

Economic assessment of the use of antibiotics in the veal calf industry in Switzerland

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BACKGROUND

The economic sustainability of veal calf production in many European countries, including Switzerland, is at least partially reliant on the use of antimicrobials (AM). The Swiss Antibiotic Resistance Strategy (StAR) lists actions to decrease AM usage (AMU). However, veterinarians, who are selling antibiotics with a profit, may at least partially depend on this income.

OBJECTIVE

The objective of this study was to assess the amount of income generated by AM sales in veterinary practices.

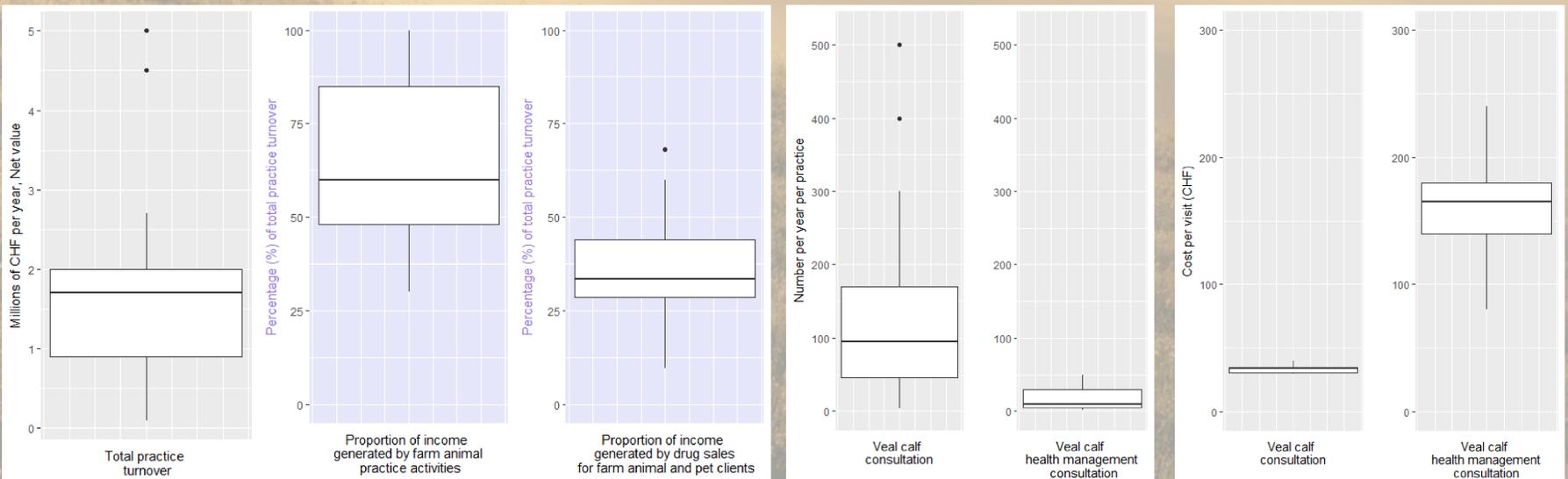
MATERIALS AND METHODS

A survey was conducted in January and February 2018 among 29 veterinary practices working with veal calf clients. The questionnaire comprised general questions about the economics of the practice (e.g. total practice income, price of a consultation). Furthermore, bills issued to 84 Swiss veal calf clients over a 12-months-period (year 2017) were collected.

RESULTS

A total of 6'232 positions on bills for veal calf operations from 29 practices in Switzerland were collected. Interviewees declared that 33% of the total income of the practice was related to drug sales (median value, Figure 1). In more details, 20% (1272/6232) of positions on bills for calves care listed sales of AM over the past year, CHF 21 per position on bills (median, range 1-983).

On practice-level, 38% (median, range 1-92%) of positions on bills issued over the past year for calf care contained sales of AM. The sum of positions on bills for the sale of AM for calves reaches CHF 2'823 per practice per year (median, range 6-13'393).



Figures 1, 2, 3: Economic results from a survey among Swiss veterinary practices with veal calf operations as clients (n=29)

DISCUSSION AND CONCLUSION

Further analyses will include the development of different scenarios (Table 1), assessing different policy options to reduce the prescription of AM by the veterinarian, and potential actions to compensate the loss of income. For the economic analysis, partial budgeting will be used.

The final results will be discussed among veterinarians, industry partners and policy makers to consolidate views. Economically attractive alternatives could be further explored in a larger study.

Table 1: Scenarios: Policy options to reduce the amount of AM prescriptions for veal calves by veterinarians and potential business models to compensate the loss of income.

Policy options	<ul style="list-style-type: none"> Benchmarking for AM sales among veterinarians Benchmarking for AM use among farmers No sales of AM from the veterinarian
Compensation actions	<ul style="list-style-type: none"> Voucher: consultation paid by the government for health management consultations Vaccination plan at farms implemented by the veterinarian Advisory consultation from the veterinarian (general health management or preparation for AMU decrease) Specialised consultation from the veterinarian