

# SUPPORTING

## selective dry cow therapy



Geoff Lloyd  
BVetMed DBR MRCVS

Geoff from Camlas Farm Vets, on the Welsh-Shropshire Border has been implementing Selective Dry Cow Therapy with his most proactive clients over the past couple of years.

### Benefits

A SDCT programme should result in using less antibiotics and farms with predominantly gram negative pathogens (eg coliforms) may see a reduction in clinical mastitis rates.

Personally I think there is also an intangible benefit from the fact that much more attention is paid to the drying off process and especially to hygiene at that time.

### Success factors

**Records:** Good farm records are key to making the right decisions (individual cow SCC throughout lactation, accurate clinical mastitis records and mastitis pathogen profile on the farm).

**Communication:** It is important to discuss SDCT with all the farm staff and to agree a written protocol that suits that individual farm and that staff will be committed to.

**Hygiene at dry off:** absolutely essential for this type of programme.

### Challenges

Accurately selecting the cows that will receive teat sealant only can be difficult, and inevitably some “infected” udders may be missed and receive no antibiotics. This means that BMSCC needs to be closely monitored.

### Your top tip

Attention to detail and following an agreed written protocol.



James Lee, Winnington Green Farm

**James runs a spring calving grazing system farm with 420 Jersey-cross cows milked in a rotary parlour.**

We started SDCT 3 years ago after hearing about it at a grazing group meeting. Now, 60%-70% of our cows are treated with OrbeSeal alone. We've set the level where cows get OrbeSeal alone at no more than 150,000 SCC and no clinical mastitis cases during this lactation. As a result mastitis is down by two-thirds and cell counts have halved in just 2 years, and of course there's been a substantial saving on dry cow tubes.

To achieve this level of success, the most important thing is to follow a strict hygiene routine. We also see drying off as a completely separate job, never done during or just after milking. When in doubt it's best to err on the side of caution – if you're not sure whether a cow should have teat seal alone, or teat seal and antibiotic, give both!

“ Ultra cleanliness and following a set routine with every cow are essential ”



Tim Hampton, Arla Foods,  
Quality Standards Manager

**Arla Foods introduces new standard**

Arla Foods are introducing a new standard for their UK farmers from October 2015 known as *Arlagården*. One of the main points will be the need to reduce blanket dry cow therapy and introduce a more selective approach.

Achieving this goal, should, still be very much within the vet's control on individual farms. If, in the opinion of the vet, conditions are not right for that farm (say bulk milk SCC is too high) then the standard requires that action should be taken to correct the situation to allow selective dry cow therapy to be adopted.

This is all part of a drive to reduce reliance on antibiotics and develop an environment to promote responsible use.



# SELECTIVE DRY COW THERAPY

## REMEMBER

- Not all farms, herds or individual cows will be suitable for a SDCT programme
- With SDCT all cows are treated with an internal teat sealant, with or without targeted antibiotic therapy
- SDCT does not mean you have to stop using antibiotics all together



## How can Zoetis help you and your vet?

Zoetis, manufacturers of OrbeSeal, have created this guide and other tools that can help you and your vet implement the right dry cow strategy for you. We have a team of field vets that support vet practices and a technical team at our head office ready to advise and support you on usage of our products.

### Reference:

1. Green MJ, et al (2002). Influence of dry period bacterial intramammary infection on clinical mastitis in dairy cows. *J. Dairy Sci.* 85:2589–2599
2. Dingwell RT et al. (2004). Association of cow and quarter-level factors at drying-off with new intramammary infections during the dry period. *Prev Vet Med.*;63(1-2):75-89
3. Rabiee AR & Lean IJ. (2013) The effect of internal teat sealant products (Teatseal and OrbeSeal) on intramammary infection, clinical mastitis, and somatic cell counts in lactating dairy cows: A meta-analysis. *J Dairy Sci* ;96:1-17

OrbeSeal contains 65% bismuth subnitrate. Withdrawal period: Zero days: [POM-V](#).

Further information is available on the product SPC or contact your veterinary surgeon or contact Zoetis UK Ltd, Walton Oaks, Dorking Road, Walton on the Hill, Tadworth, Surrey, KT20 7NS. Customer Support 0845 3008034. [www.zoetis.co.uk](http://www.zoetis.co.uk)

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# SELECTIVE DRY COW THERAPY

## A guide for dairy farmers



**OrbeSeal**

# WHAT

## is selective dry cow therapy?

Selective dry cow therapy (SDCT) is a decision made at dry off, about whether your cows receive antibiotic dry cow therapy (ADCT) in addition to an internal teat sealant such as OrbeSeal®.

### Why antibiotic dry cow therapy?

The use of ADCT has been established for more than 50 years. In 1963, the 'Five point mastitis control plan' advocated blanket therapy with antibiotics and this had an adoption rate of 75%-99% depending on the country. In some herds, over 60% of clinical mastitis cases can be traced to bacterial infections that occur in the dry period.<sup>1</sup> This is why ADCT is highly effective and plays an important role in the modern UK dairy herd.

### Why OrbeSeal?

The introduction of OrbeSeal internal teat sealant set a new standard for prevention of dry period mastitis. Up to half of all high yielding dairy cows may fail to develop a complete keratin plug in the dry period<sup>2</sup> and without this barrier there is a greater risk of bacteria entering the udder. By imitating the cow's natural keratin plug, OrbeSeal prevents mastitis-causing bacteria from entering the teat during the entire dry period, consistently reducing mastitis by around 35%.<sup>3</sup>



### Making the right decision

All cows benefit from the protection given by the teat sealant OrbeSeal, but not all cows need an antibiotic during the dry period. If a cow does require antibiotic therapy at dry off, then the decision is about selecting the most appropriate product for the cow's requirements and likely bacterial type.

WHAT is Selective Dry Cow Therapy?

# WHY

## is selective dry cow therapy important?

Governments, human health agencies, consumer groups and food retailers are putting greater pressure on food producers to justify the use of antibiotics.

Dairy companies such as Arla now require that farmers discuss SDCT with their vets.

### What are the benefits of SDCT?

- Potential for reducing antibiotics used on farm
- Can reduce amount and severity of mastitis cases
- Reduced medicine costs compared to blanket combination therapy

A SDCT programme that consists of all cows being treated with OrbeSeal can help reduce antibiotic usage in 2 ways:

- Less antibiotic used in dry cow therapy
- Reduced number of clinical mastitis treatments



WHY is Selective Dry Cow Therapy important?

# HOW

## do I implement a selective dry cow programme?

Your vet will help you determine whether your farm and herd are suitable for implementing a SDCT programme. Not all farms or herds will be suitable and information about your herd's mastitis status will help determine this.

You need the following information about your herd to make an evaluation:

- Bulk milk somatic cell count
- Records of mastitis incidences
- Outbreak type (pathogen profile)

If you don't already collect this data, your vet will discuss other options for management of the dry period and can advise you if it's appropriate to start collecting this data.

If you have the above data available, your vet can create a tailored programme for your farm that will consider treatment decisions at group and also at individual level.

### What could my treatment protocols look like?

Depending on your farm, herd and individual animal factors, your cows will be selected for one of the treatment options below:

INDIVIDUAL LEVEL SCC	HERD LEVEL SCC		
	LOW	MEDIUM	HIGH
LOW	OrbeSeal alone	OrbeSeal + broad spectrum product	OrbeSeal + broad spectrum product
MEDIUM	OrbeSeal + broad spectrum product	OrbeSeal + broad spectrum product	OrbeSeal + narrow spectrum product
HIGH	OrbeSeal + broad spectrum product	OrbeSeal + narrow spectrum product	OrbeSeal + narrow spectrum product

HOW do I implement a selective dry cow programme?