What is done to protect consumers from exposure to meat, with residues of antimicrobials? The brief answer is: "A lot!" - Still, adjustments are needed, and we have solutions for this

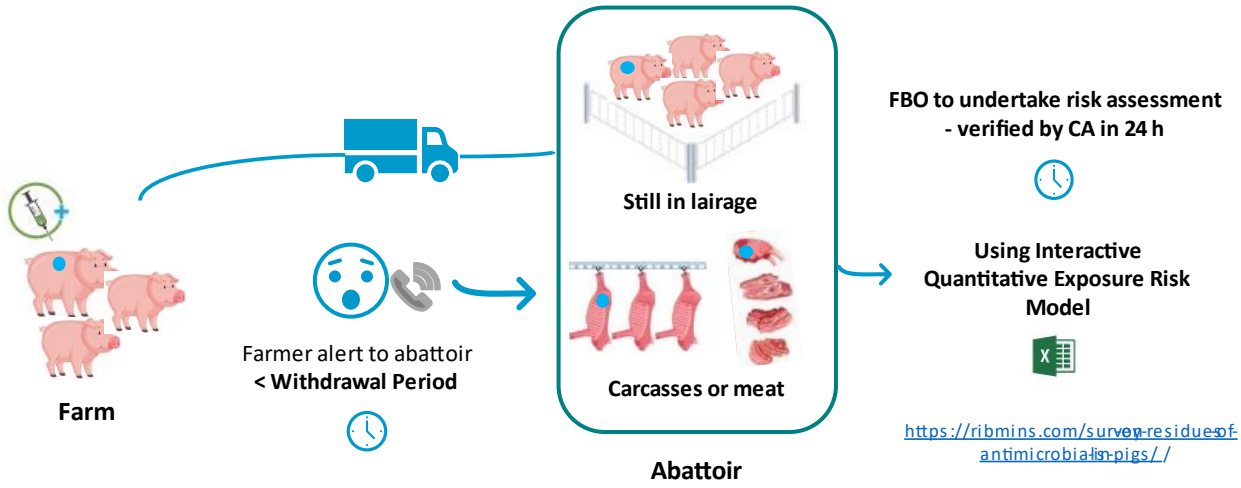
The protection of consumers against exposure to meat, with residues of antimicrobials (AMs), has been investigated by RIBMINS. The analysis was based on a collection of data from more than **26 countries** in- and outside of the European Union. **Residues above the maximum residue limits (MRL) are found only infrequent,** likely because of compliance with withdrawal periods (WP) after AM treatment. However, errors on the farm might lead to detection of residues above MRL in the meat. We have developed two best practice models, balancing consumer safety with EU policy on minimising food waste.

Model A (monitoring) could reflect small abattoirs placing meat on the **national market:**

- detection of a residue above MRL is interpreted in the **same way as a process hygiene criterion**,
- requires **on-farm inspection to correct future mistakes and no retention of tested carcases**.

Model B (surveillance) could reflect abattoirs **also trading and exporting:**

- detection of a residue above MRL is interpreted **as a food safety criterion**,
- requires **on-farm inspection,** and **the tested carcass is retained** to avoid expensive recalls.



Moreover, we have investigated what happens, when a **pig producer mistakenly delivers pigs for slaughter** prior to the end of the WP. Although WPs should be complied with, it is **difficult to use compliance with WPs as a basis for decisions**. First, because WPs **may differ between countries** and even between products containing the same molecule. Secondly, because the MRL may be complied with, despite that the animals were sent for slaughter too early due to application of safety factors when calculating the WP. We propose that the concentrations and amounts of residues present at the time of slaughter is calculated using an **interactive exposure risk model**, which can be found on: Survey on residues of antimicrobials in pigs – Ribmins. Hereby, decisions can be made in a safe, evidence-based and efficient way.

For more information, please see:

Alban et al., 2023. Food Control, 153. 109899 https://doi.org/10.1016/j.foodcont.2023.109899 (graphical abstract on link here)
Alban et al., 2023. Food Control, 154, 110000. https://doi.org/10.1016/j.foodcont.2023.110000 (graphical abstract within this document)
Lund et al., 2023. Food Control, 155, 100071. https://doi.org/10.1016/j.foodcont.2023.110071. (graphical abstract on link here)