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May 22, 2006

Division of Dockets Management (HFA-305)
Food and Drug Administration
5630 Fisher's Lane
Room 1061
Rockville, MD 20852

Attention: Docket No. 2006N-0106

Dear Sir or Madam,

Keep Antibiotics Working (KAW) (www.KeepAntibioticsWorking.com), a coalition of health, consumer, agricultural, environmental, humane and other advocacy groups with more than nine million members dedicated to eliminating a major cause of antimicrobial resistance: the inappropriate use of antimicrobials in food animals, appreciates this opportunity to submit comments on the Food and Drug Administration's (FDA) final rule prohibiting the extralabel use of anti-influenza drugs in poultry.

KAW strongly supports of the FDA's action to prohibit the extralabel use in poultry of antiviral drugs that could be pivotal in mounting an effective public health response to an influenza pandemic. KAW, however, recommends that the extralabel prohibition be extended to include all food-producing animals. The use of these drugs in any food-producing animals has the potential to select for resistance which could compromise the use of these drugs in treating human influenza infections including infections occurring as part of an influenza pandemic.

The Prohibition in Poultry

There are only four drugs approved in the United States for the treatment of influenza in humans-- amantadine, rimantadine, ostelamavir and zanamivir. Although these drugs are not approved for use in animals, they can be legally used by animal producers under extralabel provisions of the Animal Medicinal Drug Use Clarification Act of 1994 (AMDUCA). AMDUCA allows a veterinarian to prescribe FDA approved human drugs for the treatment of illness in livestock.

KAW strongly supports the decision by the FDA to prohibit the extralabel use of the four anti-influenza drugs in poultry. KAW agrees with the FDA's finding that the use of these drugs in poultry presents a risk to public health by potentially encouraging resistance and reducing the efficacy of the drugs in human medicine. This small arsenal of human anti-

influenza drugs must be maintained at full strength both to treat influenza transmitted to humans by animals (zoonotic transmission), but especially in the case of flu passed readily from human to human (pandemic flu.)

The current avian outbreak of the H5N1 strain of avian influenza demonstrates the virulence of the avian flu as a zoonotic infection. The H5N1 strain that originated in Asia has now spread into Africa and Europe continues to cause illness and death, albeit in relatively small numbers, in humans.

But H5N1 has also raised concerns about a devastating human pandemic on the order of the 1918 influenza epidemic, which might occur if H5N1 develops the ability to readily spread from person to person as many scientists fear. In the case of a pandemic, the four approved anti-influenza drugs will be vital tools for protecting the health of infected patients.

KAW believes the need to use the four anti-influenza drugs to respond to zoonotic infections alone is sufficient public health justification for prohibiting their use in poultry, but it would be unconscionable if use of these drugs in food animals deprived public health officials of their use in response to a human pandemic.

Extension of the Extra-label Prohibition to All Food Animals

While KAW supports FDA's decision to ban the extralabel use in poultry, KAW believes that the decision to limit the ban to poultry is shortsighted, and recommends that the ban be extended to all food-producing animals. The H5N1 virus responsible for the current avian influenza outbreak has been detected in swine (OIE, 2005) as well as in poultry. Swine among food-producing animals are a particular concern, because swine can act as a host for both avian and human influenza viruses creating a congenial environment for reassortment between human and avian influenza strains (Brown, 2000). Reassortment between avian and human influenza viruses in swine could allow avian strains to develop the ability for ready transmission between humans and lead to pandemic influenza (Ito et al., 1998). Thus, using the anti-influenza drugs for the treatment of influenza in swine could result in the selection of a resistant pandemic strain.

Even in the absence of a pandemic influenza epidemic, anti-influenza drugs are important for treating zoonotic influenza. Swine workers, for example, have been shown to be at increased risk of zoonotic influenza (Myers et al., 2006) and cases of swine influenza causing illness and death in humans have been documented in the literature (Brown, 2000).

While KAW does not have any information on the use of anti-influenza drugs in swine or in other livestock in the U.S., swine influenza is a common problem in U.S. swine nurseries and grower/finisher farms. Well over 50% of large nurseries and over 80% of large grower/finisher facilities report having problems with swine influenza (USDA,

2002). Any or all of these facilities could legally use the four approved human anti-influenza drugs with a prescription from a veterinarian.

There is no requirement for reporting the use of any animal drugs, so it is impossible to determine the extent to which anti-influenza drugs currently are used in food-producing animals in the U.S. Likewise, there is no mechanism by which FDA would be notified if such use were to increase dramatically in the future. Because there are not currently any restrictions on this use, beyond the minimal requirements of AMDUCA, and there is no requirement that such use be reported, KAW recommends that the ban on extralabel use be extended to swine and other food-producing animals.

In conclusion, KAW supports the prohibition of the extralabel use of anti-influenza drugs in poultry. Because avian influenza can also infect pigs and other mammals and the influenza virus responsible for the current H5N1 outbreak has been shown to infect pigs, KAW also strongly recommends that the extralabel ban be extended to include pigs as well as other food-producing animals.

Prohibiting the extralabel use of these drugs in all food-producing animals is consistent with the recommendation by the World Health Organization, Food and Agriculture Organization of the United Nations, and the World Organization for Animal Health that member states ban the use of antiviral drugs in animals (WHO, 2005).

Thank you for your attention to our comments.

Sincerely,

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