A photograph of several black cows in a feedlot. They are lined up behind a metal railing, eating yellow feed from a trough. A wooden post with the number '205' is visible in the background. The scene is brightly lit, suggesting an outdoor or well-lit indoor facility.

# Implant Considerations at the Ranch & Feedyard

**Robbi H. Pritchard, Ph.D.**



# Considerations of implant use

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- Consumer views
- Superior genetics
- Logistics
- Another Management Issue
- Impact on Product



# Considerations of implant use

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- Reduce Labor / serving of beef
- Reduce C footprint / serving beef
- Increase WW and HCW without having to change cows or bulls
- Don't cause dystocia
- Most reliable & predictable tool we have



# Considerations of implant use

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Greed is a Sin

Ignorance is no excuse



# What we were doing

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Calves born late Mar- May 1

Syn C at branding or Aug

Wean Halloween at 675 lb

Syn S at pre-Thanksgiving

Syn Plus at Valentines Day

Ship at Memorial Day



# What we were doing - OutCome

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Calves born late Mar- May 1

Syn C at branding or Aug

Wean Halloween at 675 lb

Syn S at preThanksgiving

Syn Plus at Valentines Day

Ship at Memorial Day

**HCW 865 lb**

**CAB 42%**

**Cho or better 94%**

**Y4 15%**



# Suckling Calf Implants

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- No influence on post-weaning performance
- No influence on Quality Grade
- Added WW is sustained to hot carcass scale
- Systemwide favorable outcomes require
  - communication and proper strategy



# WW & Suckling Calf Implants

<b>Cows</b>	<b>None</b>	<b>May</b>	<b>August</b>	<b>Average</b>
<b>Young</b>	518 <sup>a</sup>	527 <sup>a,b</sup>	543 <sup>b</sup>	<b>530</b>
<b>Mature</b>	561 <sup>c</sup>	601 <sup>e</sup>	578 <sup>d</sup>	<b>580</b>





# WW & Suckling Calf Implants

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<b>Mature</b>	561 <sup>c</sup>	601 <sup>e</sup>	578 <sup>d</sup>
<b>Average</b>	<b>540</b>	<b>564</b>	<b>561</b>



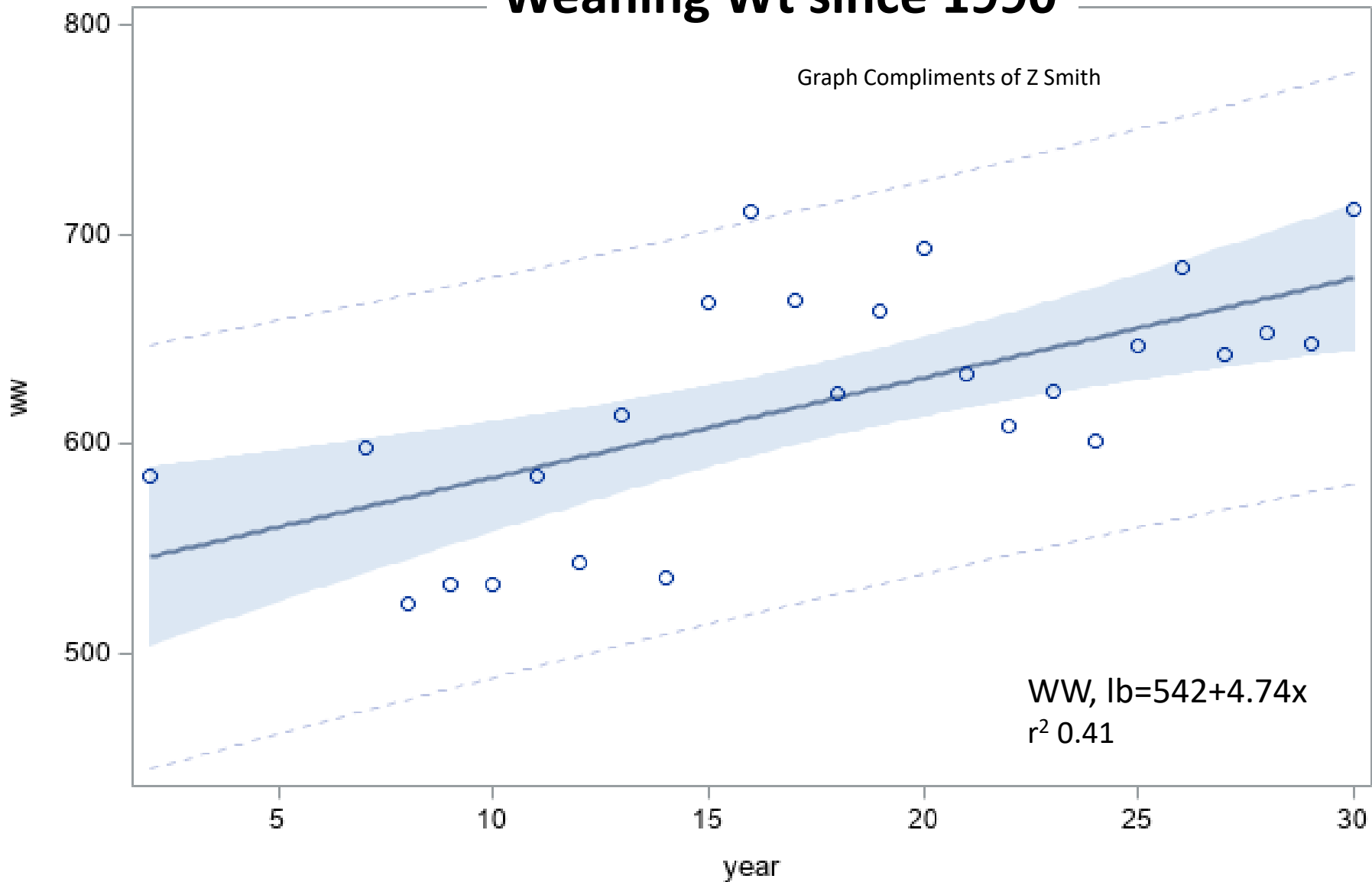
# WW & Suckling Calf Implants

Cows	None	May	August
Young	518 <sup>a</sup>	527 <sup>a,b</sup>	543 <sup>b</sup>
Mature	561 <sup>c</sup>	601 <sup>e</sup>	578 <sup>d</sup>
Average	540	564	561

**Mature - May**  
**Young - Aug**  
**575 lb**



# Weaning Wt since 1990



— Fit   □ 95% Confidence Limits   - - - 95% Prediction Limits



# What Implants Do

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- Response is Potency Dependent
- Response is % basis
- Estradiol increases Frame Size
- Animals revert to genetic potential if therapy is withdrawn



	<b>No Impl</b>	<b>Branding Only</b>	<b>Weaning Only</b>	<b>Both Implants</b>
<b>Wean Wt</b>	<b>610</b>	<b>650</b>	<b>610</b>	<b>650</b>
<b>120d Wt (Feb)</b>	<b>784</b>	<b>784</b>	<b>801</b>	<b>841</b>
<b>Postwean CoG, \$/cwt</b>	<b>83.80</b>	<b>111.14</b>	<b>80.60</b>	<b>81.61</b>
<b>Marginal \$/Cow</b>	<b>--</b>	<b>(3.13)</b>	<b>8.83</b>	<b>46.94</b>



# Options on the Ranch Selling at...

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- a) Weaning
- b) 45 days post-weaning
- c) 100 days post-weaning
- d) Carry over to grass
- e) R-O high performance



# Options on the Ranch Selling at...

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- a) Weaning branding Syn C or Ralgro
- b) 45 days post-weaning lo dose reimplant in Aug
- c) 100 days post-weaning a) + mod dose implant (at or after)
- d) Carry over to grass none on cow or at weaning
- e) R-O high performance see slide 5



# Options on the Ranch

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Creep feeder - you need to implant

Fenceline weaning – no implant at that time

Deworm – except at high plains branding

Downsizing cow weights – calves need implant frame boost





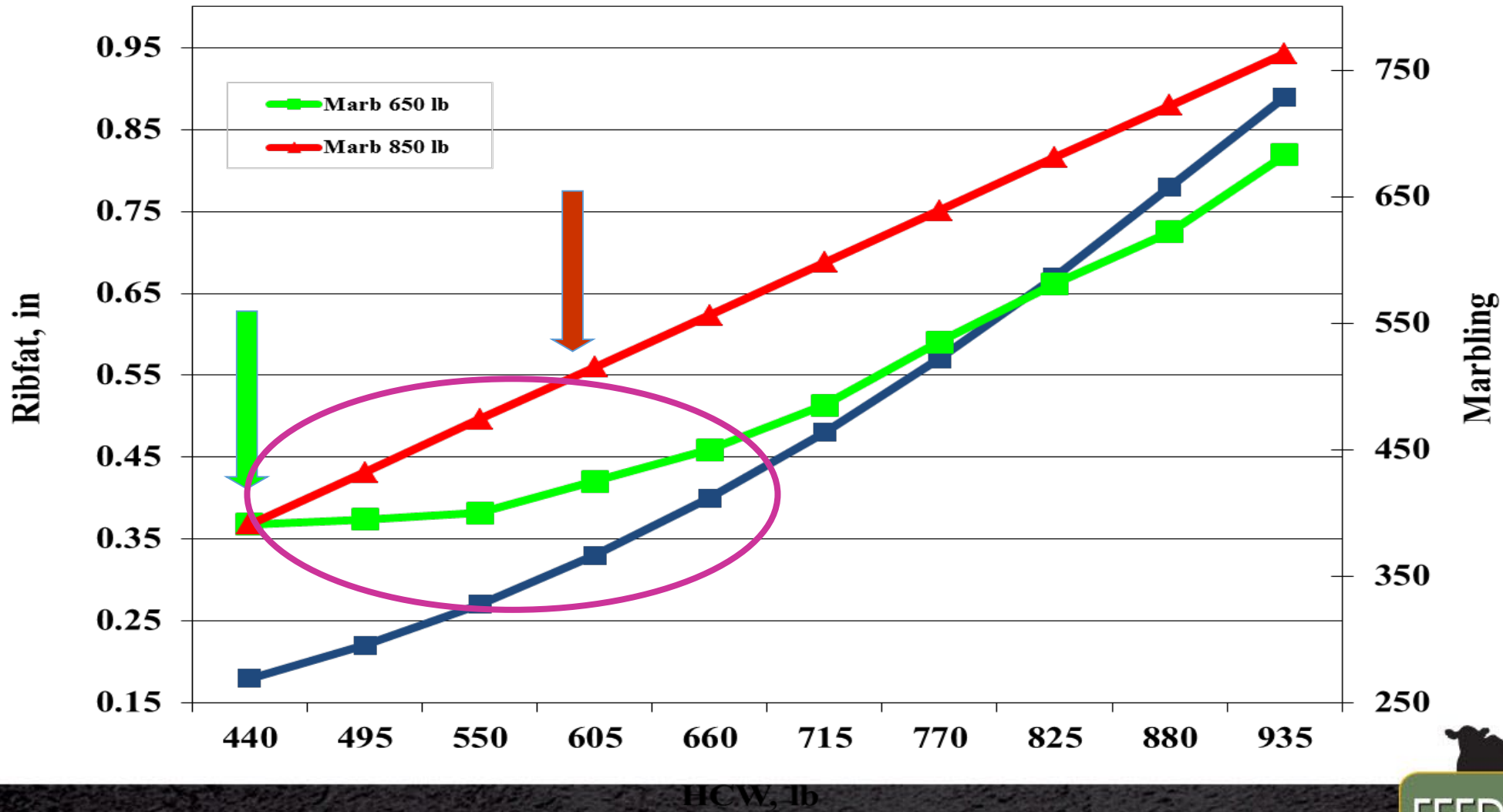
# Post-Weaning Implants

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- Strategies can add 75 – 100 lb to Mkt Wt at same days on feed
- Match Potency to Frame Size & Caloric Intake
- Grade depression is inadequate caloric intake
  - Mistake happens on the front end
  - Mistake cannot be resolved without increasing Y4 carcasses



# Ribfat, Marbling v HCW



# Feedlot Implants

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- Step up dosage over time
- Terminal Potency pays best as growth curve tries to fatten
- Get your days count right!!!
- Adjust Potency to Frame Size at diet NE fed
- No upside to O/D. O/D does have downside ramifications.



# Long Acting Implants

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Crescent wrench or combination wrenches

Elanco – Compudose and Encore

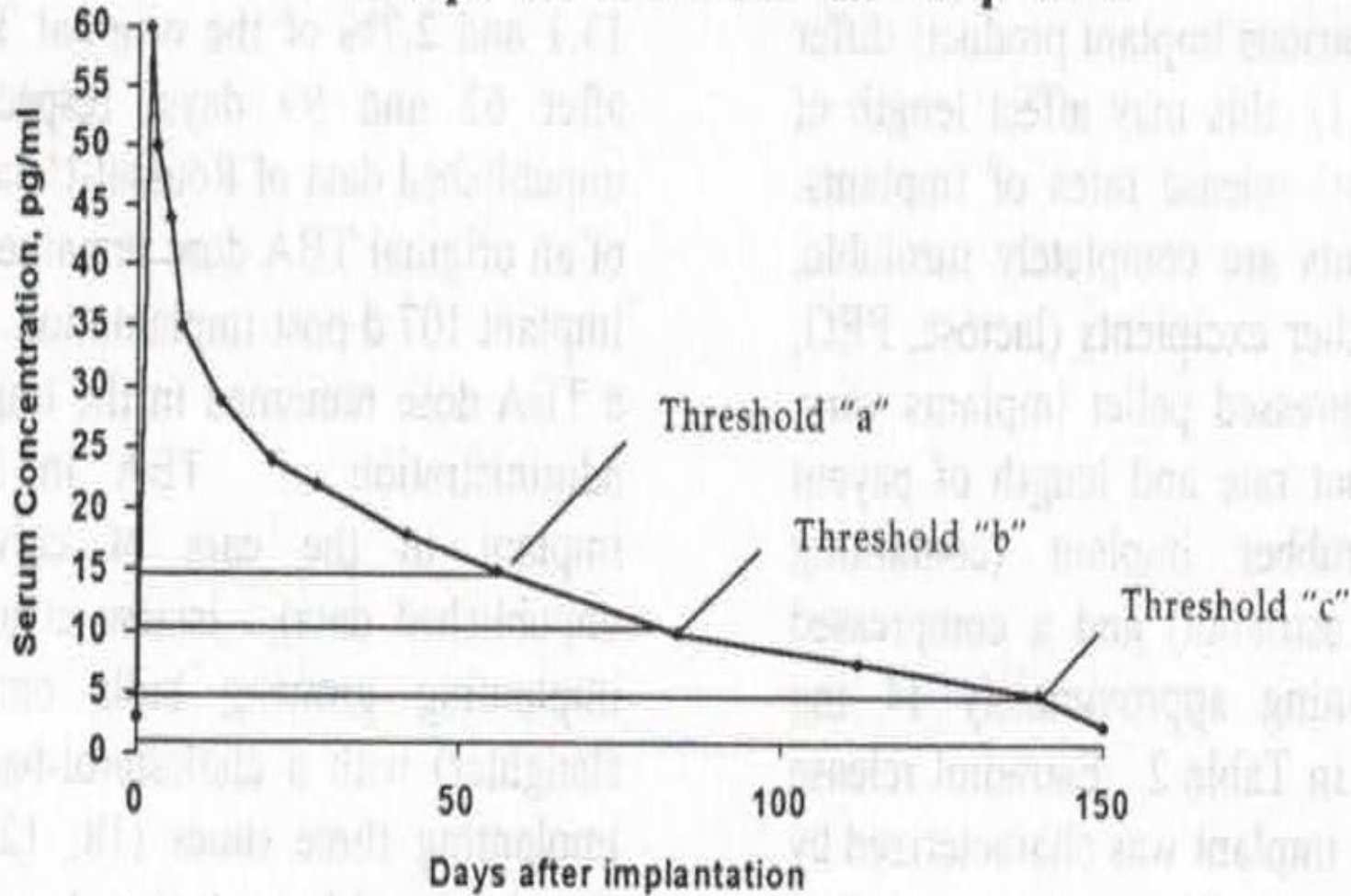
Merck – Revalor XS and Revalor XH

Zoetis – Synovex One Grass and Synovex One Feedlot

Products are Very different in function



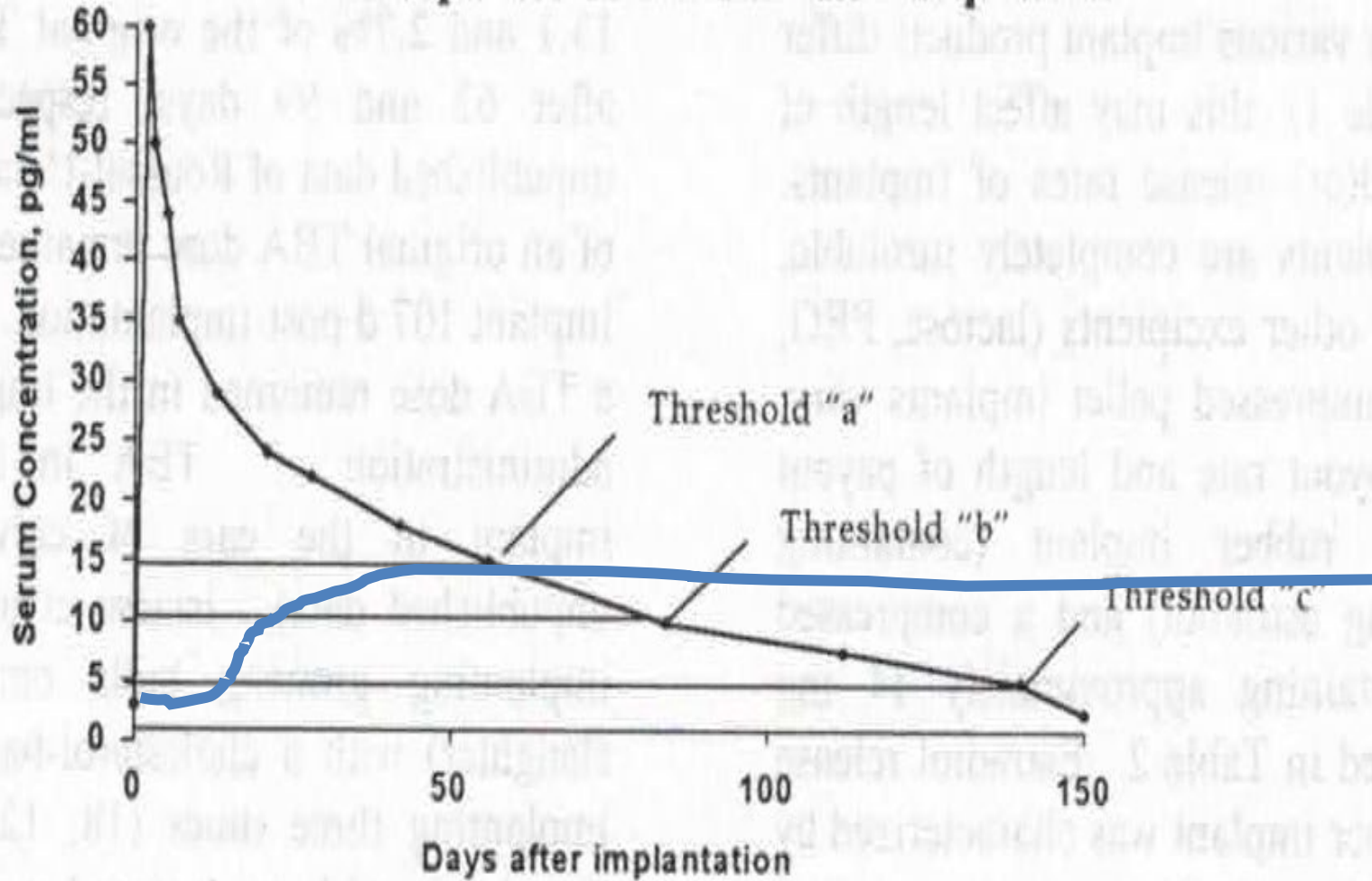
**Figure 1. Biphasic nature of hormone absorption from an ear implant.**



Brandt. 1997



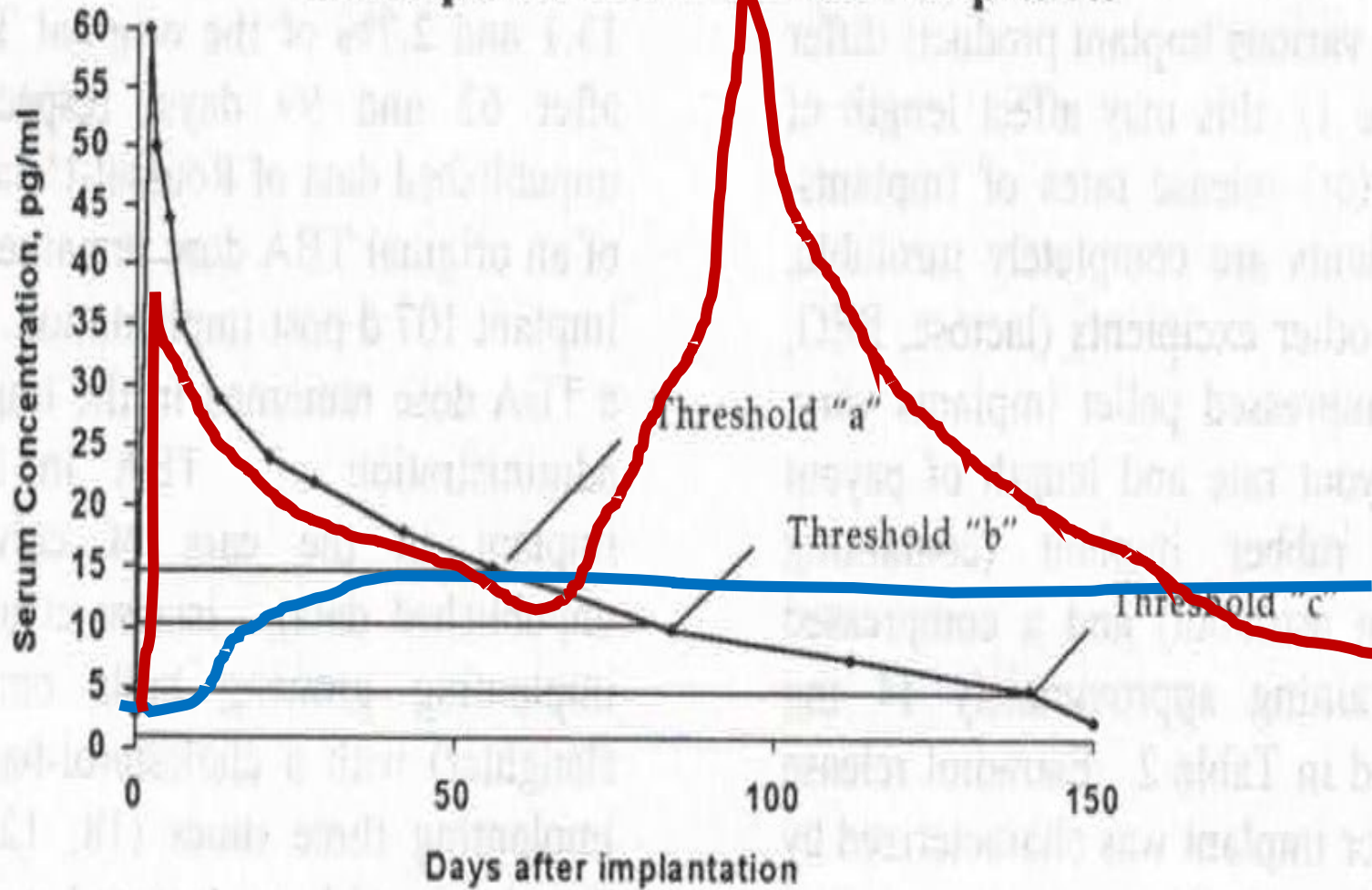
**Figure 1. Biphasic nature of hormone absorption from an ear implant.**



Brandt. 1997



**Figure 1. Biphasic nature of hormone absorption from an ear implant.**



Brandt. 1997



# Long Acting Implants or Re-implant

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Control and Adaptability

Performance

Logistics, Labor, Facilities, & Management

Price





# Consider This...

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**There are 2 classes of cattle that don't benefit from implants.**

- I. Sick or Parasitized
- II. Massive. Think Canadian Simm x

## **Management Matters**

- I. Nutritional Environ, Feed/Bunk Mgmt, Implant Strategy
- II. Mud



# Wrap Up

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The 3 things to worry about regarding implants.

Not using them

Not getting them administered properly

Using them without sound technical advice





Thank you



Cattle Class <sup>a</sup>	System <sup>b</sup>	Active Ingredients	mg (*)	Original Brand	Cattle Class <sup>a</sup>	System <sup>b</sup>	Active Ingredients	mg (*)	Original Brand
S, H, C	P, F	Zeranol	36 <sup>‡</sup>	Ralgro	S	P, F	Estradiol TBA	8 40	Revalor-G
S, H, C	F	Estradiol B Progesterone	10 (7) 100	Synovex C	S	F	Estradiol TBA	16 80	Revalor IS
S	F	Zeranol	72 <sup>‡</sup>	Ralgro Magnum	H	F	Estradiol TBA	8 80	Revalor IH
S	P, F	Trenbolone Acetate (TBA)	140	Finaplix S*	S	F	Estradiol B TBA	14 (10) 100	Synovex Choice
H	F	TBA	200	Finaplix H	S	F	Estradiol TBA	24 120	Revalor S
S	P, F	Estradiol B Progesterone	20 (14) 200	Synovex S	S, H	F	Estradiol B TBA	28(20) 200	Synovex Plus
S, H, C	P, F	Estradiol	25.7	Compudose	S	F	Estradiol TBA	40 200	Revalor XS (timed release)
S, H, C	P, F	Estradiol	43.9	Encore	S, H	F	Estradiol B TBA	28(20) 200	Synovex One Feedlot (timed release)

<sup>a</sup> S = Steer; H = heifer; c = suckling calves; <sup>b</sup> P = pasture, F = feedlot; \* Estradiol equivalent, mg; <sup>‡</sup> As zeranol



QUALITY

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