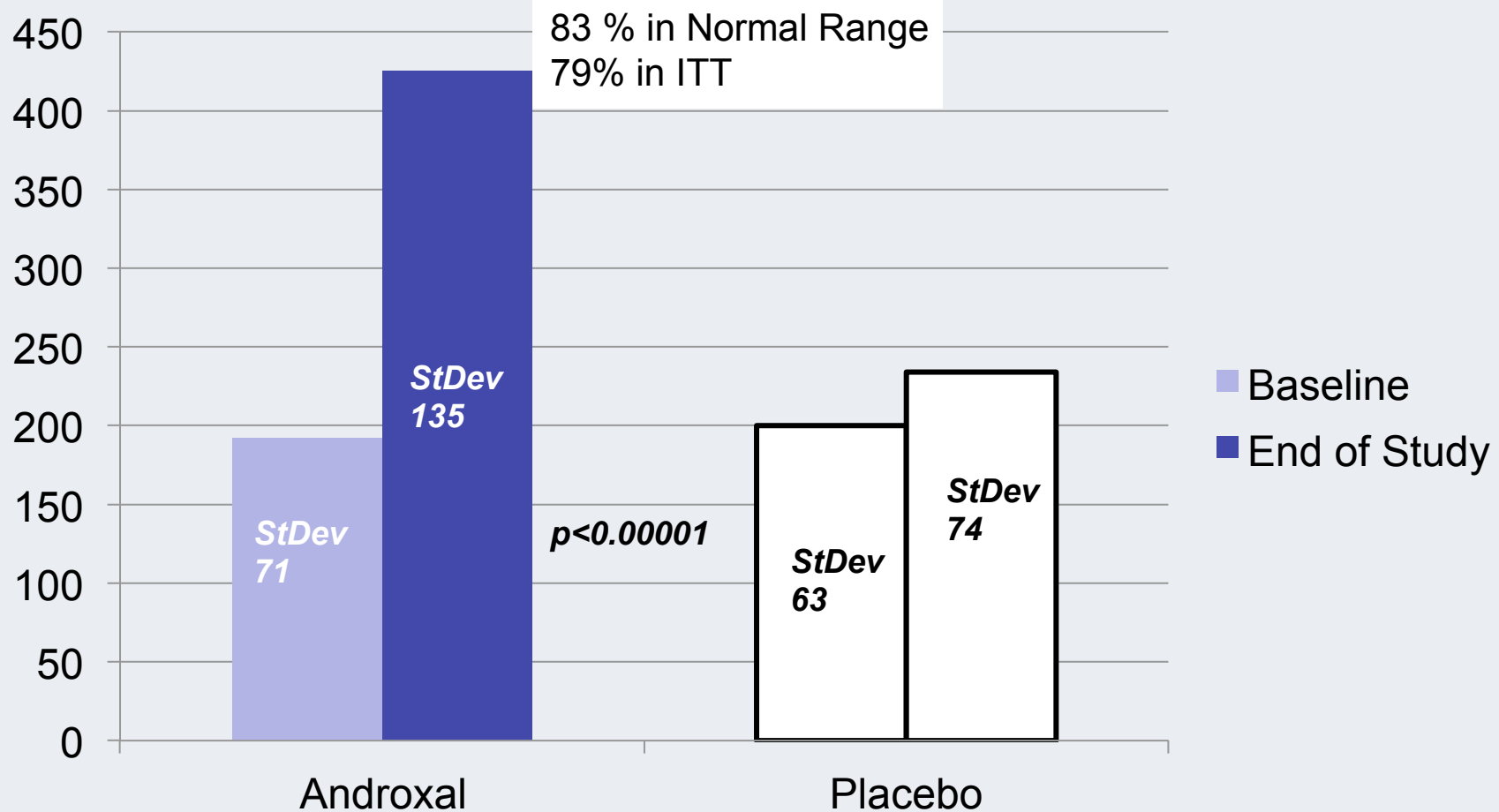
Androxal: No Negative Impact on Average Sperm Counts ZA-301



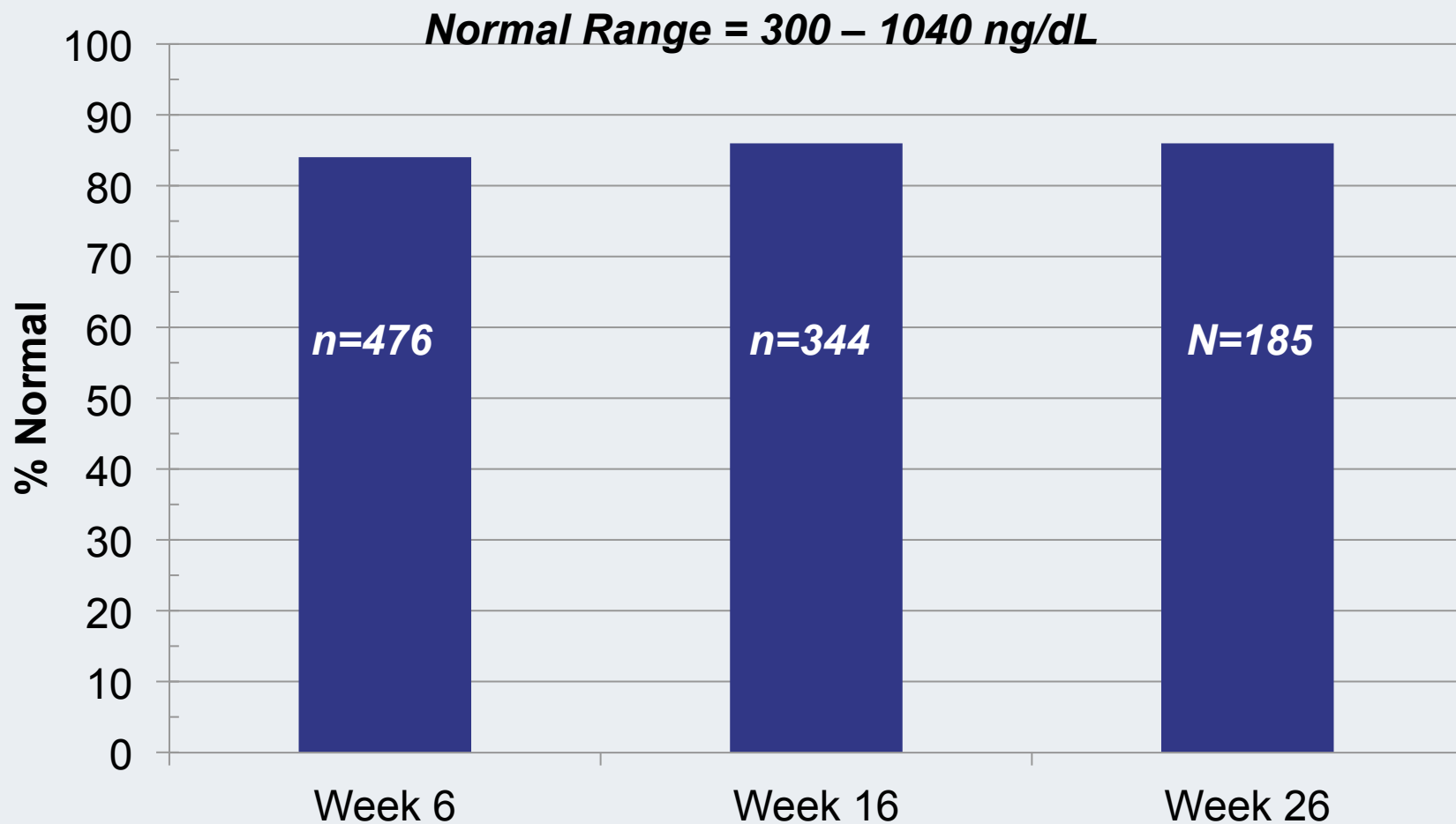
Breakdown of Sperm Count Drops >50% by Site ZA-301



Change in Testosterone at End of Study (Completer Analysis) ZA-301



ZA-300: % of Men with T in the Normal Range Fully Enrolled











Phase III Androxal Program Status:3/12/13

NDA Target: June 2014

Study	Target Enrollment	Study Duration	Subjects Screened	Subjects Enrolled	Subjects Pending	Projected Full Enrollment
ZA-300 Safety	500	6 months	1288 (28 sites)	500		Fully Enrolled
ZA-301 Pivotal	152	3 months (+ 6 weeks)	571 (17 sites)	151	Enrolled in < 12 weeks	Fully Enrolled
ZA-302 Pivotal	180	3 months (+ 6 weeks)	395 (16 sites)	122	~20	May '13
ZA-303 Safety	150	1 year	419 (10 sites)	150		Core Study Enrolled

Androxal Profile Favorable Compared to Leading T Products

	T Gels/Creams	Androxal	<i>Advantage Androxal</i>
Administration	Applied to Skin	Oral	
Controlled Substance	Yes	No	
Sexual Partner & Risk to Children	Yes	No	
Unpredictable Response	Yes	No	
Super High T Levels	Yes	No	
Prostate Risk	Yes	No	
Shuts Down Testes	Yes	No	
Requires Chronic Treatment	Yes	No	

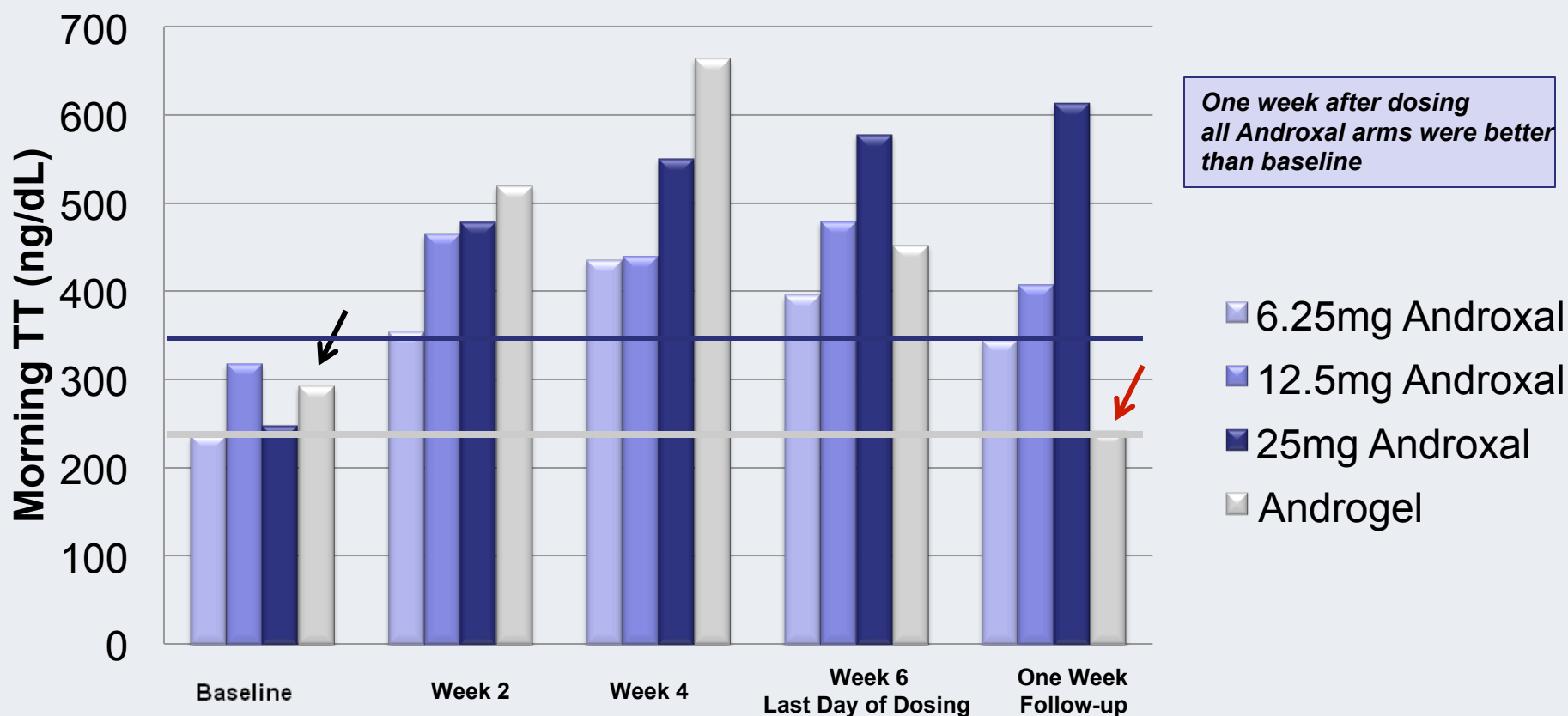
Third Party Study Suggests Favorable Reimbursement Potential for Androxal

Majority of payers believe Androxal's oral administration and non-chronic use may offer overall cost savings

- **Third party assessment of payers suggests vast majority (>90%) would add Androxal to formularies**
 - Cost will be key for tier placement
 - **50% of plans indicated they would require a PA (Prior Authorization) to show proper diagnosis**
- **62% of respondents expect Androxal to be priced at parity to Androgel**
 - Anticipated Androxal pricing of \$170-350/month would be competitive with Androgel

Men on Androxal exhibit continued improvement in T even after dosing has stopped

Fig. 14: Mean Morning TT Over Time (ZA-204)



One week after dosing the AndroGel arm was worse than baseline

Who are the men using testosterone?

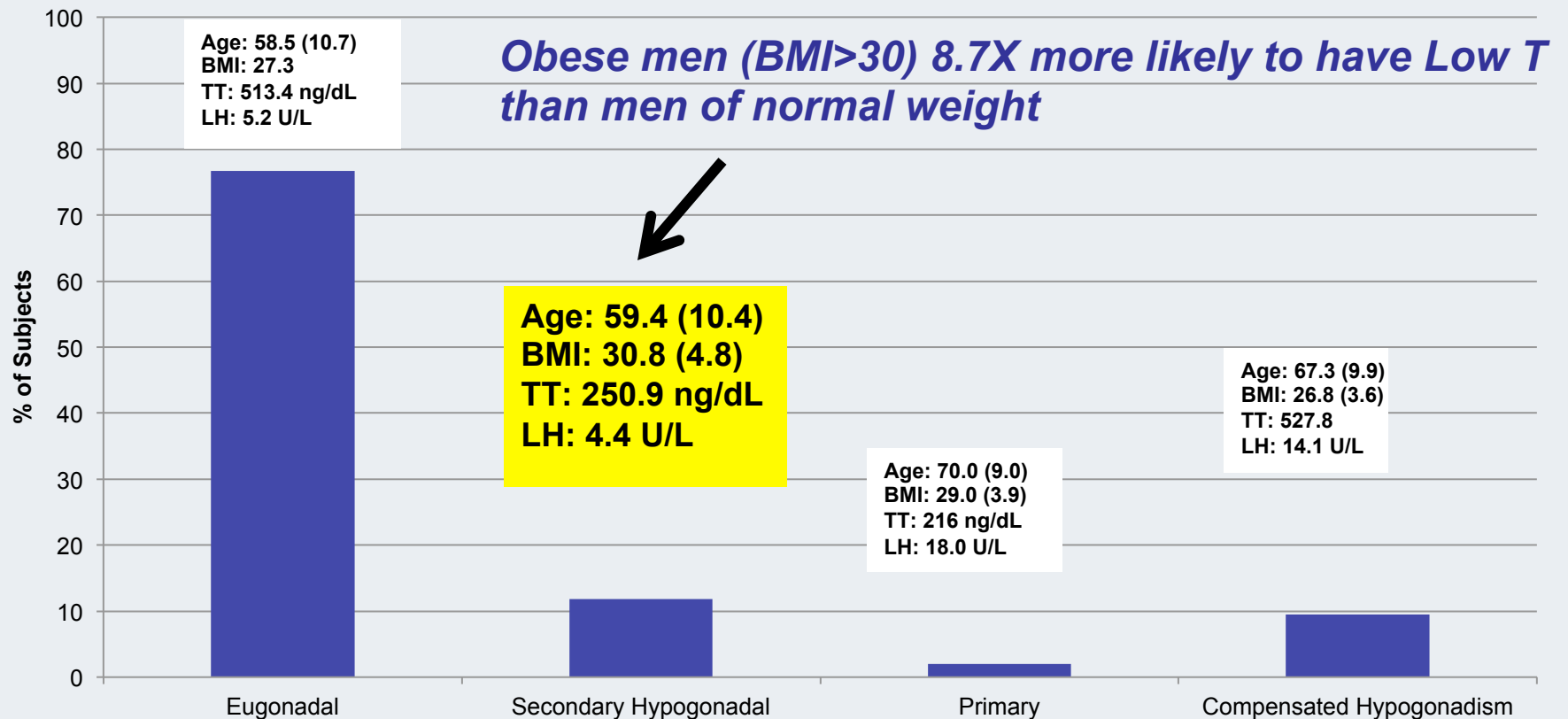
European Male Aging Study

Distribution and Selected Characteristics of Men Ages 40-79 (Tajar et al)

Overweight BMI > 25 (6' 190# male BMI=25.8)

Obese BMI > 30 (6' 230# male BMI =31.2)

Data derived from over 3000 men



In 2010 there were ~90 million men in the US between the ages of 20 and 65
32% are obese

Androxal Take Home Message

- Because of Obesity, 30% of American Males are at Risk of Secondary Hypogonadism
 - Co-morbidities include diabetes and cardiovascular disease
- Approved T Products Worsen the Underlying Condition
- ***We believe only Androxal + Diet + Exercise can reverse this disorder***

Proellex for the Treatment of Uterine Fibroids and Endometriosis

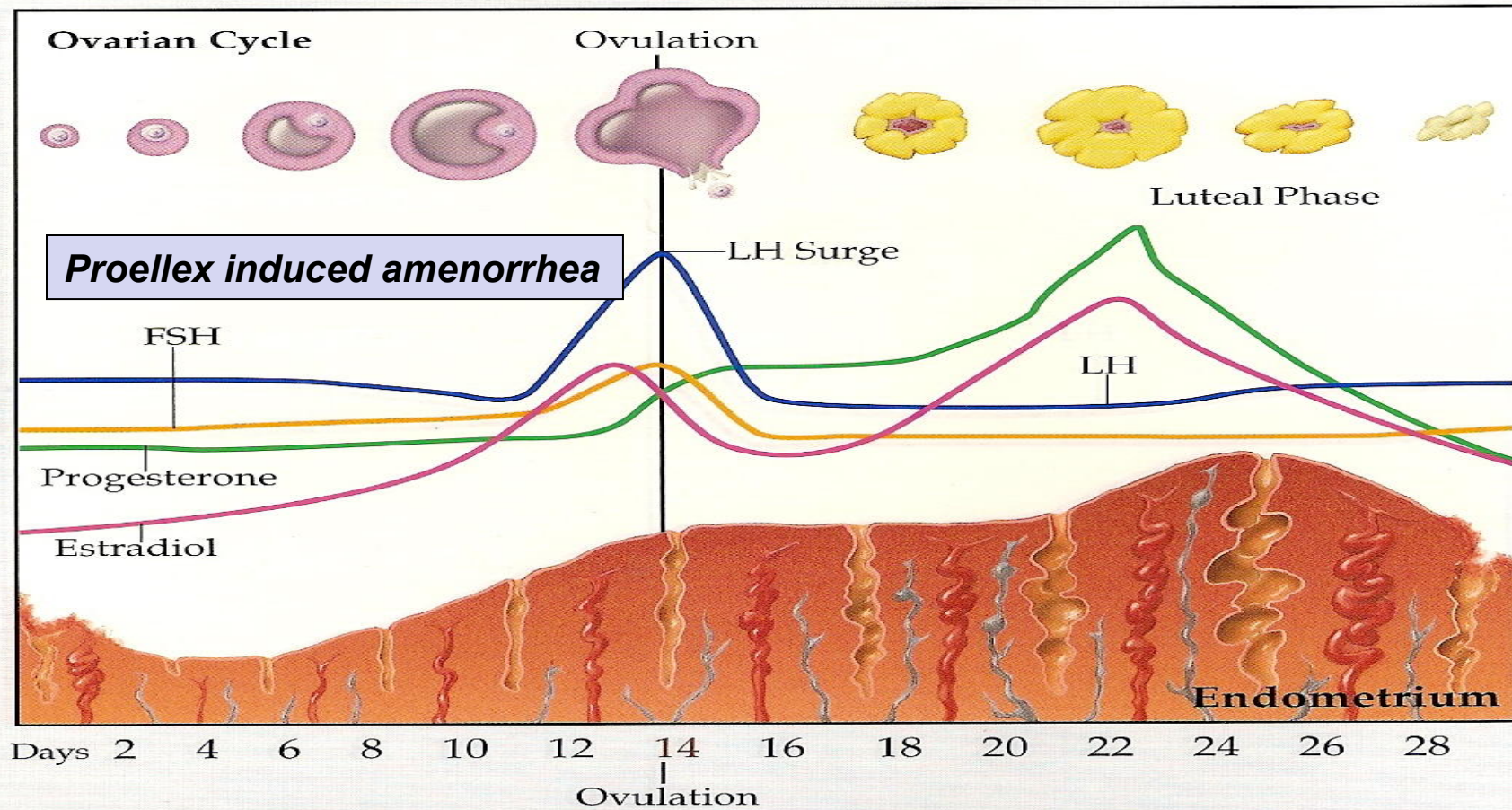
Over 30 million women of reproductive age in the US afflicted with symptomatic uterine fibroids or endometriosis

Over 300,000 hysterectomies performed every year in the US to treat these two disorders

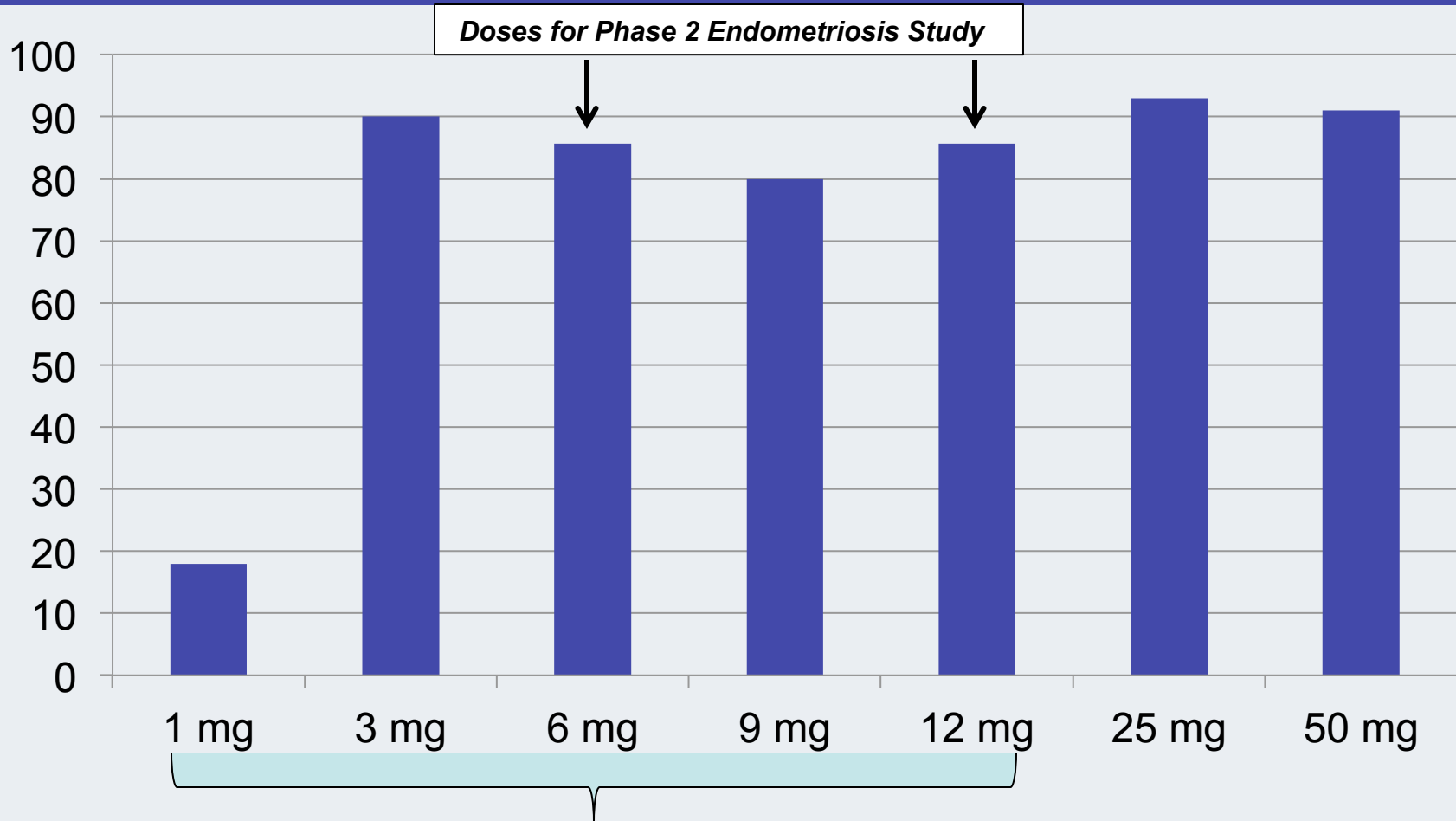
No acceptable chronic therapeutic options available today

An Effective Dose of Proellex Stops Menstruation in Majority of Women

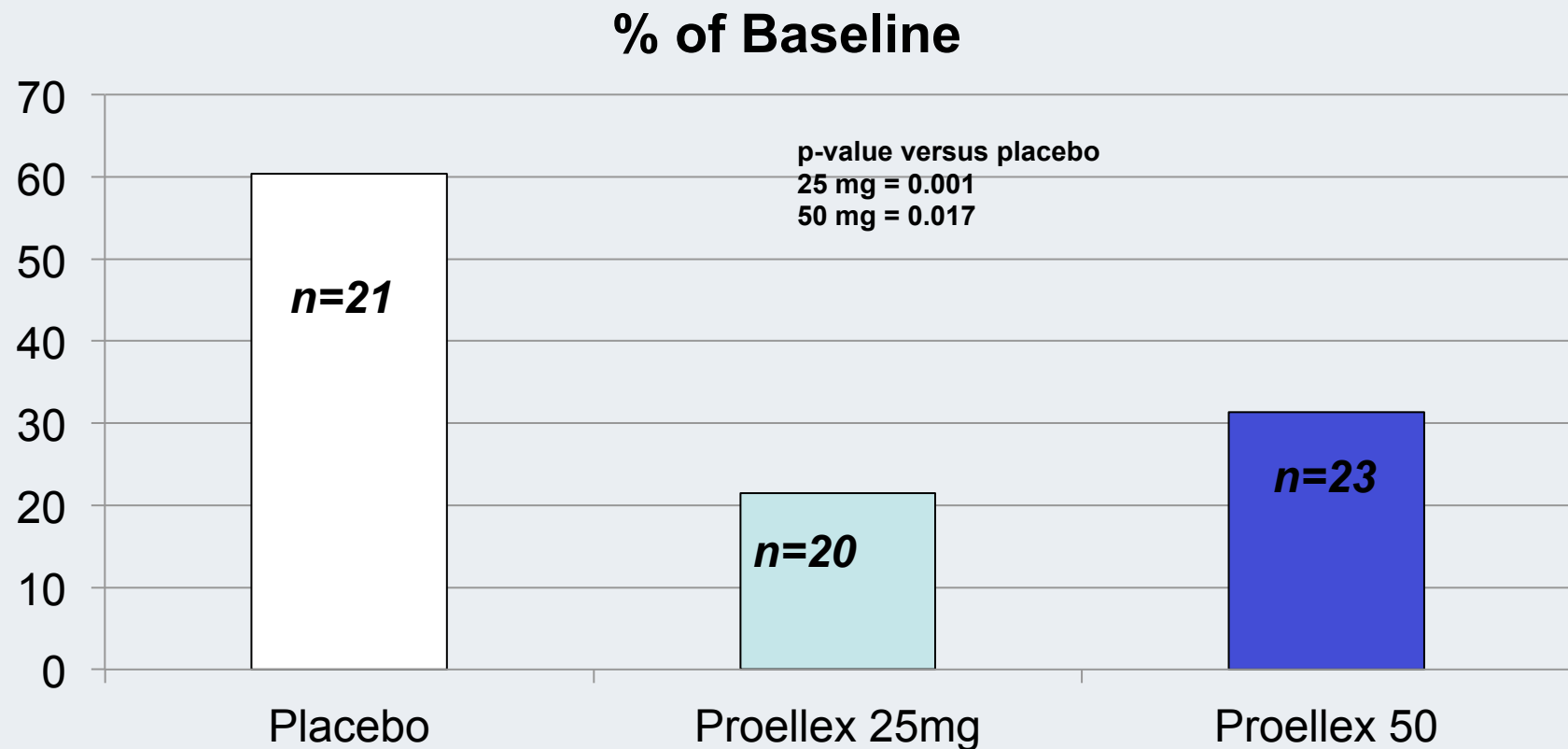
Menstrual Cycle



% of Women Experiencing Proellex Induced Amenorrhea in Low Dose Study



ZPE- 201 Baseline vs Last 28 Days All Patient Reported Endometriosis Pain

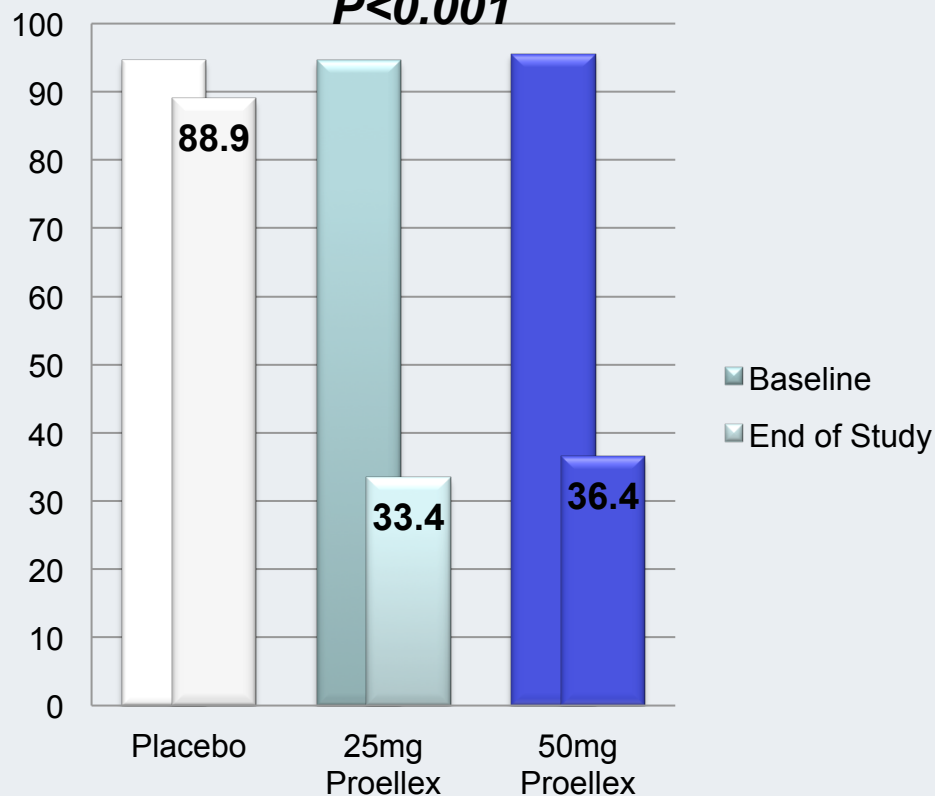


Dysmenorrhea, Dyspareunia and Non Menstrual Pelvic Pain

ZPE-201 Doses That Stop Menses Have Significant Impact on Analgesic Use in the Control of the Pain Symptoms of Endometriosis

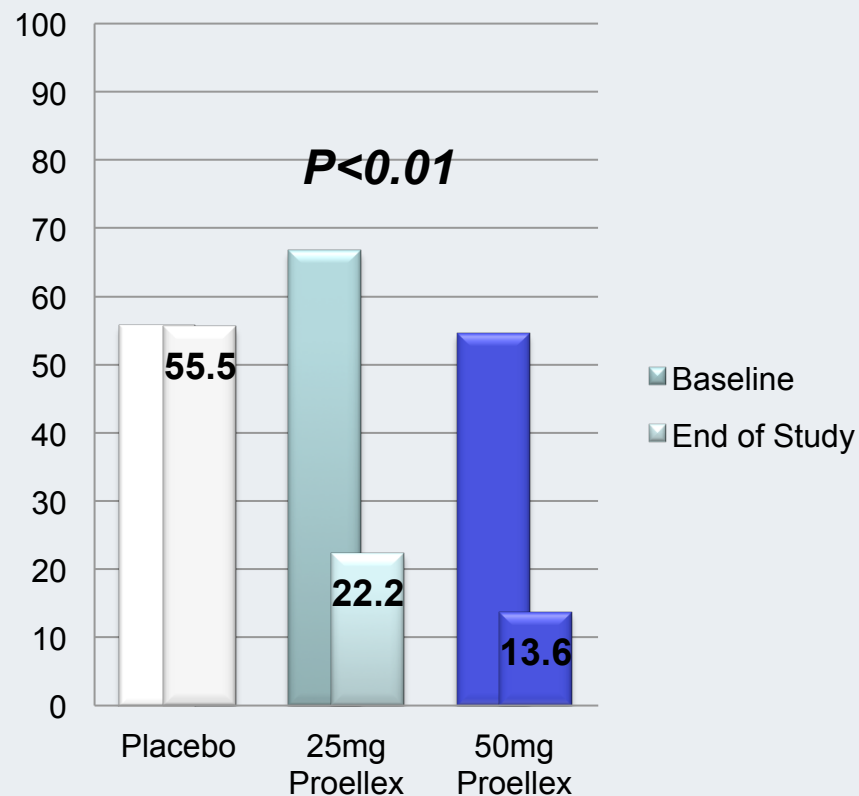
% of Subjects Requiring Narcotic or Non Narcotic Analgesics at End of Study

$P < 0.001$



% of Subjects Requiring Narcotics at End of Study

$P < 0.01$



FDA allows Repros to conduct Phase 2 study in women with severe endometriosis

ZPE-202 Phase 2 Endometriosis Study

- 90 subject double blind placebo controlled study balanced between placebo, 6 and 12 mg oral Proellex
 - Subject population (confirmed endometriosis)
 - Severe endometriosis as determined by BBSS score
 - Requiring narcotics or prescription analgesics to control endometriosis related pain
 - Study Duration: 4 months
 - Study endpoints:
 - Reduction in need for analgesics from baseline
 - Change from baseline in BBSS pain scores
 - Status: enrolling sites and subjects

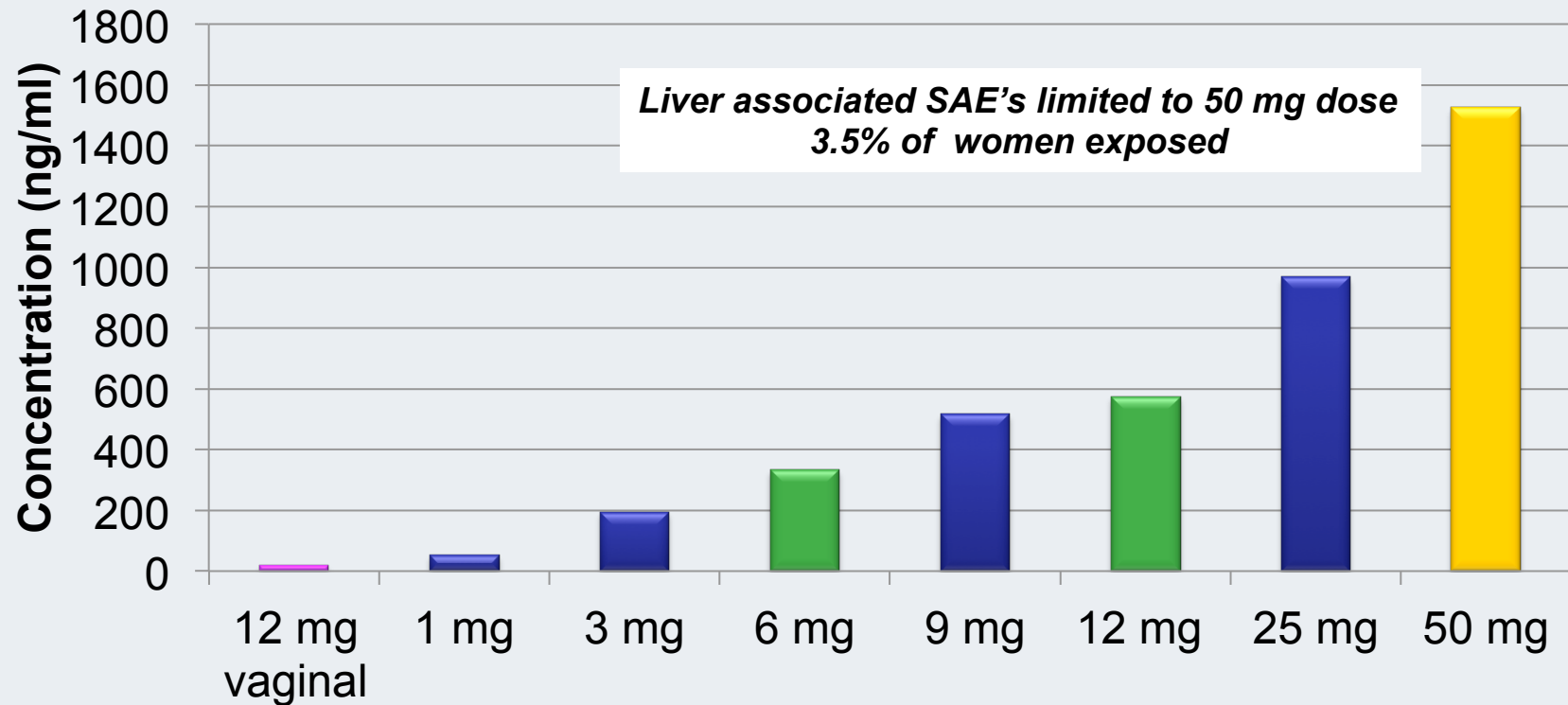
Vaginal Proellex to Eliminate the Need for Hysterectomy in Most Situations

- Initial Phase 2 study to test four doses of vaginal administration in the treatment of uterine fibroids completed
 - Assess reduction of fibroid size and elimination of symptoms
 - Top line data reported
- End of Phase 2 meeting request with FDA accepted by Agency for end of May 2013
- Propose 90 subject 1st Phase 3 study and.....
 - 2 Phase 3 studies
 - 200 subjects for +1 year
 - 300-600 subjects for +6 months
- Separate IND from low dose oral

Systemic Exposure to Oral Proellex Varies in a Dose Dependent Manner

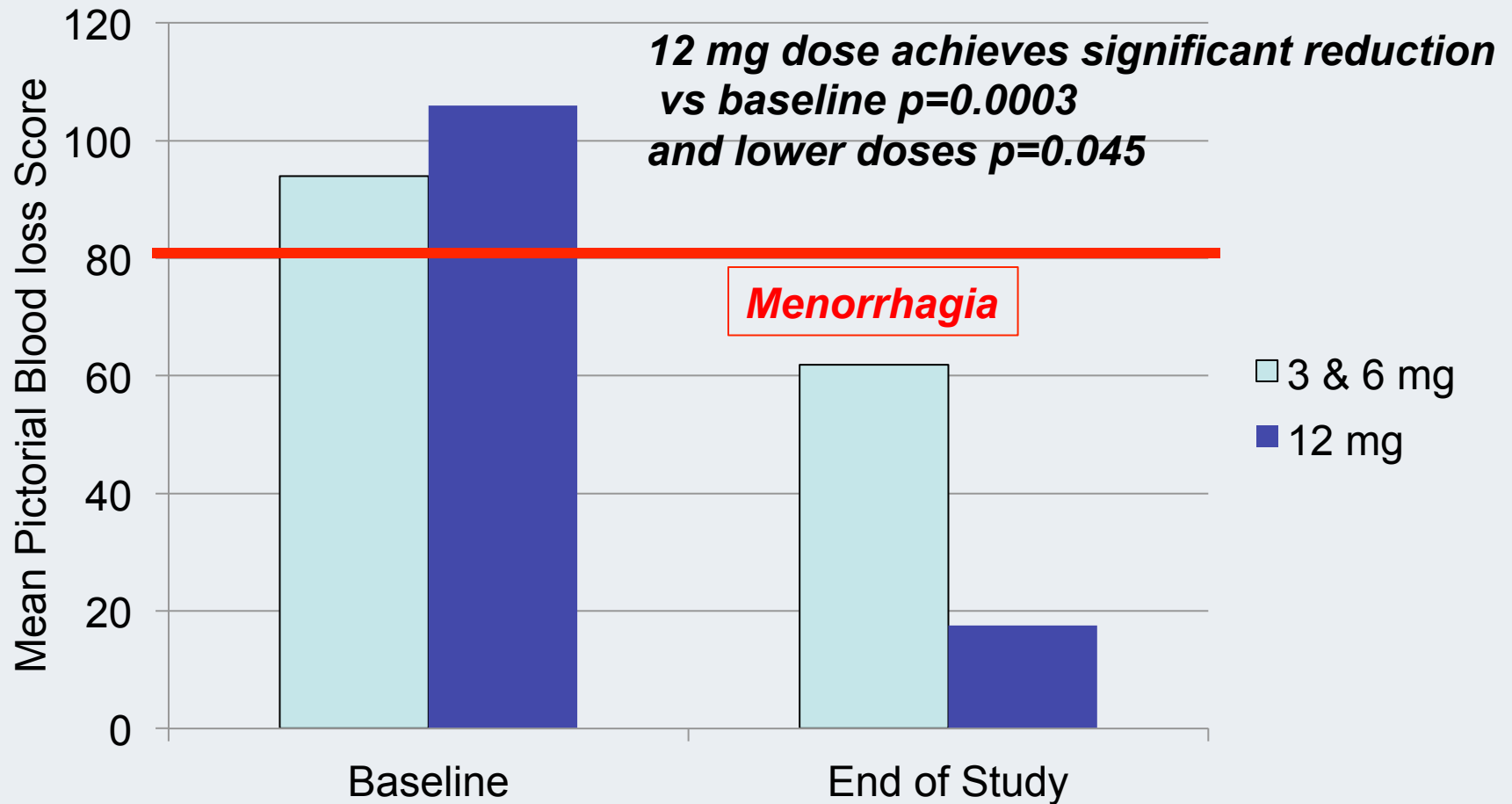
Significant reduction in exposure via vaginal delivery

Combined Cmax for Telapristone and Primary Metabolite



Vaginal Proellex Update

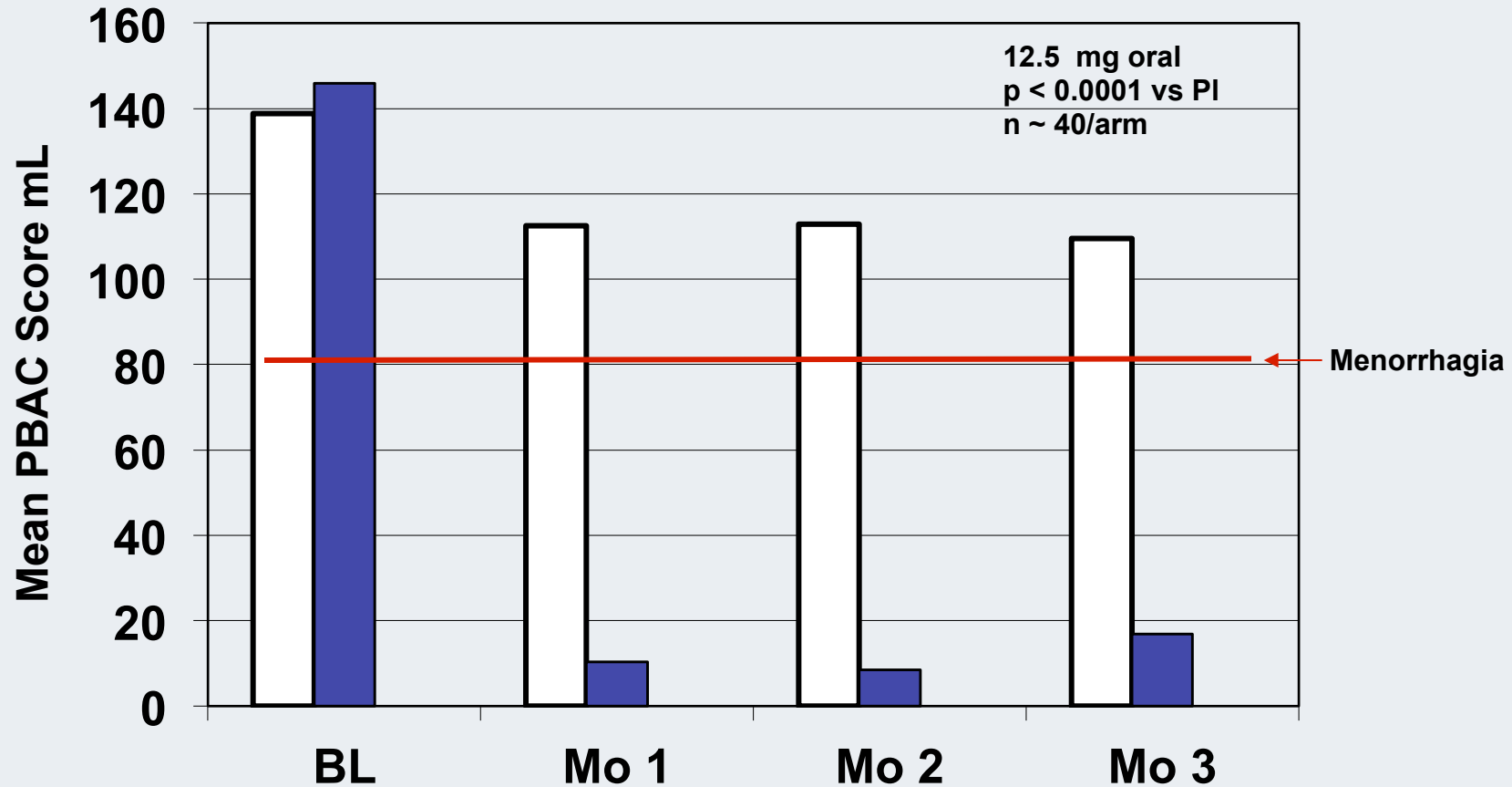
12 mg Dose Achieves Significant Improvement in Vaginal Bleeding



ZPU-003

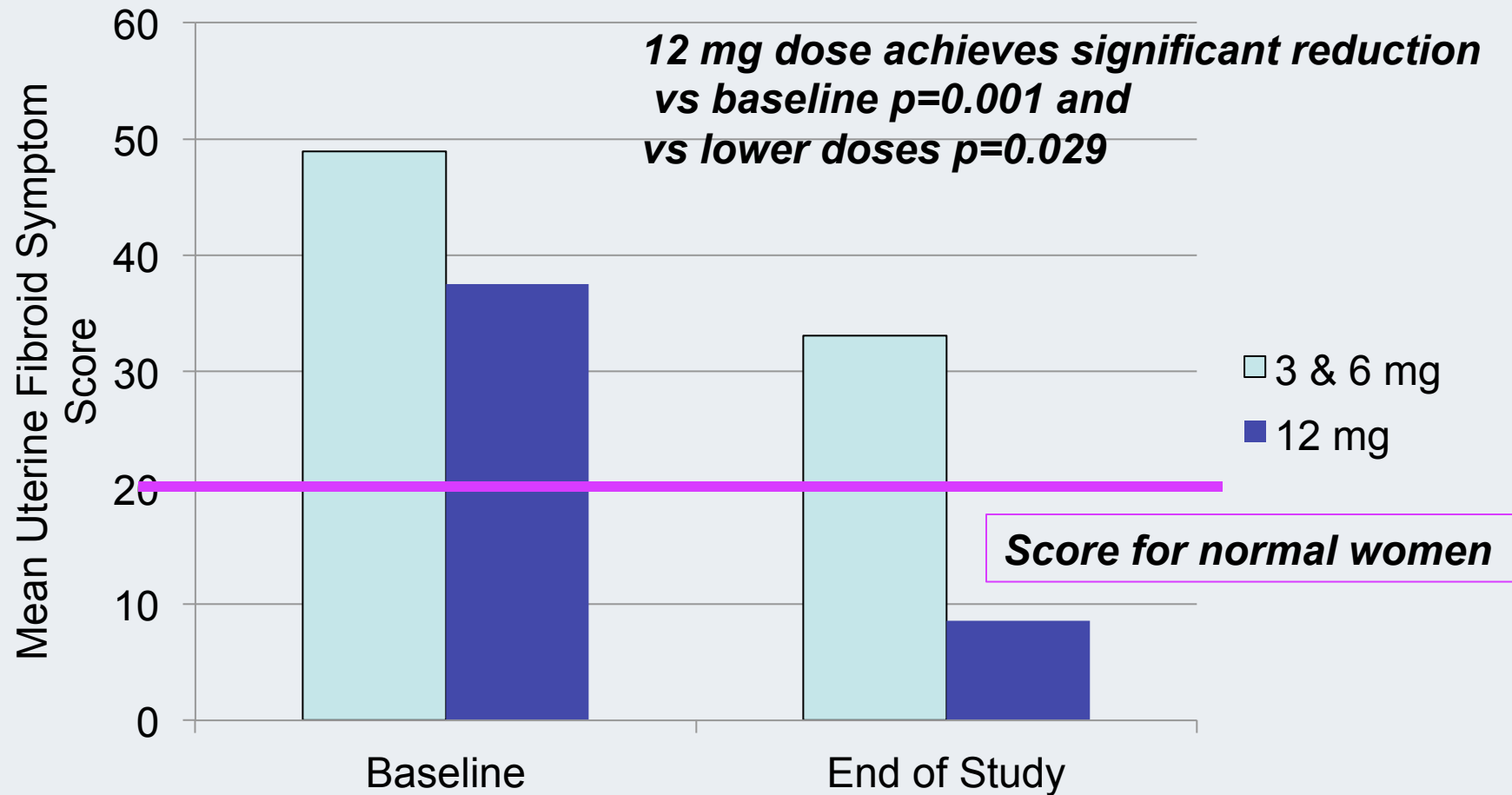
Phase II Uterine Fibroid Study

Pictorial Blood Loss

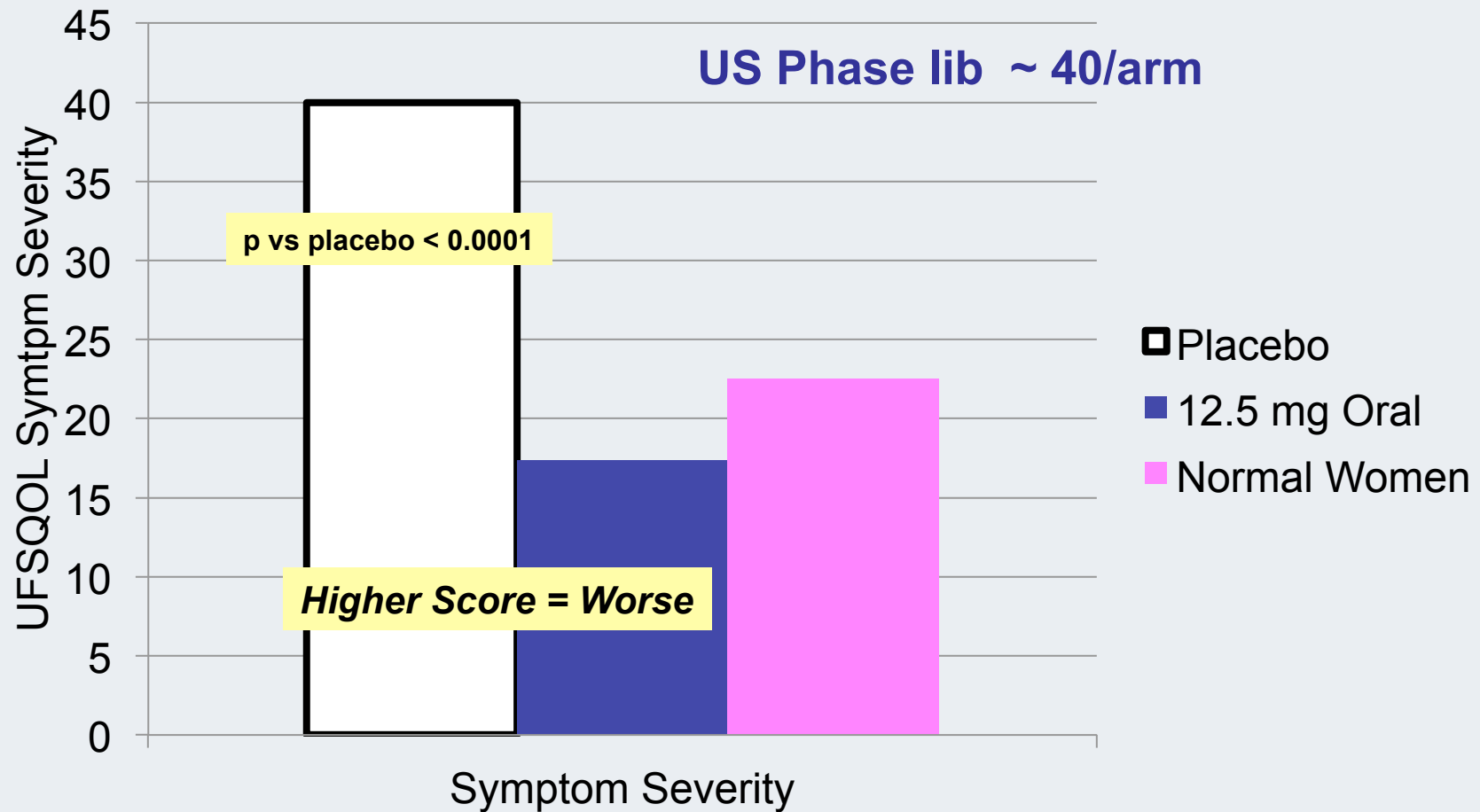


Vaginal Proellex Update

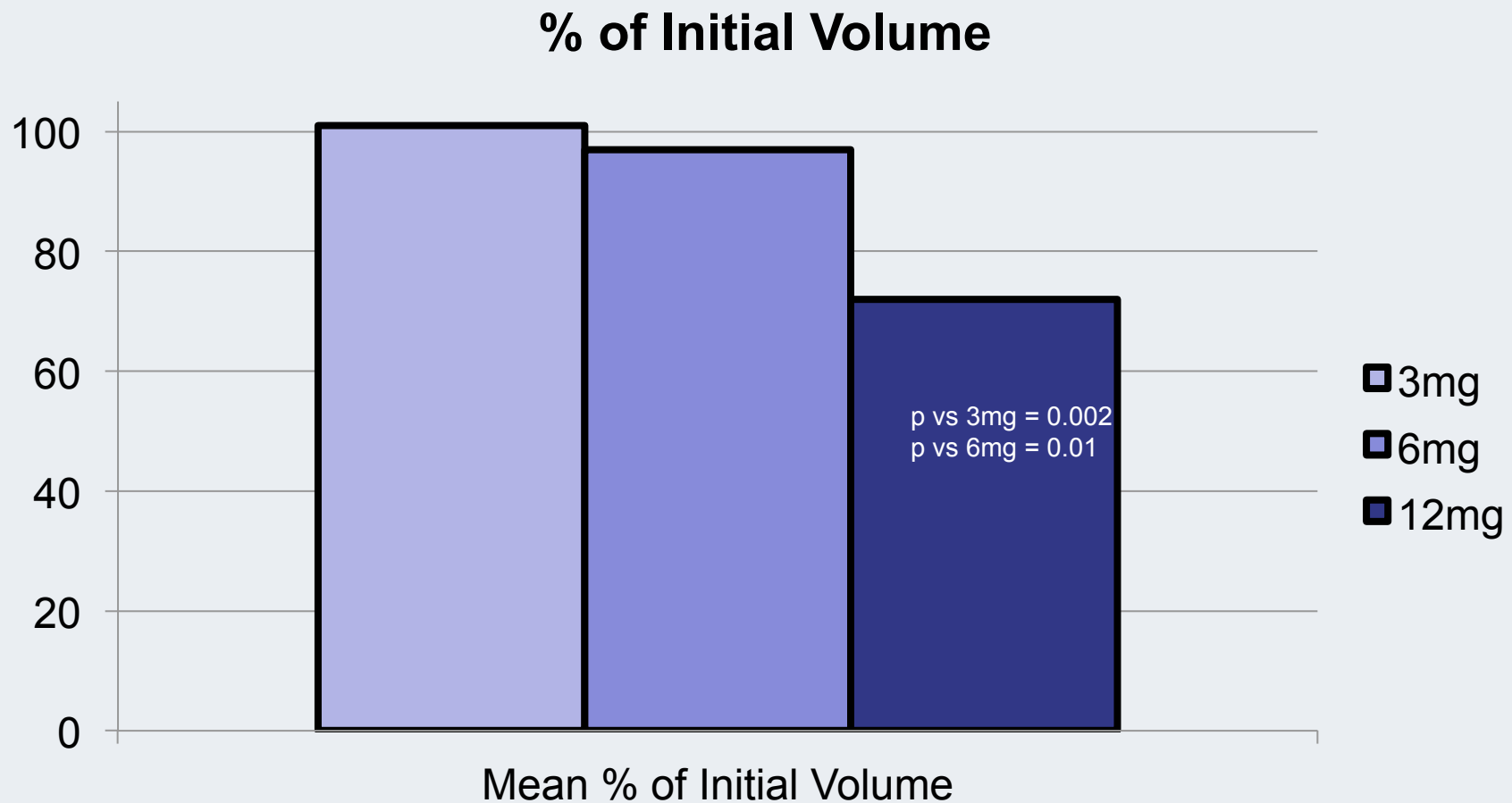
12 mg Dose Achieves Significant Improvement in Symptom Scores



12.5 mg Oral Proellex Produces Significant Clinical Benefit Resulting in Substantially Asymptomatic Uterine Fibroids in Phase 2 Study (ZPU-003)

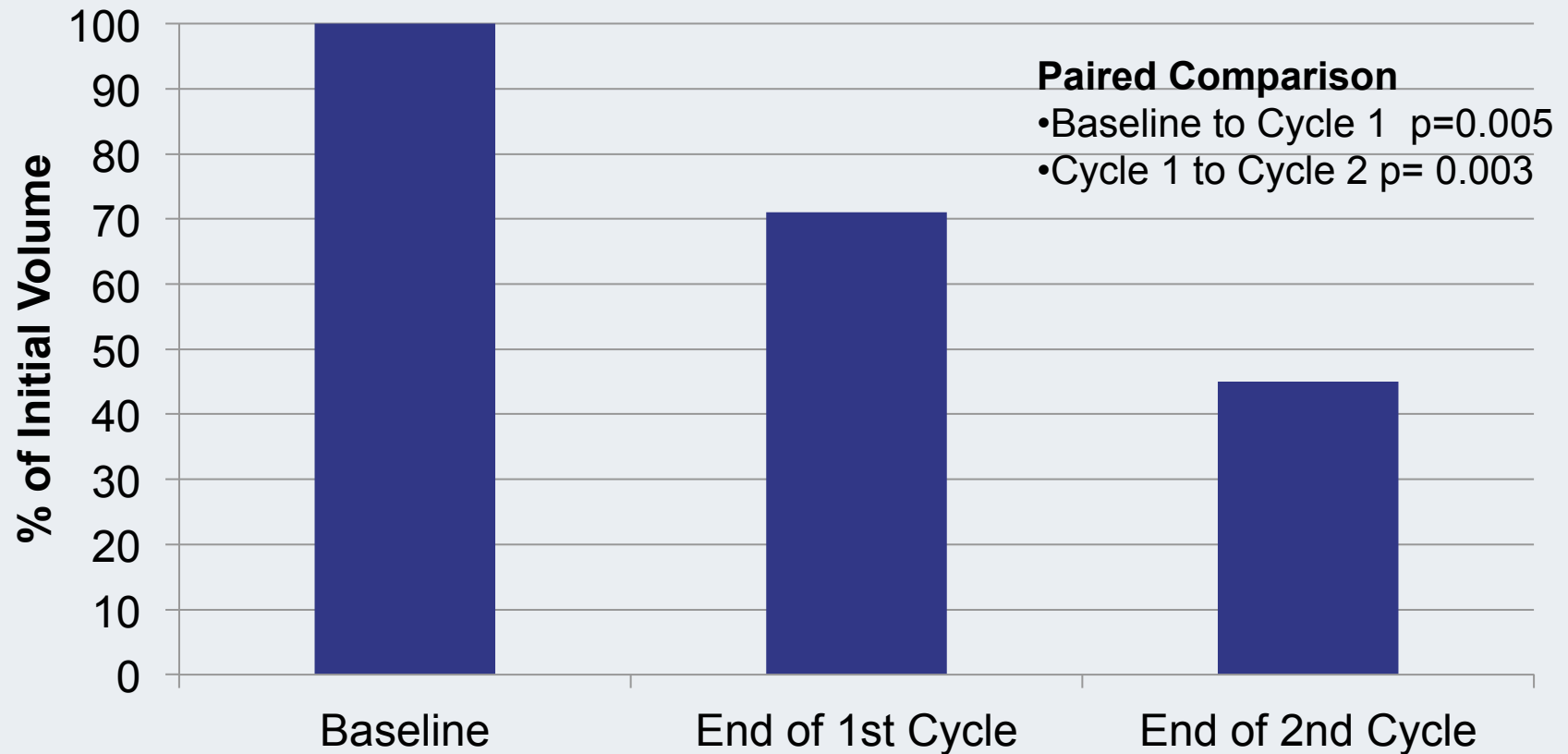


Fibroid Volume Significantly Reduced at end of 4 Month Study @ 12 mg



ZPV-200 Ext. Proellex Open Label Update (12mg dose)

Fibroid Volume Reduction by MRI (n=15)



Financial Summary

- **Cash and equivalents** (as of 4/1/13, unaudited) ~ \$18 M
- **Cash runway:** Q1 2014
- **Current shares outstanding:** 18.6 M shares
 - This includes approximately 1.5 million shares resulting from the cashless exercise of 872,133 Series A Warrants and 713,741 Series B Warrants on Jan. 29, 2013.
 - Warrants Outstanding – Series A – 877,137 (purchased in unit deal @ \$2.45); Series B – 855,680 @ \$2.49 exercise price.

2013 Anticipated Milestones

- Report results for Phase 2 Vaginal Proellex Study Q1-13
- Fully Enroll 1 year Dexa Study Q1-13
- Fully Enroll 500 subject 6 mos. Androxal Study Q1-13
- Report Results for 1st Pivotal Androxal Study Q2-13
- End of Phase 2 Meeting with FDA for Vaginal Proellex Q2-13
- Commence Phase 3 Vaginal Proellex Study Q3-13
- Complete 500 subject 6 mos. Androxal Study Q3-13
- Report Phase 2 low dose Oral Proellex Study Q4-13
- Report 2nd Pivotal Androxal Study Q4-13
- Request Androxal Pre-NDA Meeting with FDA for Q1'14 Q4-13
- Submit Androxal NDA Mid-2014