

STARTECT

Dual Active Oral Solution

THE PRODUCTION COST OF REDUCED WORMER EFFICACY

An innovative strategy for sustainable worm control in sheep

This is a POM-V product – information is provided for educational purposes only

STARTECT is the first dual active wormer. It gives an additive effect for improved worm control, which can enhance animal performance.

Benefits of dual active wormers: additive effects¹

- **Enhanced efficacy against resistant worms**
If one drug fails to kill all worms, the other can kill the survivors
- **Delayed resistance development**
Resistance to the constituent anthelmintic classes is delayed, protecting the wormers and sustaining their effective use into the future

Dosing guidelines

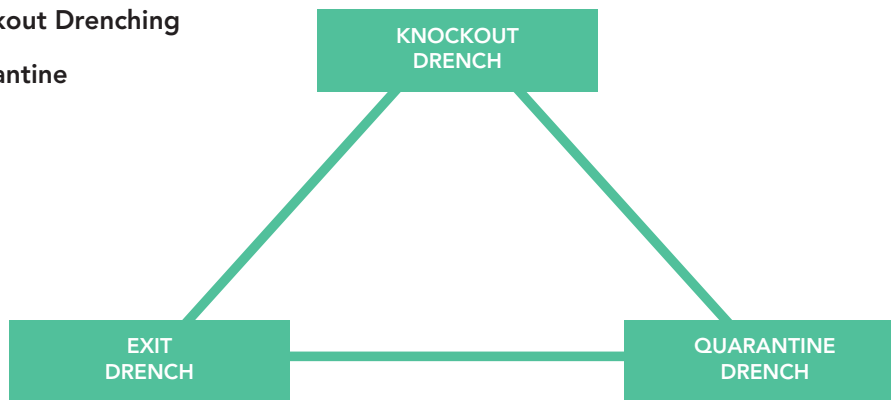
- Quarantine – STARTECT is effective against roundworms resistant to group 1, 2 and 3 wormers, and can be used as a quarantine drench for any sheep purchased throughout the year
- Do not keep STARTECT in reserve for use only when other wormers have failed
- Routine use can help delay the development of resistance^{2,3}
- Knock Out drench – STARTECT should be used as a routine clear out of resistant worms

 **STARTECT**[®]
Dual active worm control



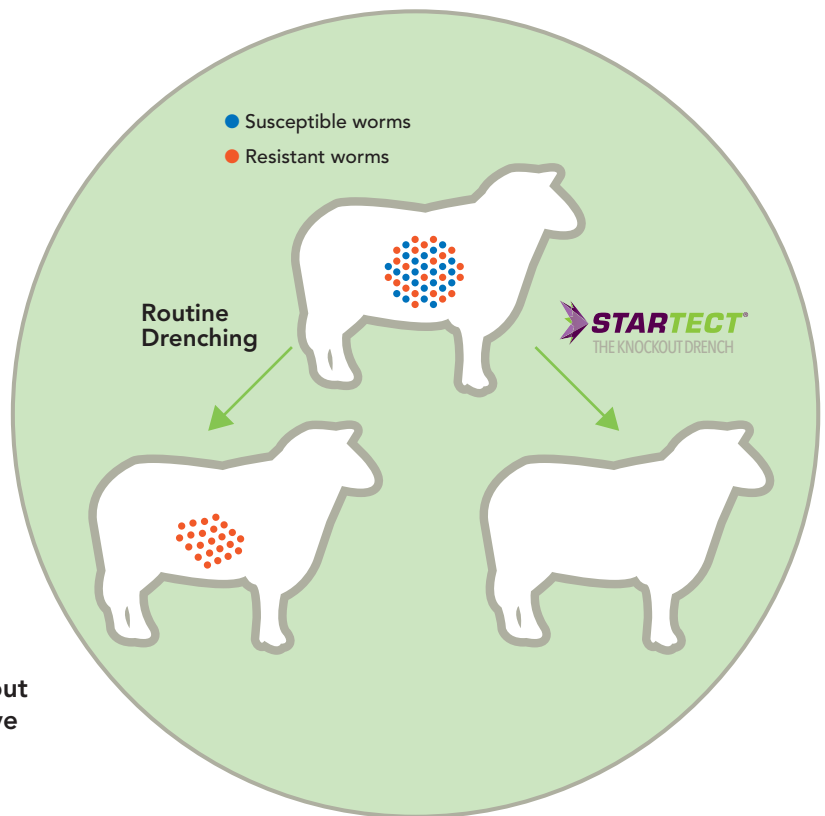
STRATEGIC DRENCHING

- Knockout Drenching
- Quarantine
- Exit



STARTECT – THE KNOCK OUT DRENCH

- A knockout drench is the substitution of one routine lamb drench with a novel drench active
- Resistant parasites which have accumulated and survived preceding drenches are then knocked out by STARTECT
- A Knockout lamb drench has been shown to delay the onset of resistance to the routine drenches
- Start ideally when there is no detectable resistance or when resistance is at a low level
- **All sheep farmers should be routinely adding in a Knockout drench into their preventative drenching programs**



Delays resistance

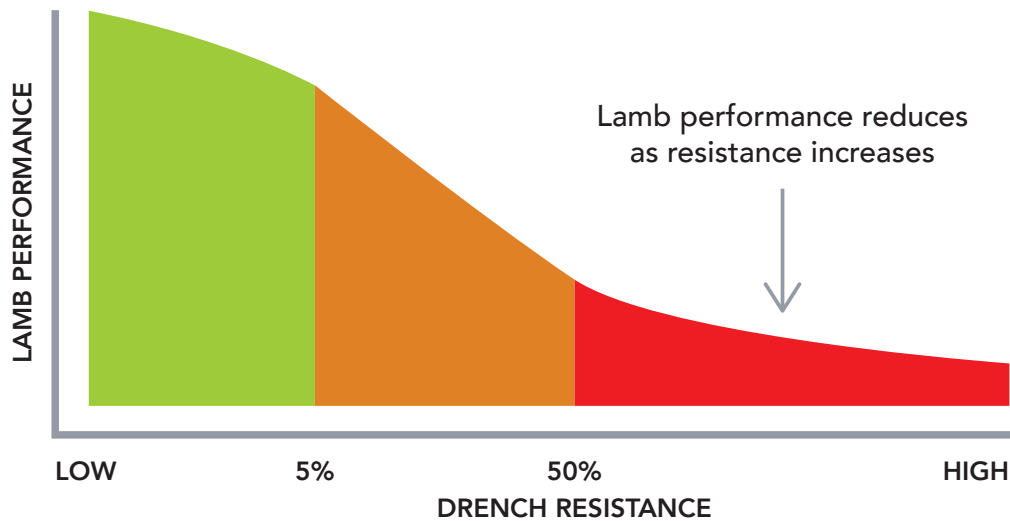
Dual active wormers can help delay the development of anthelmintic resistance, sustaining the efficacy of the constituent anthelmintic classes. They do this through additive effects:

- Reducing the number of resistant worms which survive treatment, because worms must be resistant to both anthelmintic classes for survival
- Leading to greater dilution of resistant worms by the unselected parasites in refugia
- Reducing the proportion of resistant worms available to reproduce with other resistant worms that have survived treatment

What is the cost of drench resistance?

- Lamb performance reduces as drench resistance increases

This results in a reduction in the growth rates of lambs, even when other signs of resistance are not overtly apparent. When drench resistance reaches the 'red zone', production losses are very substantial and other signs of drench failure are generally clearly visible.



Containing derquantel, and a potent ML abamectin; STARTECT not only kills worms resistant to other products but, used routinely, it can help delay wormer resistance, protecting your flock from drench failure now and into the future.

STARTECT is the only dual active wormer.

1. Bartram DJ et al., (2011), Vet Parasitol. doi:10.1016/j.vetpar.2011.11.030.
2. Leathwick DM, (2011), Vet Parasitol. doi:10.1016/j.vetpar.2011.11.030.
3. Learmount J et al., (2012), Vet Parasitol. doi:10.1016/j.vetpar.2011.11.030.