

## Participant Information Sheet

### Investigating the risk factors and impact of Johne's disease on UK sheep and beef farms

A PhD project sponsored by Virbac Animal Health Ltd, University of Liverpool and Hybu Cig Cymru

PhD student: Laura Taylor

Supervisors: Dr Peers Davies & Professor Nicola Williams

We would like to invite you to participate in a research study into ewe lifetime productivity and Johne's disease. Before you decide whether to participate, it is important for you to understand why the research is being done and what it will involve. Please read the following information carefully and feel free to get in contact if you would like more information or if there is anything that you do not understand. Please also feel free to discuss this with your veterinary surgeon if you wish.

### What is the purpose of the project?

This project seeks to improve understanding about some of the key knowledge gaps around ovine Johne's disease (OJD) including demonstrating the magnitude of the economic impact of the disease and identifying the risk factors that predispose to higher risk of infection and/or higher risk of production loss.

Specifically, the objectives of the PhD project are as follows:

- Quantify the impact of OJD on ewe longevity and lamb production efficiency in commercial and pedigree sheep flocks of all system types in the UK.
- Quantify the risk posed by cattle to sheep for Johne's infection and vice versa.
- Assess the prevalence and relative risk of OJD by system and husbandry practices to estimate the level of benefit that could potentially be derived from *Gudair* vaccination.
- Validate a PCR diagnostic test for detection of both 'C' and 'S'-type strains of the bacteria that causes Johne's disease (*Mycobacterium avium subspecies paratuberculosis* (MAP)).

### Why have I been invited to participate?

You have been asked to participate because you are registered as a sheep and/or beef producer on one of AHDB, HCC, QMS, NBA or NSA member lists.

We are aiming to recruit approximately 100 farms across England, Wales and Scotland according to stratified selection criteria to give a proportionate representation of the UK sheep sector across the important flock level variables in system and husbandry. Within these criteria, we are hoping to recruit a proportionate number of sheep only, cattle only and sheep and cattle mixed farms.

Any additional farms that we are able to recruit beyond the aforementioned target will be invited to send in a boot sock sample to determine their farm's Johne's status; this will provide further useful data about the prevalence of OJD within the UK.

### **What will happen if I take part?**

If you consent to take part in this study, one of two courses of action will happen.

For the approximately 100 farms which are selected for the main part of the project, Laura will visit you at your farm on a date that is convenient for you. She will collect faecal samples from your sheep and/or cattle, and check ewes' teeth to gauge the age of each group of ewes sampled. We would ask you to gather a group of between 50 – 100 ewes (of mixed ages that are typical of your flock) into a handling facility. Cattle faecal samples can be collected directly off the field so there is no need to gather cattle for sampling. Boot-sock samples will also be used whilst on the farm; these are one-use fabric socks worn over boots which allow collection of a composite sample over a larger proportion of the farm. Additionally, Laura will go through a detailed questionnaire with you regarding your farm management practices. The whole visit should take no longer than 2hrs in total.

If your farm is not selected for the main part of the study you will be provided with a Boot-Sock sampling kit to use on your farm and submit to the laboratory to help determine your farm's Johne's status. Collection kit, instructions and post and packaging will be provided free of charge to as many farms as possible.

You will receive the results of all the samples submitted from your farm as part of the study. All laboratory related costs will be covered by the project.

### **What are the possible benefits of taking part?**

For you: gaining information relating to your flock and/or herd's Johne's disease status free of charge. This information can be used by you and your veterinary surgeon to alter management and hence improve the health, welfare and productivity of your flock and/or herd.

For the industry: gathering data about the prevalence of OJD in the UK, understanding the effect of the disease on ewe longevity and lamb production metrics, identifying risk factors for OJD infection (including the risk posed by cattle and vice versa) and evaluating the economic impacts of disease in relation to system and husbandry practices to help ascertain the potential cost-benefit of vaccination.

### **What are the possible disadvantages and risks of taking part?**

The sampling involved in this project is considered to be standard agricultural and veterinary practice. Handling and sampling ewes can be associated with a very small risk of injury or

abortion. These risks can be minimised through calm, quiet handling. Other than taking up some of your time, there are no other anticipated disadvantages to participating in this study.

### **How will my data be used?**

The University processes personal data as part of its research activities in accordance with the lawful basis of ‘public task’ and in accordance with the University’s purpose of “advancing education, learning and research for the public benefit”.

Under UK data protection legislation, the University acts as the Data Controller for personal data collected as part of the University’s research. Laura Taylor acts as the Data Processor for this study, and any queries relating to the handling of your personal data can be sent to Laura at [L.Taylor11@liverpool.ac.uk](mailto:L.Taylor11@liverpool.ac.uk).

Further information on how your data will be used can be found in the table below.

How will my data be collected?	Data will be recorded on farm using paper records.
How will my data be stored?	Electronic records will be stored on the secure server at the University of Liverpool. Signed consent forms will be retained for 10 years in locked filing cabinet at the University of Liverpool. No other paper records will be retained.
How long will my data be stored for?	10 years
What measures are in place to protect the security and confidentiality of my data?	Data will be stored in a secure university server. Access will only be given to Laura Taylor.
Will my data be anonymised?	Yes – all data used for research will be anonymised. We will not need to record or store any personal identifying information for this project.
How will my data be used?	The data from your sheep will be used to assess the prevalence, risk factors and economic impact of Johne’s disease in the UK.
Who will have access to my data?	Laura Taylor (University of Liverpool)
Will my data be archived for use in other research projects in the future?	Yes, anonymous biological samples will be stored for future studies.

### **Will what I say in this study be kept confidential?**

All data will be stored on secure password protected servers based in the UK. Only research staff have access to these files. All data will be analysed anonymously, and there will be no way to identify your farm's data in any publications that result from the project.

### **What should I do if I want to take part?**

If you are happy to take part you should sign the consent form. You and your vet will receive the laboratory results from your flock as soon as they are available and we will send you the findings from the research project.

### **What will happen to the results of the research study?**

Results from this study will lead to published scientific articles and knowledge transfer material. The anonymised results will also be presented during face to face meetings with various stakeholders and possibly at veterinary conferences. Neither you nor your flock would be identifiable in any of these results.

### **Do I have to take part?**

It is up to you to decide whether or not to take part in this research study. If you do decide to take part, you will be asked to give your consent on the proviso you have understood the information in this document. If you decide to take part you are still free to withdraw without giving a reason. After the data has been anonymised, it will not be possible to link it back to the individual participants so withdrawal of data after that point will not be possible. Withdrawing or deciding not to take part will in no way affect your relationship with your vet.

### **Who is organising and funding the research?**

This project is co-funded by Virbac Animal Health Ltd, University of Liverpool and HCC and will be carried out by Laura Taylor based at University of Liverpool, supervised by Dr Peers Davies and Professor Nicola Williams.

### **Who has reviewed the study?**

The research has been approved by the University of Liverpool Veterinary Ethical Review Committee.

### **Contact for Further Information**

If you require further information about the project, would like to withdraw or have any questions or concerns, please contact Laura Taylor at [L.Taylor11@liverpool.ac.uk](mailto:L.Taylor11@liverpool.ac.uk) or call on 07764455628. If you would prefer to discuss the study in Welsh please contact Peers Davies at [Peers.Davies@liverpool.ac.uk](mailto:Peers.Davies@liverpool.ac.uk) or call on 07714613747.

**Thank you**

Thank you for taking the time to read this participation information sheet. We hope you will choose to take part in the study and look forward to distributing results as soon as they become available.