

ELANCO*

Compudose®

Strategies for profit



**Maximising the profitability of
northern beef production
using Compudose implants**

Choosing the right implant

Commercially-available implants can be distinguished by their active ingredients, length of payout and formulation. These differences have a significant impact on the performance and recommended usage patterns of each implant.

Compudose 400 and **Compudose 200** are long-acting implants whose liveweight gain advantages are maintained even after the pay-out period expires.¹ Compudose 400 and Compudose 200 provide an effective daily dose of oestradiol-17 β for 400 and 200 days, respectively. As such, they are ideally implanted at branding as part of a whole-of-life program.

Conversely, **Compudose-G** and **revalor-G**[†] are short-acting implants whose liveweight gain benefits can be lost if cattle are not re-implanted.^{1,2} Compudose-G and revalor-G have a functional life of less than 100 days. Ideally, they should be implanted 100 days before anticipated turn-off as part of a whole-of-life program.



Implants available for use in pasture fed cattle

Product	Active ingredient	Formulation	Payout	Recommended usage
Compudose 400	43.9 mg oestradiol-17 β	Silicone rubber	400 days	Implant at branding as part of a whole-of-life strategy, or 400 days before anticipated turn-off.
Compudose 200	25.7 mg oestradiol-17 β	Silicone rubber	200 days	Implant at branding as part of a whole-of-life strategy, or 200 days before anticipated turn-off.
Compudose-G*	12 mg oestradiol-17 β + 60 mg trenbolone acetate	Compressed pellet	<100 days	Implant 100 days before anticipated turn-off, ideally as the terminal implant as part of a whole-of-life strategy.

*Compudose-G has the same active ingredients as revalor-G.

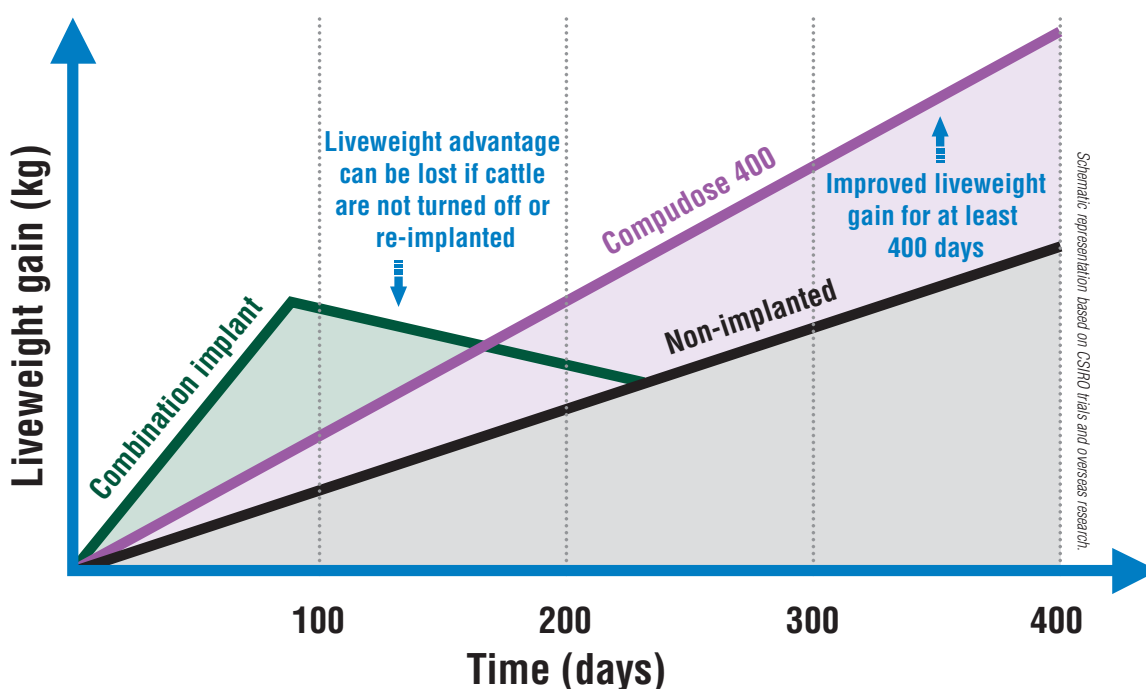
Maximum growth, maximum profit

Implants containing sex hormones are commonly used to increase growth rates and to reduce the age of turn-off in the northern beef industry. The ability to increase productivity per hectare also has important implications for pasture utilisation and environmental sustainability. Traditionally, cattle are implanted 100–300 days before anticipated turn-off, depending on the implant used. In more recent years, some producers have adopted “whole-of-life” or multiple-implant programs to maximise growth rates and profitability. In practical terms, this means implanting cattle at least twice, and possibly more, throughout their lifetime.

Proven benefits

CSIRO research has consistently demonstrated that sustained growth promotion strategies based on the use of multiple implants can improve growth rates by up to 0.1 kg/day – equating to a liveweight advantage of 55 kg – over 18 months. A large-scale trial conducted in 2000/01 on “Coorabulka”, a NAPCO property situated in western Queensland, confirmed that whole-of-life implant programs can achieve greater total liveweight gains than single-implant strategies.¹ No matter what your target market, the strategic use of Compudose implants as part of a whole-of-life program can maximise the profitability of your beef operation by making sure your cattle achieve market specifications sooner.

Response of Compudose 400 vs combination implants



CSIRO trials and overseas research have confirmed that Compudose 400 has a functional life of more than 400 days and liveweight gain benefits are maintained even after the pay-out period expires. Conversely, combination implants have a functional life of 90–100 days and liveweight benefits can be quickly lost unless cattle are reimplanted.^{1,2}

Developing a whole-of-life program

The objective of a whole-of-life implant program is to achieve sustained growth promotion from branding right through to turn-off. To do this, an elevated concentration of active ingredient must be present in the bloodstream throughout the year.

A typical whole-of-life implant strategy for first-round muster calves (i.e. March to June) is Compudose 400 at branding followed by a second implant of Compudose 400, Compudose 200 or Compudose-G at the first-round muster the following year. The second or “terminal” implant chosen will depend on the target market, anticipated time to turn-off and your usual handling times.

Second-round muster calves (i.e. August to November) are typically implanted with Compudose 200 at branding, followed by Compudose 400, Compudose 200 or Compudose-G at the following first-round muster. In this example, the pay-out period of implants in all yearling stock should run out at roughly the same time the following year, allowing producers to re-implant cattle as a single management group.

Some basic guidelines

The following guidelines are based on extensive research and commercial experience:

- ✓ Start the implant program at branding.
- ✓ Once an implantation program is started, don't stop.
- ✓ Implant young cattle with an oestrogen-only implant (e.g. Compudose 400 or Compudose 200).
- ✓ Match the payout period to your usual handling times (e.g. first or second muster).
- ✓ Implant finisher cattle with a combination implant (e.g. Compudose-G) 90–100 days before anticipated turn-off.

Multiple use of combination implants

In general, the use of more than one combination implant in whole-of-life programs is not recommended because:

- ✗ Combination implants are short-acting (90–100 days) and therefore will not provide sustained growth promotion throughout the year.
- ✗ The relatively short pay-out period of combination implants means cattle should be gaining weight and on a rising plane of nutrition for optimal results.
- ✗ Cattle implanted more than once with an androgen tend to show signs of masculinity (e.g. increased head weight, neck and shoulder muscles).

Recommended implant strategy

Details

	Group 1	Group 2	Group 3	Group 4
Sex				
Breed				
Age				
Target liveweight				
Age at turn-off				

Recommended strategy

	Year 1												Year 2												Year 3					
Month	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
Group 1																														
Group 2																														
Group 3																														
Group 4																														
Mustering periods																														

For further information,
call Elanco Animal Health
on 1800 226 324.



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References: ¹Coorabulka™ trial, NAPCO. ²BF4846. *Elanco®, Compudose® and the diagonal colour bar are trademarks of Eli Lilly and Company. ©Compudose is a trademark for Elanco's brand of oestradiol. †Trademark name. WORDSMITH24150 [EP00998]