



Leveraging Big Data to estimate the association between chronic disease and antimicrobial usage in Danish dairy cattle

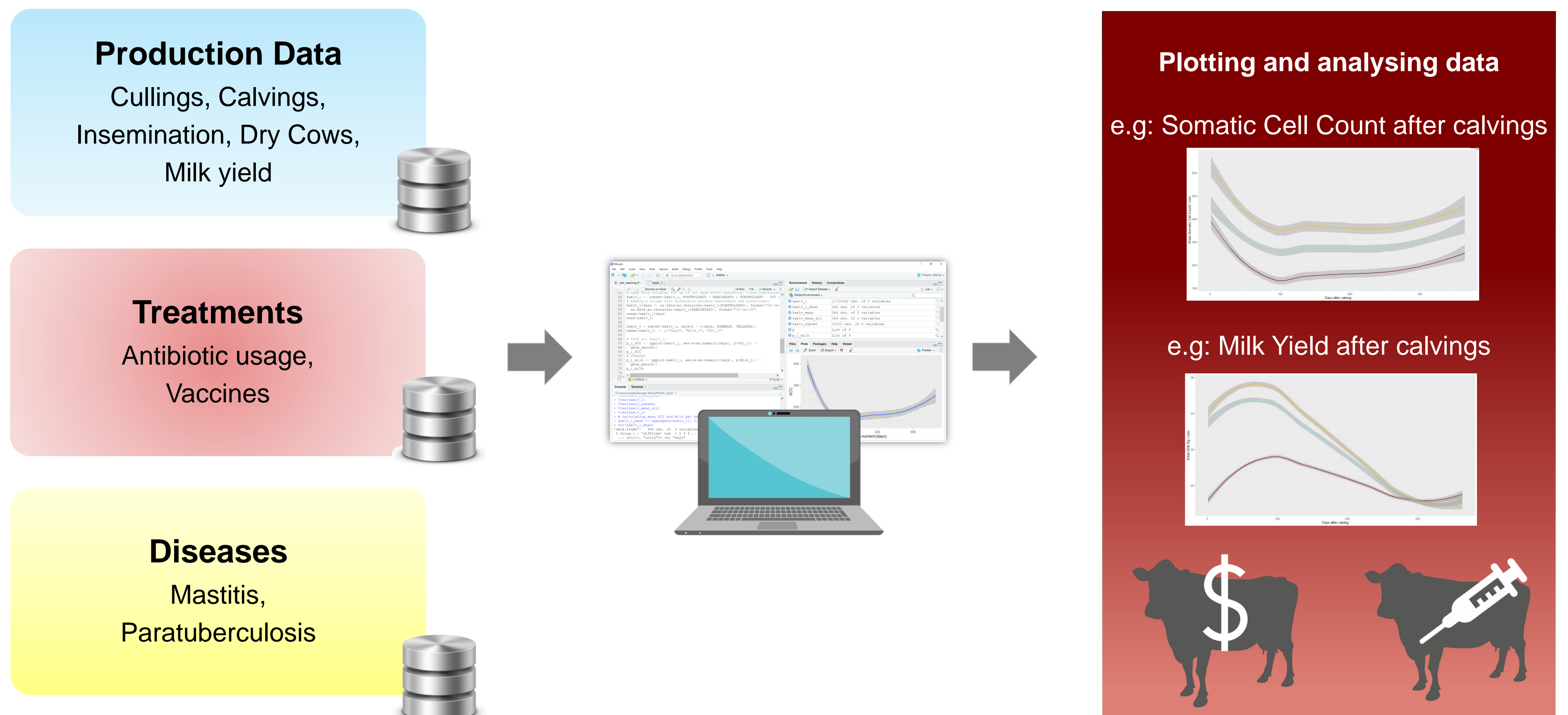
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Background

In Denmark, data for production animals have been routinely recorded for over 30 years as a tool for farmers to achieve good operation of the farm. For antibiotic monitoring and research purposes, data for antibiotic usage in production animals have been recorded for 20 years. These databases will be merged and analyzed using a Big Data approach, in order to investigate the economic, welfare and societal effects of a reduced antibiotic usage in dairy cattle herds.



Workflow



Perspectives

This poster describes an ongoing PhD project at the department of Veterinary and Animal Sciences, University of Copenhagen, Denmark. In the first instance, overall patterns of antibiotic usage and links with production data will be identified using Big Data techniques, including a Machine Learning approach to enable continuous standardized analysis. The initial findings of these novel analyses will affect the future direction of analysis for these databases.