

Minutes: AWERB: PPL Review meeting

Status: FINAL

Meeting held: 5 March 2024 at 10am via F17 Camden and MS Teams

Present: 16 plus 1 in attendance, 4 by invitation and 11 apologies

1 NEW PPL APPLICATION

The project licence holder was welcomed to the meeting. He explained that he was undertaking studies to investigate the development of immunity during the prenatal and neonatal period in the bovine calf. Several initial small studies had been undertaken including looking at the levels of sickness and morbidity in calves on dairy farms throughout the UK. This had involved taking bloods under the Veterinary Surgeons Act to look at calves' immunity which identified poor levels of antibody related immunity and that levels of disease were quite a lot higher than had been expected. UK veterinary practices had also been asked to share anonymised data relating to the antibody levels taken from calves in the first week of their lives. These studies showed that antibody titres in these calves were well below the stated guidelines.

The aim of this particular project is to look at how calves' immunity develops through the preweaning period (up to about 8 weeks of age) and also how antibody titres change over time and how that relates to disease. A test had been developed by a practice to look at these antibody titres which it was hoped could be used in pre-weaning calves up to 8 weeks. The aim was to validate this new test and to focus on identifying what normal antibody titres there were in these calves and to work out if these were associated with disease. The impact on animal welfare could be huge. Previous tests had only been accurate in calves aged between 1 to 7 days old, so measurements had rarely been performed in older calves.

The following queries were raised by AWERB:

- The project would be carried out at POLES as the main focus was studying the health and immune development of calves on commercial farms. Had these POLEs been identified? Discussions were under way. There would be two used: one would be a commercial dairy farm and the other a commercial calf rearing operation.
- Would there be any financial incentives provided to the farmers for participating? No, but the results would be useful to them.
- Would there be any adverse effects of taking the blood samples? There was a very minute risk of thrombophlebitis. Although the risk was very small, it needed to be included in case there were any concerns over a warm or slightly swollen vein so that it could be appropriately treated and the situation monitored to see if there was any improvement within 7 days.
- If a cow had to be euthanased, how would the farmer be compensated? Discussions would be needed with the farmer and the vet practice.
- As pregnant dams would be blood sampled at a number of time points before calving, including a final one taken the week before calving, could taking a blood sample that close to

giving birth cause any problems with the pregnancy (not only from the blood sampling but from using a restraint) such as going into premature labour?

It shouldn't, as dairy cows were used to being handled twice daily and having blood samples taken. The risk would therefore be very small. This information would be added to the licence.

- The licence stated that when blood sampling the calves a mandatory step of taking a jugular vein sample would be carried out, followed by an optional step of a nose prick. Clarification was sought whether this should be either a jugular bleed or a nose prick. It was confirmed that the jugular bleed was mandatory, but the nose prick was optional. The nose prick would only provide a tiny amount of blood but was needed for test validation, as that would be the route the farmers and vets would use. It was required to be able to prove that a blood sample taken from a nose prick was the equivalent to blood taken from a jugular sample at each week of life. This would be emphasised in the licence.
- The licence mentioned that nose prick sampling was becoming a "routine method of collection" in clinical veterinary practice. The RCVS though have a definition for routine veterinary practice which this was not.

This would be changed to "standard" to avoid confusion.

- How soon after the cows have been moved to their new farm would blood samples be taken? Usually if an animal was moved, they would be given 7 days of acclimatization to get used to their new surroundings. What was the rationale for doing it sooner? The blood sample would be taken within 7 days of having been moved. This was to see how stress affected the immune system.
- How soon after a calf had been born would they be blood sampled? It would be between 6 hours to 7 days.
- Could blood sampling the calf so soon cause any problems with the maternal bond between the mother and the calf or any problems with getting their first colostrum? Calves as standard were usually separated by this point so this was not an issue. Also, the first blood sampling was a routine veterinary procedure under the VSA. It was being included as the blood sampling will be done every week. It also shouldn't affect the colostrum.
- Would the animals being blood sampled remain on the licence for the duration of the project? There have been a lot of discussions about how to practically run this project as it was taking place at POLEs. The dams would be signed off as soon as possible whereas the calves would remain on the licence. An independent vet was in the process of being identified who would be responsible for signing off the animals in conjunction with the RVC NVS. They would be able to physically examine the animals whilst liaising with the RVC NVS. If an animal became sick, then the RVC NVS would need to be notified as well as the PPL Holder.

Action: it would be made clear to the POLEs the potential amount of work resulting from being involved in this study to make sure they understood and were happy with this, particularly with them being commercial operations.

• There was uncertainty whether the calves when in utero would be deemed as a protected animal and so automatically covered by A(SP)A, even though no procedures would be carried out on them. This was important as if a cow aborted after being sampled under ASPA, and the unborn calves were protected then this event would need to be reported to the Home Office and yet a certain level of abortion occurred naturally in cows. It was agreed that the licence would be submitted on the assumption that the foetus was not protected and then to follow any advice provided by the Home Office.

The PPL Holder was thanked for attending the meeting. He would make the suggested changes to the licence and it would then be circulated for a final review.

2 ANY URGENT ITEMS TO RAISE?

- Two dogs within the DMD unit were starting to show typical signs of the disease so were under close observation.
- Sheep tracheotomy: Changes have been made to the process and a surgery carried out. The sheep made a better recovery and the device was working well.

3 MINUTES

The minutes of the meeting held on 6 February 2024 were confirmed as an accurate record.

4 DATE OF NEXT MEETING

This was scheduled for 10 April at 2.30pm. It would be a PPL review meeting.

AWERB Secretary 15 March 2024