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SUBMITTED ELECTRONICALLY

Docket No. FDA-2012-N-0447
Food and Drug Administration
5630 Fishers Lane, Room 1061
Rockville, MD 20852

Re: Docket No. FDA-2012-N-0447; Antimicrobial Animal Drug Sales and Distribution Reporting

Dear Sir or Madam:

The National Chicken Council (NCC) appreciates the opportunity to comment on the Food and Drug Administration's (FDA's) Advanced Notice of Proposed Rulemaking (ANPR) entitled "Antimicrobial Animal Drug Sales and Distribution Reporting," published in the *Federal Register* on July 27, 2012. NCC represents vertically integrated companies that produce and process more than 95 percent of the chicken marketed in the United States.

NCC and our members are committed to public health, animal health, and food safety. NCC recognizes the importance of the public health, animal health, and food safety issues with regard to foodborne antimicrobial resistance. FDA is asking for comments on how best to compile and present the current summary information from Section 105 of the Animal Drug User Fee Amendments of 2008 (ADUFA 105). Under ADUFA 105, the Center for Veterinary Medicine (CVM) is required to report annual sales of antimicrobials on a calendar year basis. In spite of FDA's cautions on the use of this data, these reports have been misconstrued by many and compared to human antimicrobial use data in an inappropriate manner. Compiling these reports requires careful thoughts and ensuring the public is provided appropriate context to ensure the information is used accurately.

For example, the difference in the total biomass of the human compared to the food animal population has not been considered in CVM's reporting. In a manuscript published in the Journal of the American Veterinary Medical Association, a researcher estimated that on the basis of milligrams/kilogram of body weight, humans and companion animals consume approximately 10 times more antibiotics than food-producing animals in a any given year (D.A. Barber, 2001). National reporting of annual sales data is not likely to increase our knowledge base regarding antimicrobial resistance but is likely to continue to be misrepresented and misconstrued by groups that wish to further impose antibiotic restrictions in livestock production. The correlating of antimicrobial sales data to national antimicrobial resistance trends, as mentioned in the *Federal Register* notice, is of great concern to NCC and its membership. As demonstrated in the extensive Danish database that monitors antimicrobial usage and resistance in both humans and animals, reductions in antimicrobial usage in food-producing animals and reductions in resistance in indicator organisms have not resulted in measurable improvements in antimicrobial resistance in human medicine (DANMAP, 2010). NCC appreciates the opportunity comment and provide input on this challenging topic.

Sales and Distribution Data by Species

Specific and strategic goals and objectives related to sales and distribution data must to be openly stated, agreed upon and defined in detail prior to reporting any antimicrobial sales and distribution information. It is also imperative that the questions that FDA seeks to answer are clearly expressed and agreed upon by all stakeholders before a reporting system is designed. Once clearly defined and articulated, a reporting system could then be effectively designed around the specific goals, objectives, and posed questions. Therefore, FDA should clearly articulate the scientific basis and circumstances for an expanded sales data reporting. Without transparency and stakeholder support, the value of attempting to provide any additional data lacks scientific validity.

Moreover, determining how to track distribution information requires careful consideration of a complicated process. Manufacturers sell antimicrobial drug products to distributors, veterinarians, or producers. Antimicrobials may be used directly by these buyers or sold to a variety of different distributors, which further complicates the distribution process. This complex distribution network makes it impossible to determine the amount of antimicrobials sold for use in a particular animal species and even more difficult to determine the ultimate end use of antimicrobials labeled for multiple species. Thus, once the product has been sold to the end user of the antimicrobial, there is no practical means for a sponsor to further track a multi-label product with respect to subsequent distribution for use in a particular animal species or its actual intended use in a food-producing animal. Drug sponsors would not be able to provide additional sales and distribution data by species because it is impractical to obtain, and its accuracy cannot be assured.

The ADUFA 105 sales data provided by sponsors cannot be further broken out into sales per species with any known degree of accuracy, and estimates of such break-outs are likely to vary significantly from company to company. Moreover, a company cannot reasonably match sales of a multi-label product to its ultimate use in a specific animal species. Any report must account for and communicate these supply-chain complexities.

Compiling and Presenting Summary Information

As previously stated, national reporting data will continue to be misrepresented and misconstrued by groups that push to further reduce the amount and type of antimicrobials used in livestock production. While the inclusion of Section 105 in ADUFA was driven by a desire for antibiotic sales data, Congress also recognized the importance of confidentiality. The ability to protect confidential business information is essential to commercial interests and competiveness. NCC believes the sales data summaries released by FDA under ADUFA 105 have already been misused in this manner to overstate the risk to human health from the use of antibiotics in animal agriculture. This misuse has come despite the caveats and warnings FDA issued both in the April 19, 2011 letter to Congresswoman Louise Slaughter and the subsequent Caution Document posted on the CVM website. NCC believes that obtaining additional species-specific antimicrobial usage information that in all probability will not be entirely accurate will only exacerbate the misuse of summary data and risks undermining an essential, scientifically justified aspect of modern farming practices. Moreover, antimicrobial use in companion animals has been increasingly recognized as a risk for transfer of antimicrobial resistance to humans (J.C. Seguin, *et al*., 1999; O.E. Heuer, *et al*., 2005; M. Bramble, *et al*., 2011), and this should be reflected in the data produced by FDA reporting on sales of antimicrobials used in animals.

National Antimicrobial Resistance Monitoring System (NARMS)

The ANPR states that the "sales and distribution information that is currently being collected from antimicrobial new animal drug sponsors in accordance with ADUFA 105 is important in supporting efforts such as the National Antimicrobial Resistance Monitoring System (NARMS)…" This is of great concern to NCC and its member companies because there is no and never has been a methodology provided for associating the two programs. It was never the original intention of the antibiotic sales data collection program to supplement or support NARMS.

In fact, attempts to utilize national sales data to estimate annual antimicrobial use among food animals has led to inflated perceptions of the human risk of contracting antimicrobial resistant foodborne bacteria from animal proteins. The Government Accountability Office (GAO) has since characterized this current methodology of sales data collection as not sufficient to analyze trends in antibiotic resistance (*Federal Register*/Vol. 77, No. 145/Friday, July 27, 2012). Additionally, a Danish study has demonstrated that significant decreases in the use of antimicrobials and decreases in resistance in indicator bacteria from food-producing animals have not resulted in measurable improvements in antibiotic resistance in human medicine (DANMAP, 2010). In fact, some trends observed since the ban of the antimicrobial growth promoters in Denmark are rather concerning, such as the steady increase in cases of Methicillin-resistant *Staphylococcus aureus* (MRSA) in humans, from 47 cases in 1997 (when AGP use for all practical purposes ended) to 1104 cases in 2010.

The NARMS retail data is viewed by many as a definitive indicator of the potential risk of contracting antimicrobial-resistant bacteria from meat commodities. However, these reported estimates of the prevalence of antimicrobial-resistant bacteria on meat are hampered by very small sample numbers and limited geographic representation. Therefore, they may suggest an artificially elevated risk given the small probability of the resistant bacteria surviving the cooking process, the probability of a consumer actually getting sick, the probability of going to the doctor to seek care, and the probability of being treated with an antibiotic to which the respective pathogen is resistant. Matching NARMS data to sales data at a national level because of an association, but not a correlation, led to the Agency decision to remove enrofloxacin approval in 2005. Since that time, the prevalence of ciprofloxacin-resistant campylobacter on chicken meat has increased despite a lack of enrofloxacin exposure in poultry (NARMS Final Report, 2010). Thus, NCC is very concerned that without a strong scientific protocol to clearly outline how national sales data can be correlated to NARMS data, additional products will be placed at risk of Agency action or label restrictions. Failure to provide such a protocol has the potential to lead to erroneous associations between antibiotic exposure and antimicrobial resistance that will neither protect public health nor food safety and will likely jeopardize animal health and welfare. Additionally, with the yet to be defined revision in NARMS sampling and the yet to be defined sources of antibiotic use data, developing such a protocol would likely be an exercise in futility.

Suggested Practices

As FDA considers this potential rulemaking, we recommend incorporating the following practices:

- FDA should consider eliminating the reporting of ionophores and other compounds not used in human medicine (*i.e.*, not medically important) since the utilization of these compounds could have no possible impact on human resistance.
- Reporting these compounds in terms of the importance (important, highly important, and critically important, with an appropriate description included in the report) assigned to them in Appendix A of Guidance for Industry 152 may shed some light on the type of compounds being utilized for animal health and demonstrate the disconnect with the major resistance concerns encountered in human medicine.
- FDA could add context to the report. NCC believes a common perception is that the amount of use of antimicrobials is directly correlated to resistance observed in human medicine. As illustrated by the lack of effect on resistance in human Camplylobacter cases observed after the withdrawal of poultry uses of enrofloxacin and Denmark's similar experience, a direct correlation is difficult to demonstrate. Users of the report would be greatly benefited by appropriate context.

Conclusion

In summary, NCC objects to additional resources being spent on antimicrobial use data without first understanding the specific goals and objectives related to the collection of additional antimicrobial information. Without clearly stated goals and without an assurance that additional information will not exacerbate the existing

misinterpretation of antimicrobial use in the livestock industry, NCC does not believe that species-specific sales and distribution information will provide a public benefit. If the goal of antimicrobial use data is to assess the risk of antimicrobial use in food animals on public health, NCC urges FDA to work with the U.S. Department of Agriculture's Agricultural Research Service scientists and laboratories on developing the appropriate rigorous research project. Likewise, antimicrobial use data in companion animals must be included if a true assessment of potential sources of antimicrobial resistance to humans from animals is to be calculated.

Measuring antimicrobial sales or use is not an effective way to gauge the "success" of voluntary actions taken regarding antibiotic products. Indeed, FDA has yet to define clear goals and objectives relating to antimicrobial data. As previously stated, there is currently no method in place that will accurately link national sales data to antimicrobial resistant food borne bacteria prevalence within the NARMS program. If the agency determines that additional sales data would be useful, it should articulate the specific application of additional sales data in the context of NARMS data (within the new NARMS Strategic approach) and provide protocols necessary for collecting, summarizing, analyzing and linking such national level data prior to pursuing a regulation to require sponsors to provide more detailed breakout sales data.

Please do not hesitate to contact us if we may be of assistance in developing an alternative approach. Thank you for your consideration.

Respectfully submitted,

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National Chicken Council

REFERENCES

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