

CgFARAD[™] NEWSLETTER

FALL 2021

REPORT FROM THE STAKEHOLDER MEETING

The CgFARAD[™] stakeholder meeting has been held every second year in Ottawa in conjunction with the National Farmed Animal Health and Welfare Council Forum. This year, the meeting was held virtually on Thursday, October 28, 2021. Forty-two stakeholders logged onto the meeting. Participants heard updates on CgFARAD[™] service activity, CgFARAD[™] and food safety related research projects, administration and finance, and the results of the stakeholder survey conducted earlier this fall. This edition of the stakeholder newsletter provides a summary of the presentations from the meeting.

OVERVIEW OF CgFARAD™ SERVICE ACTIVITY

Dr. Trisha Dowling, Co-director, CgFARAD™

CgFARAD[™] is an integral service that ensures food safety for Canadians when veterinary pharmaceuticals are used extra label in food producing animals. CgFARAD[™] provides veterinarians with unbiased veterinary pharmacological expertise on withdrawal recommendations and undertakes research where insufficient information on withdrawal times exists. To proactively protect the food supply, veterinarians need to provide producers with accurate withdrawal information on the disposition of drugs or chemicals in animals and their products.

The CgFARAD has a two-part mission. First and foremost, we focus on doing our part to keep the food supply safe. In evaluating drug use and developing withdrawal recommendations, we always consider human safety first. Then, because of the capabilities of modern analytical chemistry, we often find ourselves making recommendations that are longer than what is needed for human safety but are required because of the very low limits of detection by the Canadian Food Inspection Agency.

CgFARAD[™] personnel also assist:

- veterinarians in determining safe withdrawal periods when animals are accidentally exposed to pesticides, heavy metals or other chemicals;
- feed mills, producers and processors when accidental contamination of feeds occur; and,
- regulatory agencies seeking clinical pharmacological expertise regarding drug residues.

Number of Requests Received by CgFARAD™



CgFARAD[™] responded to 2,557 withdrawal requests in 2020-2021 covering 24 different livestock and poultry commodities. You can see from the graph to the left, the number of requests has been increasing by approximately 200 per year; 2018-2019 was the highest year with 2,640 requests. The service is currently averaging seven requests per day.

The COVID-19 pandemic also impacted the reliance on the CgFARAD[™] service. Animals held on farms longer due to

2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021

processor shutdowns led to increased animal health issues. As well, some animals were sent to alternate slaughter facilities in the U.S. While drug labels and withdrawal times are appropriate for animals and their products that remain in Canada, there are important differences in federal drug regulations between the two countries that can impact animals heading South for processing.

The graphic below summarizes the use of the CgFARAD[™] service for our last fiscal year. It is obvious that the poultry industry is the biggest user of our service, mostly because it is legal in Canada to use drugs in an extralabel manner in feed. Such use is not permitted in the United States. While commercial poultry makes up the majority of the requests, we are seeing increasing numbers of requests for drugs used in backyard poultry.



- Broilers (32%)
- Turkeys (18%)
- Layers (13%)
- Dairy Cattle (9%)
- Broiler Breeders (9%)
- Goats (6%)
- Sheep (4%)
- Beef Cattle (3%)
- Swine (2%)
- Ducks (2%)
- Rabbits (1%)
- Horse (<1%)</p>
- Veal Calves (<1%)</p>
- Quail (<1%)</p>
- Chukar Partridges (<1%)</p>

CgFARAD[™] AND FOOD SAFETY RELATED RESEARCH

Dr. Ron Johnson, Co-director, CgFARAD™

CgFARAD[™] Co-Director, Dr. Ron Johnson provided an overview of results from two research studies during the stakeholder meeting. The Dexamethasone Depletion in Lactating Dairy Cattle and Beef Cattle project was funded by the OMAFRA-University of Guelph Research Alliance, Dairy Farmers of Ontario, and Beef Farmers of Ontario. Dr. Ron Johnson is principal investigator with Dr. Dave Renaud, Population Medicine, University of Guelph as co-principal investigator.

The dairy cow study was conducted at the Ontario Dairy Research Centre at the Elora Research Station and involved 20 healthy lactating cows free of mastitis. Dexamethasone sodium phosphate was administered intramuscularly at 0.05 mg/kg every 24 hours for three days. Milk samples were taken at baseline (0), 12, 24, 36, 48, 60, 72, 84, and 96 hour post last dose. By 48 hours post final dosage, there were no detectable residue levels in the milk samples (limit of quantitation set at 0.15 ppb; limit of detection set at < 0.05 ppb).

The beef study was conducted at the Ponsonby General Animal Facility with a herd of 16 healthy beef cattle: four cattle (two steers, two heifers) per sacrifice time point. Dexamethasone sodium phosphate was administered at 0.05 mg/kg intramuscularly every 24 hours for three days. Groups of cattle were processed at three, seven, 11, and 15 days post last dosing. Tissues sampled included: liver, muscle, kidney, and peri-renal fat. By day three post injection, dexamethasone levels were not detectable in muscle and peri-renal fat. By day seven, residues were below the limit of quantitation in the liver and kidney samples (limit of quantitation set at 2 ppb for liver, kidney, muscle; 3 ppb for peri-renal fat; limit of detection set at 0.7 ppb for kidney and muscle, 0.6 ppb for liver, 1 ppb for peri-renal fat).

The Depletion of Injectable Meloxicam in Grain-fed Veal Calves project was funded by Veal Farmers of Ontario and a grant from the Canadian Agricultural Partnership (CAP) program. Dr. Dave Renaud, Population Medicine, University of Guelph is the principal investigator and Dr. Ron Johnson is co-principal investigator.

The project sought to estimate a withdrawal interval for grain-fed veal calves receiving injectable meloxicam. Twenty-eight healthy male dairy calves, intended for grain-fed veal production, were given 0.5 mg/kg meloxicam (Metacam[™]) subcutaneously. Four calves were sampled at 18, 20, 22, 24, 26, 28 and 30 days post-last dosing. Tissues for assay were liver, muscle, and kidney. All tissues from all sacrifice time points were less than the limit of detection which was set at 2 ppb. These results support the approved cattle withdrawal time of at least 20 days when meloxicam injectable is used at the label dosage subcutaneously in grain-fed veal cattle.

ADMINISTRATION AND FINANCES

Susan Fitzgerald, CgFARAD[™] Administrator

CgFARAD[™] is an unincorporated, not-for-profit organization. The CgFARAD[™] Co-Directors, Dr. Trisha Dowling and Dr. Ron Johnson, provide pharmacological expertise and administrative oversight. Fitzgerald & Co. looks after association administration and finances. The Stakeholder Advisory Board provides guidance and strategic advice to the CgFARAD[™] co-directors on business and financial matters.

The Advisory Board is comprised of the two CgFARAD[™] co-directors, three commodity association representatives, two directors from veterinarian associations, and one representative each for pharmaceutical companies, the Canadian Animal Health Institute, feed and processing industry, and the Canadian Food Inspection Agency. Animalytix was added to the Advisory Board this year as they provide the pharmacological data to support the database. Below are the current members of the Advisory Board.

The Advisory Board meets in May and November. A Board Report summarizing the discussion at these meetings is sent to stakeholders shortly after the meeting in addition to this semi-annual newsletter which is issued in May/June and November/December. It is important stakeholders feel they are kept informed. Recipients of the newsletter are urged to forward it to colleagues or your members if you are an association.

| Name | Organization | Advisory Board Seat |
|-----------------------|---------------------------------------------|----------------------------------|
| Ron Johnson | CgFARAD™ | Co-director |
| Trisha Dowling | CgFARAD™ | Co-director |
| Catherine Filejski | Canadian Animal Health Institute | Canadian Animal Health Institute |
| Rae Knight | Elanco | Pharmaceutical company |
| Erica Charlton | Canadian Poultry and Egg Processors Council | Feed and processing industry |
| Steve Leech | Chicken Farmers of Canada | Commodity association |
| Corlena Patterson | Canadian Sheep Federation | Commodity association |
| Nicole Sillett | Dairy Farmers of Canada | Commodity association |
| Tom Inglis - Chair | Veterinarian | Veterinarian association |
| Jost AmRyn | Canadian Veterinary Medical Association | Veterinarian association |
| Jonas Goring | Animalytix | Pharmaceutical data |
| Christopher Coulis | Canadian Food Inspection Agency | Government - regulatory |

| CgFARAD™ is funded by four stakeholder groups: | Stakeholder Groups | Target Funding Formula |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------|
| veterinary associations;pharmaceutical companies; | Commodity Associations | 50% |
| national livestock and poultry associations; and, | Veterinarian Associations | 12.5% |
| feed and processing associations. The financial contributors are listed on the final pages of this newsletter. | Pharmaceutical Industry | 25% |
| | Processing and Feed Associations | 12.5% |

The 2020-2021 year-end financial statement and current year (2021-2022) budget were presented to meeting attendees as shown at the side. Some notes to the statement included:

- In 2020-2021, Rafter 8 discontinued their support and Elanco reduced funding. However, we gained Partnar and Huvepharma. Partnar is increasing their contribution level in 2021-2022 and CEVA is a new supporter.
- In 2020-2021, CgFARAD[™] benefited from COVID relief funding of approximately \$10,000 which assisted with the veterinarian salary.
- There were no invoices from the University of Saskatchewan last year for operating expenses due to COVID (all personnel working from home).

We began the year with a reserve of \$68,000 however there could be a potential deficit of expenses over revenues of up to \$14,000 this year. The Advisory Board Financial Sustainability

| Projected Revenue - Stakeholder Contributions | Year-ending | 2021-2022 Budget |
|--------------------------------------------------|--------------|---------------------|
| Commodity Associations | \$100,000.00 | \$100,000.00 |
| Veterinarian Associations | \$15,280.00 | \$15,280.00 |
| Pharmaceutical Industry | \$47,000.00 | \$48,500.00 |
| Processing and Feed Associations | \$18,000.00 | \$18,000.00 |
| HST Collected | \$23,436.40 | \$23,631.40 |
| HST Refund | \$2,765.94 | |
| Total | \$206,482.34 | \$205,411.40 |
| Annual Operating Expenses | | |
| Co-Directors - Clinical Pharmacologists | \$66,000.00 | \$66,000.00 |
| Salaries and Benefits Veterinarian | \$79,071.20 | \$91,924.41 |
| Administration - Susan | \$10,012.50 | \$12,000.00 |
| Translation | \$987.21 | \$1,000.00 |
| University office space and overhead | \$10,347.26 | \$15,000.00 |
| Office expenses/computer/equipment | \$2,670.52 | \$6,000.00 |
| Conf./Educ./Mileage/Parking/Travel | \$159.98 | \$2,000.00 |
| Year-end Financial Review | \$1,000.00 | \$1,000.00 |
| Insurance | \$750.00 | \$750.00 |
| Bank Fees | \$100.30 | \$100.00 |
| HST Paid | \$7,921.22 | \$8,767.50 |
| HST Remitted | \$14,540.18 | \$14,863.90 |
| Total Expenses | \$193,560.37 | \$219,405.81 |
| Excess of revenues over expenses | | |
| (expenses over revenues) | \$12,921.97 | -\$13,994.41 |
| Opening bank balance | \$55,410.40 | |
| Ending bank balance | \$68,332.37 | |

Committee has continued to meet and discuss options for long-term sustainability (see article on page 8).

RESULTS OF STAKEHOLDER SURVEY

Susan Fitzgerald, CgFARAD™ Administrator

In September, we conducted a CgFARAD[™] stakeholder survey to gather perceptions of the service and opinions on where value could be added. There were 113 survey responses of which 80 were veterinarians.

- 99% were familiar with CgFARAD™ services
- 91% indicated CgFARARD™ directly benefits their sector
- 70.5% expect use of CgFARAD[™] will increase moderately (up to 30%) over next three years
- 18.75% believe there will be a strong increase (30% to 100%)

The top perceived benefit was CgFARAD[™] ensures the safety of Canada's food system. Rounding out the top five were: safeguards animal health and welfare; promotes prudent antimicrobial use; protects Canada's reputation nationally and with international trading partners and export markets; and, provides flexibility to use certain drug combinations that would otherwise not be available.





A follow-up question asked respondents to select the strengths of the service. The three most selected strengths were: highly regarded veterinary clinical pharmacology expertise; it is free to individual veterinarian users; and is an unbiased service.

- 1. Highly regarded veterinary clinical pharmacology expertise 91
- 2. Free to individual veterinarian users 90
- 3. Unbiased service 78
- 4. Good reputation with government agencies 64
- 5. Service is easy to access and use 59
- 6. Timely responses to requests 54
- 7. Broad industry funding support 24
- 8. Other 3

Respondents were asked what other benefits or services CgFARAD[™] should consider providing. Conducting more research was selected by 84% of respondents. Hosting webinars on pharmacology topics (53%) and producing information and outreach material (45%) were also seen as providing added value.



Currently the service is based at two Canadian veterinary colleges, the University of Saskatchewan and the University of Guelph. Seventy-five percent of respondents are still in favor of an academic setting for the service, as has been noted in previous surveys.



How important or beneficial is it for CgFARAD™ to continue as a university-based service?

Respondents were also asked to list what they perceive to be current weaknesses of the CgFARAD[™] service. More research, insufficient long-term funding, and the need for more stakeholder outreach were the top three responses.

- 1. Would like to see more research regarding withdrawal times, residues and drug interactions 68
- 2. Insufficient funding for long-term sustainability (number of requests increasing) 47
- 3. Insufficient communication and education with stakeholders on extra label drug use 37
- 4. Some species groups and sectors do not contribute financially 26
- 5. Recommendations take too long to process 25
- 6. Time consuming to complete individual use requests 19
- 7. Other 15 (primarily withdrawal times are too long/too conservative, want lists or tables published)
- 8. Too expensive for annual financial stakeholders 9

CgFARAD[™] issues two newsletters and two Advisory Board reports; one of each in the spring and fall. We asked respondents whether they received and read these communications.

- 52% received and read the newsletters
- 10% received the newsletters but did not read
- 15% received and read the Advisory Board report
- 14% received but did not read the Advisory Board report
- 38.51% did not receive either communication
- Only 6% forwarded either communication to members/colleagues

The annual financial contribution levels for stakeholders have not been increased since 2015 although expenses have grown. The CgFARAD[™] Advisory Board continues to seek other sources of funding. However, at some point, stakeholder contribution levels must increase. We asked respondents whether they preferred an incremental annual increase reflecting "cost of living" or periodic larger increases (e.g., once every three to five years).



Stakeholder Contribution Increases

A strong 72% of respondents favoured incremental annual increases. Comments in the "other" category included: fee for service, government funding, and no increases but look for other sources of funding.

Format of Stakeholder Meeting



Seventy percent of respondents supported continuing to hold the biennial stakeholder meeting virtually.

FINANCIAL SUSTAINABILITY

Jonas Goring, Advisory Board Member

A Financial Sustainability Working Group was formed in early 2020 to assess the financial sustainability of CgFARAD[™] in the longer term. The members assessed the annual budget from the perspective of sustainable levels while considering current and future staffing and added stakeholder value. Currently, we are not even managing existing services within annual commitments, always projecting a \$10,000 shortfall.

The working group developed a five-year budget which reflects implementing a strategic plan for increasing stakeholder value and attaining financial sustainability. The results of the stakeholder survey were used to guide considerations for financial sustainability. Key points include:

- Annual incremental increases to stakeholders' contributions as a component of the long-term financial sustainability;
- To ensure viability in the long-term, CgFARAD[™] will begin implementing succession planning for human resources, e.g., graduate student training;
- Seek to provide a bilingual service with the addition of a Francophone veterinarian or pharmacologist;
- Enhance stakeholder knowledge translation and transfer through face-to-face talks/presentations to key stakeholder groups, webinars, publications, newsletter articles; and,
- Earmark an annual allocation for stakeholder driven research to be matched by government granting agencies, e.g., OMAFRA.

Discussions have started with the federal government on cost-sharing to assist funding initiatives to increase stakeholder value and ensure financial sustainability. A joint letter is being sent by over 20 annual financial contributors of CgFARAD[™] to federal and provincial ministers seeking annual cost-sharing of \$200,000 to \$250,000. If additional government funds are not received, we will shift focus and priorities to accommodate a revised operating budget.

Current Financial Supporters of CgFARAD™







New Supporters are Welcome!

If you or your company is interested is supporting CgFARAD[™] through an individual annual membership, please contact the CgFARAD[™] office, contact information below. All supporters are identified on the CgFARAD[™] website <u>www.cgfarad.usask.ca</u>

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