

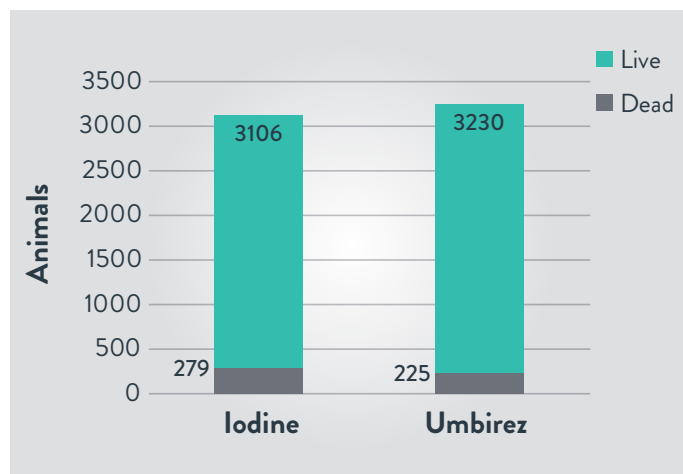
What did we learn in the largest ever navel protection study?

This study was conducted in the United Kingdom where Umbirez is currently sold as NoBACZ **NAVEL**

The best flocks achieve 10 – 12% lamb losses from scanning to rearing¹, and it is an accepted fact that almost half of those losses occur within the first two days of life, with another 10% occurring in the first two weeks². As well as fatalities, other conditions such as umbilical infections or infectious suppurative polyarthritis ('joint-ill') caused by *Streptococcus dysgalactiae* subsp. *dysgalactiae* (SDSD) can contribute to poor lamb health and welfare.

Prevalence rates of up to 50% and subsequent mortality rates of up to 20%³ are reported, and it is not uncommon for lambs with either of these conditions to be euthanised on welfare grounds. Bacteraemia has also been observed after routine management procedures (such as tagging) create an entry point for infection.

It isn't just a problem affecting lambs. Joint-ill and navel-ill in calves reduce daily liveweight gain and are responsible for a significant amount of antibiotic use. The importance of a robust colostrum protocol



i.e. if the farmer dipped the umbilicus normally, they dipped with iodine or Umbirez. If they sprayed normally, they sprayed the umbilicus with iodine or Umbirez. Survival and weights up to eight weeks of life were monitored.

Umbirez demonstrated superior protection compared with iodine in the study⁷. Evidenced by the 21% reduction in mortality that was observed in the Umbirez group compared with the iodine group (p=0.005).

is known, however, recent studies^{4,5}, demonstrate that wet bedding and poor (or absent) disinfection of the umbilicus increase the odds ratio of contracting navel-ill more than colostrum provision.

Until now best practice has been to apply 'strong iodine' to the umbilicus, and sometimes ear-tagging sites, by dipping or spraying. The aim is to provide desiccation of the umbilicus and disinfection of the surface. Prophylactic antibiotic use still occurs on as many as 19% of farms⁶, which is not best

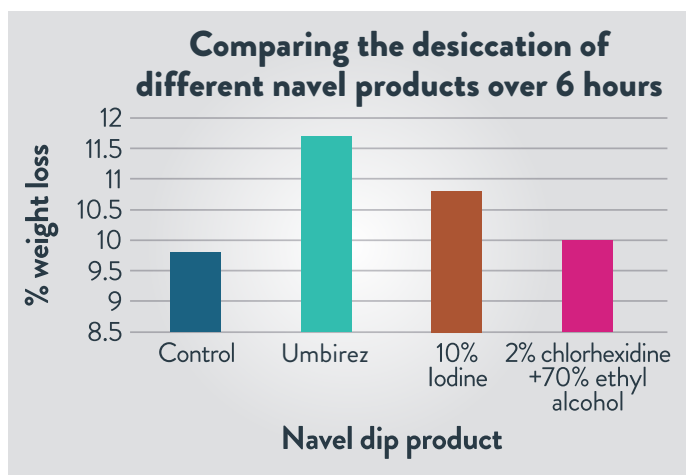
practice or good antimicrobial stewardship (AMS). There is little published evidence for the prevention of SDSD or reduced mortality rates using iodine as a preventative approach. Farmers often report that it is licked off, or drips off, and re-applications are required.

In 2022, the iodine supply was limited and prices quadrupled. In response to this, NoBACZ Healthcare developed a liquid solution containing a proprietary blend of shellac and metal salts in an ethanol base (Umbirez). It provides greater desiccation of the umbilicus than iodine or chlorhexidine (with or without spirit), and 360° protection by forming a non-colonizable hydrophobic barrier – protecting the lamb from the environment.

Farmers, and vets⁸, also frequently comment on the benefit of Umbirez being 'lick-resistant' the bitter agent prevents interference by the dam, something which is often observed with iodine causing repeat applications to be required.

For lambs, producers should target eight-week weights more than 20 Kg. In the study, lambs that had Umbirez applied to the umbilicus and tagging sites were more than 230 g heavier than their iodine group counterparts at eight weeks.

The economic benefit to the farmer is clear: 17 more lambs alive per 1000 born and an average of 230 g extra bodyweight (per lamb) at eight weeks more than justifies the investment in Umbirez at 16 p per dose!



Throughout the 2023 – 2024 lambing season, FlockHealth Ltd ran a RCT with eleven flocks in the UK enrolled on the study producing a cohort of 6840 lambs. It was a true randomised-control trial (RCT) with odd numbered lambs receiving strong iodine and even numbered lambs Umbirez. Current practices on the farm were observed,



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