Pig Farmers’ Perceptions of Antimicrobial Use (AMU) and Antimicrobial Resistance (AMR) in Northern Ireland

H. Bradford a, C. Elliott a, A. Gilman b and M. Dean a

a School of Biological Sciences, Queen’s University Belfast, UK
b Cranswick PLC, UK

Introduction
- The past decade has seen a rise in the prevalence and spread of AMR due to widespread AMU.
- A substantial share of AMU is attributed to swine production.
- It is imperative to understand farmers’ perceptions in order to identify areas for possible intervention to reduce AMR.

Aim
- To explore pig farmers’ perceptions and attitudes towards AMU and AMR in Northern Ireland.

Study Design
- 10 face-to-face interviews with pig farmers.
- Eligibility criteria: ♂ and ♀ pig farmers, from Northern Ireland, 18+ yrs.
- Discussions explored farmers’ attitudes and opinions of AMU in pigs and perceptions of AMR as a human health risk.
- The audiotapes of the discussion were transcribed verbatim and analysed qualitatively (template analysis).

Perceptions of AMU and AMR

Awareness
- Most farmers could identify at least one alternative.
- There was scepticism surrounding their usefulness with some farmers believing they are a marketing play.

Theme | Example Quote
--- | ---
Benefits of AMU | “The animal probably won’t recover and then it’s a welfare issue, whereas a simple treatment could sort the problem.”
Associated Risks | “Well, I suppose we’re all becoming more aware of the antibiotic resistance.”
AMR | “Agriculture can’t be totally blamed for what’s happening… everybody needs to work together to try and reduce”
Individual AMU | “Pretty much the wearing stage. Wearing and just before they go onto this stage and then you’d just be using it on a one-off basis.”
Other Farmers’ AMU | “Retail pressure on prices has forced farmers to increase the number of pigs they produce. This in turn, leads to large numbers of animals on farm which require medication to keep health problems at bay.”
Triggers | “You generally know the symptoms or you just know a sick pig. You would treat it as to what you think it would need… depends on what you think the symptoms are.”
Awareness of Alternatives | “You know, sometimes a company that has produced the product recommending it to you, you’re wary because obviously their rep’s trying to sell the product.”
Use of Alternatives | “It’s [organic acids] bound to help… we’ve noticed a serious improvement… yes, it’s quite expensive but you only need to save a handful of pigs to justify it each week.”

Conclusion
- Results suggest that pig farmers are more aware of the benefits associated with AMU than potential risks despite being aware of AMR, however, they would consider using alternatives that prove beneficial.
- These preliminary findings will be verified through more interviews.