

From:

Saad Enouri, BVSc, MSc, PhD Research Associate, Canadian gFARAD Ontario Veterinary College senouri@uoguelph.ca Telephone: 519-824-4120 ext. 54984



Re: Uniprim® Oral Granules Case Id: ON-041420-21352 Date of Response: Apr 15, 2020 9:53:58 AM

Case Information:

Date Submitted	Apr 14, 2020 9:39:15 PM
Species	Turkeys
Number of Animals	25000
Location of Animals	Ontario
Reason for Use	Treatment
Additional Information	E coli infection in growing turkeys75 kg per tonne of Uniprim

Drugs Administered

Drug Trade Name	Generics	Route	Dose	Diseases
Uniprim® Oral Granules	sulfadiazinetrimethoprim	Oral - Feed	750 g/tonne of feed: Trimethoprim 50.25 ppm, sulfadiazine 249.75 ppm continuously for 7 days.	• Systemic: colibacillosis

Response and Recommendation: 10 days

As Uniprim is not approved in Canada for use in poultry, the detection of any amount of sulfadiazine and trimethoprim in the tissues is a residue violation. Trimethoprim is usually administered with a sulphonamide, but is excreted faster. Consequently if no residues of sulphonamide are detectable, no residues of trimethoprim would be expected, so CFIA's detection program focuses on sulphonamides. We have been provided with depletion data for sulfadiazine/ trimethoprim in chickens at a dose of 25-30 mg/kg from the US manufacturer of Uniprim. The methodology of the analysis is unknown and may not be as accurate as the methodology employed by the CFIA, but it does give us data to model the elimination of sulfadiazine from chickens and we use the means plus 3 standard deviations. We find a liver elimination half-life of 4 hours, which corresponds to a literature reference of a plasma elimination half-life of 2 hours. We

are unable to find any published information on the depletion of sulfadiazine in turkeys, but a reference on sulfadimethoxine suggests that depletion from turkeys is somewhat slower than chickens. Therefore, we have previously recommended a withdrawal interval of at least 10 days for this use of Uniprim in turkey feeds, which is consistent with our recommendations for sulfadimethoxine in turkeys.

Therefore, the Canadian gFARAD recommends a withdrawal interval of 10 days, which should be sufficient so that detectable residues are not found. Furthermore, this recommendation for residue avoidance does not address the risks of developing or transmitting antimicrobial resistance from treated animals to other animals or humans following the extralabel use of this antimicrobial. Because the Canadian gFARAD withdrawal recommendation is not an official withdrawal time and is based on data that has not been reviewed nor approved by the Veterinary Drugs Directorate or the Canadian Food Inspection Agency, responsibility for residue violations rests with the attending veterinarian.

To review this request in CgFARAD: <u>https://farad.usask.ca/cgfarad/vet/viewRequest?id=21352&langen</u>