Letters to the Editor

Editor — We refer to the article entitled 'Equine influenza: a current reference for vets in practice in the UK' by Rendle et al. in the September/October 2019 issue of UK-Vet *Equine* (the 'Article') (https://doi.org/10.12968/ukve.2019.3.S3.1). We understand that the Article was designed to be a practical and informative piece for veterinary surgeons. As Marketing Authorisation Holder for ProteqFlu® and ProteqFlu-Te® (Boehringer Ingelheim/Merial) we feel obliged and would like to provide further information regarding two segments of the Article as we are concerned that statements included are not consistent with the Summaries of Product Characteristics (SPCs) for ProteqFlu® and ProteqFlu-Te® and that this could potentially be misleading for veterinary surgeons.

Under the heading 'Efficacy in foals and interaction with maternally derived immunity' on page 8 of the Article, the authors discuss that 'the different vaccines are licensed from different ages' and provide comment that ProteqFlu® is licensed 'from 4 months of age'. Whilst it is accurate that ProteqFlu® is licensed for use from 4 months of age, this is only under specific circumstances. According to the ProteqFlu® SPC 'in case of increased infection risk or insufficient colostrum intake, an additional injection of ProteqFlu® can be given at the age of 4 months followed by the full vaccination programme (primary vaccination course at 5–6 months of age and 4–6 weeks later followed by revaccination)'. Therefore when following the ProteqFlu® SPC for all other horses it is advised that the first injection in the primary course not be administered until 5–6 months of age; similar to other available equine influenza vaccines in the UK.

Under the heading 'Vaccine reactions' on page 9 of the Article, the authors correctly state that 'the incidence of adverse events reported to the VMD for all currently authorised equine vaccines that vaccinate against equine influenza only and equine flu and tetanus are 0.05% and 0.1% respectively'. The adverse event rates reported on both the ProteqFlu® and ProteqFlu-Te® SPCs are based on VMD and EMA data and are consistent with the adverse event rates stated in the Article. As such the statement 'there is a perception among UK practitioners that reactions are more common with the canarypox vector; however this has not been substantiated' by the authors at the end of the 'Vaccine reaction' section has the potential to be misinterpreted by veterinary surgeons. As you may be aware, ProteqFlu® and ProteqFlu-Te® are the only licensed UK equine influenza vaccines to contain a canarypox vector. Therefore our concern is that the Article could give veterinary surgeons the impression that there is a higher adverse event rate with ProteqFlu® and ProteqFlu-Te® based on unsubstantiated evidence. The safety profiles of both ProteqFlu® and ProteqFlu-Te® are reviewed regularly and as such if changes to the adverse event rates occur then the SPCs are updated accordingly.

The above information relating to vaccine reactions has also been summarised in *Table 2*: 'Summary of the relative merits of different UK vaccines' on page 8 of the Article. The table represents the relative merits of the available equine influenza vaccines pictorially by colour code based on the available evidence in the literature and the authors' unpublished data and collective data which we are concerned is unsubstantiated. The footer of *Table 2* describes the colour codes within the table as red for poor/absent, amber for moderate, green for good and white for no data which depict the relative merits of the different vaccines.

In *Table 2* ProteqFlu® is represented as amber in the column 'Vaccine reactions' which means that veterinary surgeons may deem vaccine reactions to be a greater concern with ProteqFlu® compared to other available equine influenza vaccines. As previously stated above, this information relating to vaccine reactions in *Table 2* is inconsistent with both the ProteqFlu® and ProteqFlu-Te® SPCs and the VMD/EMA data and in isolation has the potential to be misunderstood and misinterpreted by veterinary surgeons.

We would appreciate for a correction to be published to remedy these inconsistencies.

Kind regards,

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Editor — Equine influenza vaccination is something that occupies a significant amount of our time and is deserving of more of our attention. It was therefore useful to publish this article (Rendle et al, 2019) outlining some relevant information and opinions. However, I was very surprised that the authors expressed a view of the relative likelihoods of adverse reactions to the different vaccine brands (*Table 2*) in the absence of any supportive evidence.

Readers and authors may be interested to know information from the Veterinary Medicines Directorate detailing numbers of reports of suspected adverse events following use of equine vaccinations. From January 2017 until June 2019 there were 132 suspected reactions to Proteq flu and Proteq flu-Te combined, and 194 suspected reactions to Equilis Prequenza and Equilis Prequenza Te combined. Data for just the first half of 2019, when many of us will have been vaccinating increased numbers of horses, indicate 39 Proteq flu/flu Te suspected reactions and 68 Prequenza/Prequenza Te suspected reactions. Clearly these data must be interpreted carefully as this is based on only those cases reported to the VMD and/or the vaccine manufacturer, and also market share will influence likelihood of reactions occurring; however, it does not appear supportive of an increased incidence of reactions to canarypox vectored vaccines as suggested in the article.

Yours faithfully,

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References

Rendle D, Bowen M, Ivens P et al. Equine influenza: a current reference for vets in practice in the UK. UK-Vet Equine. 2019;3(S3):1-13. https://doi.org/10.12968/ukve.2019.3.S3.1

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Authors' response

Editor — As the authors of 'Equine influenza: a current reference for vets in practice in the UK', published in the September/October 2019 issue of UK-Vet Equine, we are grateful to Dr Lees for raising concerns that The Boehringer Ingelheim

technical team had with inconsistencies between the advice given in the article and the Summaries of Product Characteristics (SPC) for their vaccines ProteqFlu and ProteqFluTe. We are also grateful to Professor Durham for the benefit of his experiences and for his provision of data from the VMD

It is not uncommon for current best evidence or expert opinion to conflict with the recommendations made in SPCs as the latter are updated infrequently and are often superseded by published evidence (Hardefeldt, 2019). It is however important that vets are aware when they are using medicines 'off label', and the authors therefore welcome the points of clarification relating to the SPCs for ProteqFlu that Ms Lees has raised.

Considering more carefully the SPC for ProteqFlu/ProteqFluTe in response to Ms Lees comments, and taking account of published evidence highlighting reduction in immunity that may result from using ProteqFlu in young foals (Fougerolle et al, 2016), we feel able to offer more generic advice that all vaccines can be used from 4–5 months of age in the face of increased risk. However, an early vaccine should not replace the primary course of vaccination which should commence at 56 months irrespective of whether vaccines have been administered at a younger age.

Ms Lees second concern relates to the statement in the article: 'There is a perception among UK practitioners that reactions are more common with the canarypox vector; however, this has not been substantiated'. Ms Lees expresses concern that this statement 'has the potential to be misinterpreted by veterinary surgeons'. We are confident that veterinary surgeons will be able to understand that there is no robust evidence to confirm or refute whether there is a higher rate of reactions with Proteq/ProteqFlu than with other vaccine brands. Our collective, but anecdotal, experiences are consistent with the views of practitioners, hence we assigned colour amber to ProteqFlu in the vaccine reactions column of *Table 2*. Endorsing our view, Ms Lees highlights the lack of evidence regarding vaccine reactions. We would welcome research into the rate of vaccination reactions because the perception among owners that there are risks associated with influenza vaccination is a major impediment to increasing vaccination rates and protecting the national herd against equine influenza.

Yours faithfully,

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