Canadian Licensing of Veterinary Drugs and Vaccines

June 1, 2016

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Boehringer Ingelheim (Canada) Ltd.

Thank you!

- **Dr. Normand Plourde**, D.V.M., Manager of Veterinary Affairs at Boehringer Ingelheim (Canada) Ltd. & **CAPRA** organization for the opportunity to present this webinar.

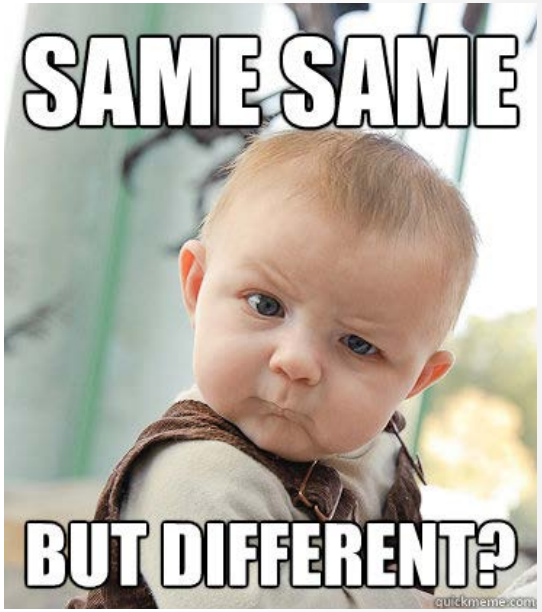
Special thanks for their expertise:

- Dr. Jeff Kawamoto, PhD., DABT, Associate Director of Drug Regulatory Affairs at Boehringer Ingelheim (Canada) Ltd., and

- Sue McGee, President of BioMedex Inc.

Agenda

- Governing Regulation & Authority
- Overview of the Regulations for Veterinary Drug Registrations
- Comparison of the management of drug submissions (veterinary vs. human):
  - overall similarities/differences
  - review division
  - review timelines
  - review process
- Comparison of submission dossiers (veterinary vs. human)
- Veterinary Biologics
- Veterinary Drugs vs. Veterinary Biologics
- CFIA licensure of Veterinary Biologics
- References



Governing Regulation & Authority

Food and Drugs Act, Part C of the

Food and Drug Regulations:

all drugs, unless specifically exempted, must be registered before being sold or imported for sale in Canada

- Drugs intended for humans: **TPD, BGTD & MHPD**
- Drugs intended for animals: **VDD & CFIA**

Governing Regulation & Authority

- Agriculture and Agri-Food Administrative Monetary Penalities Act
- Canada Agriculture Products Act
- Canadian Food Inspection Agency Act
- Consumer Packaging and Labelling Act
- Feeds Act
- Fertilizers Act
- Fish Inspection Act
- **Food and Drugs Act & Regulations (food)**
- **Health of Animals Act (for veterinary vaccines)**
- Meat Inspection Act
- Plant Breeder's Rights Act
- Plant Protection Act
- Safe Food for Canadians Act
- Seeds Act

Overview of the Regulations for Filing Veterinary Drug Submissions

Filing requirements:

- C01A.001: EL
- C01.004: Label requirements
- C01.014(1): Valid DIN
- C.01.014(2): Excluding Radiopharmaceuticals & Medicated Feed
- **C.01.600-.612: Veterinary drugs specific requirements**
- C.08.002: NDS/ANDS
- C.08.003: NOC
- C.08.003 & C01.014.2 & .4: Post-market change submissions & NOL
- C.08.005 & **C.08.005.1**: CTA/**IND**
- C.08.010: Emergency treatment under veterinarian/practicitioner request
- **C.08.012: Sale of Medicated Feeds**
- **C.08.013-.015: ESC**

Overview of the Regulations for Filing Veterinary Drug Submissions

Post-approval obligations:

- C01.014.3: DNF
- C.01.014.4: Changes to the product's brand name & DIN ownership
- C01.014.5: ADN
- C01.014.6: Cancellation of DIN
- C.08.003 & C.08.004: Post-market change submissions

Comparison of the Management of Drug Submissions (veterinary vs. human):

- Regulatory Project Manager that we can contact directly for each submission
- Transparency of questions/concerns by HC is more open from VDD; more formal from TPD/BGTD
- Veterinary vaccines are governed by CFIA regulations vs. certain biopharmaceutical products can undergo VDD submission review
- Medical devices are not regulated for use in animals
- More review divisions for human submissions
- Review timelines are comparable
- Submission review process is similar with slight changes ie. MIR vs. Clarifax

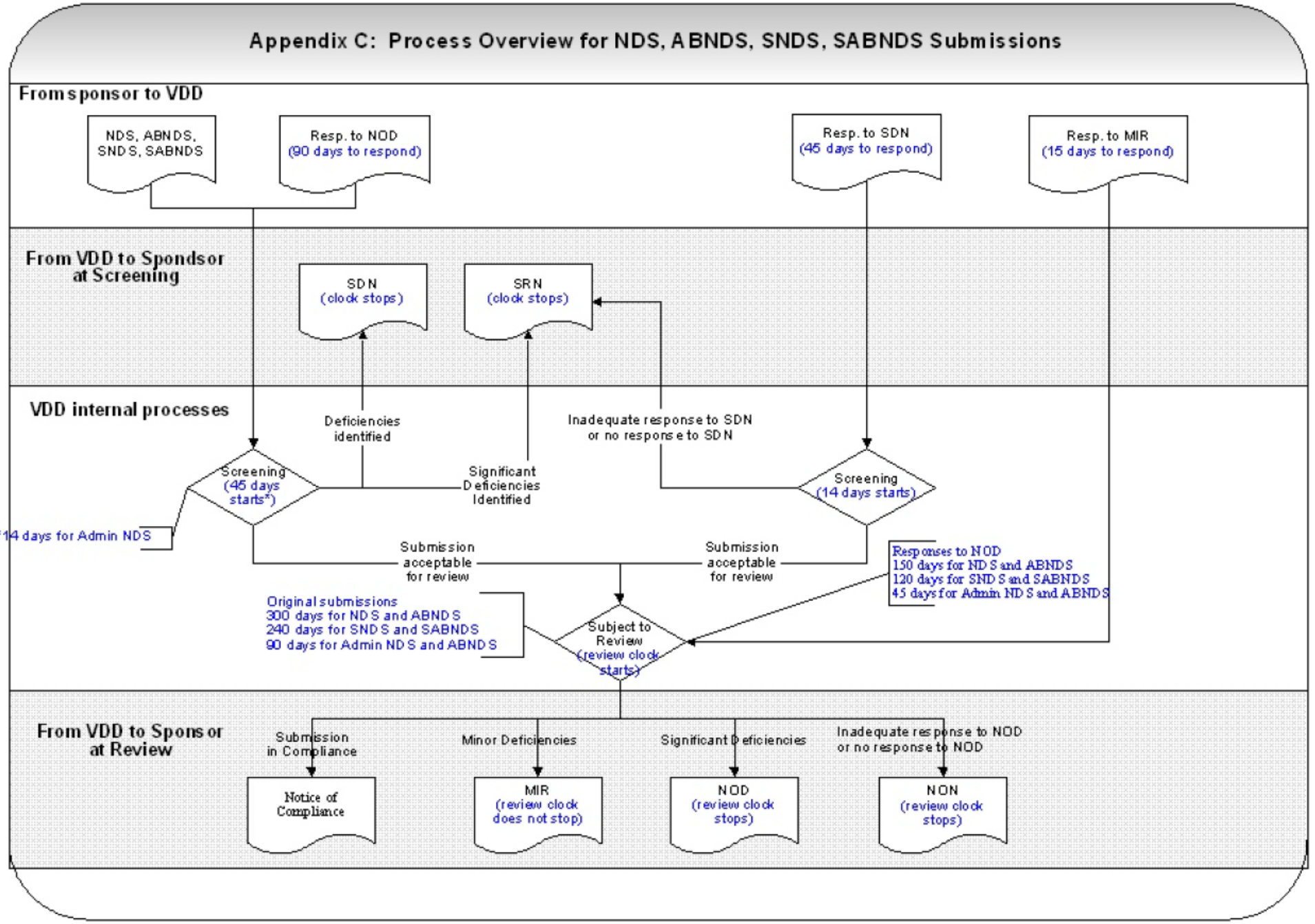
Submission Review Division
New Product Registration

VDD	TPD	BGTD
Clinical Evaluation Division (CED)	Bureau of Metabolism, Oncology & Reproductive Sciences (BMORS)	Centre for Blood/Tissues/Organs Evaluation (CBTE)
Manufacturing & Chemical Evaluation Division (MCED)	Bureau of Gastroenterology, Infection & Viral Diseases (BGIVD)	Centre for the Evaluation of Radiopharmaceuticals & Biotherapeutics (CERB)
Human Safety Division (HSD)	Bureau of Cardiology, Allergy & Neurological Sciences (BCANS)	Centre for Vaccine Evaluation (CVE)
	Bureau of Pharmaceutical Sciences (BPS)	Office of Regulatory Affairs (ORA)
	Office of Clinical Trials	
	Regulatory Project Management Division (OBT)	
	Office of Risk Management*	

Submission Review Timelines for New Product Registration

Submission Review Process	VDD (days)	TPD/BGTD (days)
Acknowledgement of Receipt (AoR)	7*	-
Acceptance for Review letter	45	45
Screening Deficiency Notice (SDN)	45	45
Screening of Response to SDN	14	-
Submission review	NDS/ABNDS 300 SNDS/SABNDS 240	NDS 300 ANDS 180/300 SNDS 180/300 SANDS 180/300
Minor Information Request (MIR)/Clarifax	15	15
Screening of response to NOD	45	-
Notice of Deficiency (NOD)	NDS/ABNDS 150 SNDS/SABNDS 120	90
Drug Notification Form (DNF)	30	30

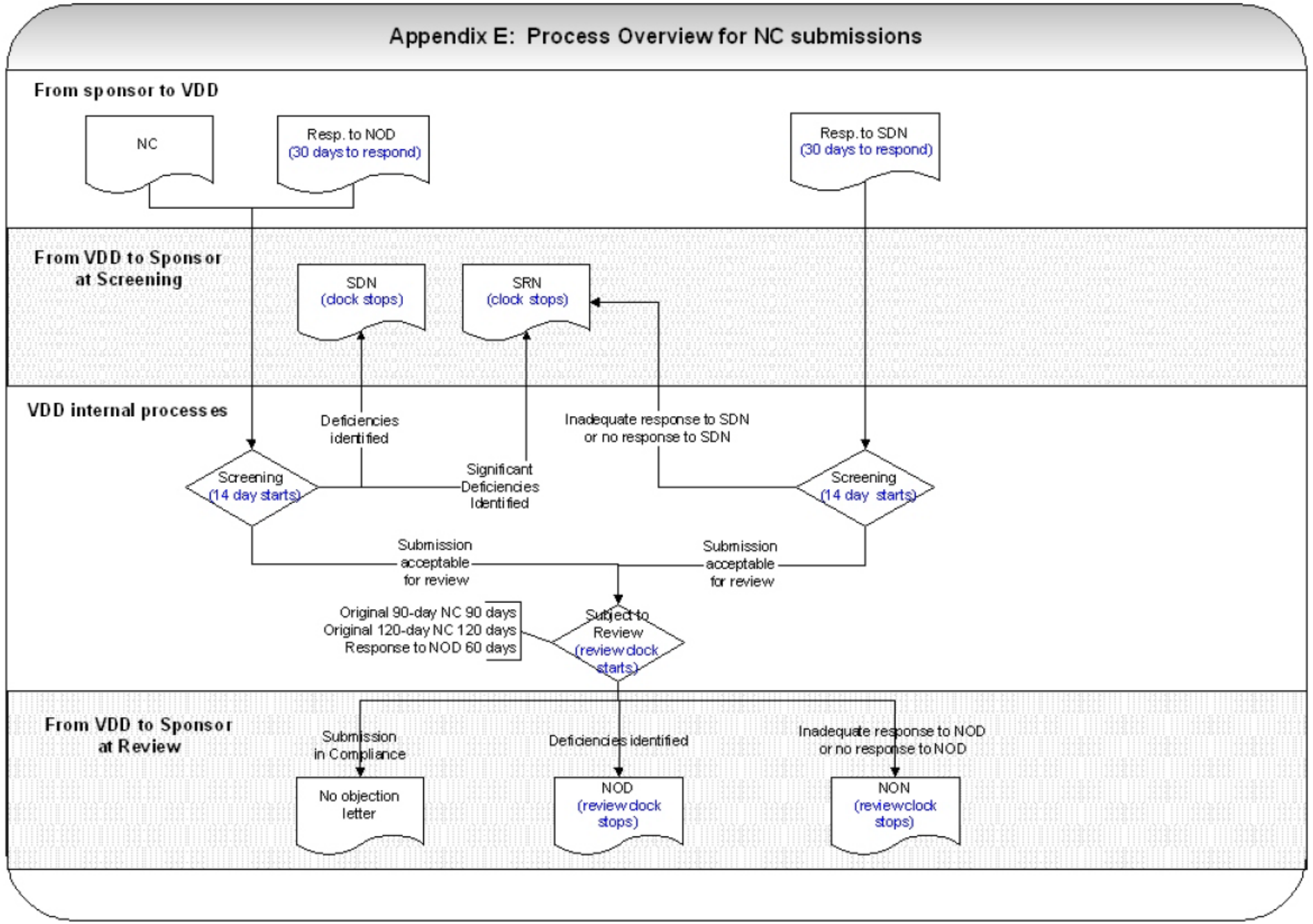
Appendix C: Process Overview for NDS, ABNDS, SNDS, SABNDS Submissions



Submission Review Timelines for Notifiable Change Submission

Submission Review Process	VDD (days)	TPD/BGTD (days)
Screening Acceptance	14	7
Screening Deficiency Notice (SDN)	30	-
Screening of Response to SDN	14	-
Submission review	90 120	90 120
Minor Information Request (MIR)/Clarifax	15	15
Notice of Deficiency (NOD)	60	-

Appendix E: Process Overview for NC submissions



Comparison of Submission Dossiers (human vs. veterinary):

- Submission format is very different
- Content requirements are very different
- VDD has moved towards electronic submissions
- Possible to cross-reference VDD submission to approved human submission
- No guidance docs for veterinary biopharmaceutical drug submissions
- Veterinary vaccines follow a different registration process

Structure of a VNDS

Table 1. Overview of Structure of Veterinary New Drug Submissions

PART NUMBER	PART TITLE	INCLUDED FOR SUBMISSION TYPE
I	MASTER VOLUME	ALL TYPES
II	MANUFACTURING AND QUALITY CONTROL	ALL TYPES
III	ANIMAL SAFETY	ALL TYPES
IV	EFFICACY	ALL TYPES
V	HUMAN SAFETY [1,2]	ALL EXCEPT NC
VI[3]	ENVIRONMENTAL IMPACT	ALL EXCEPT NC

Part 1: Master Volume

1. PART I: REQUIREMENTS FOR MASTER VOLUME
   - 1.1 Cover letter
   - 1.2 Table of Contents
   - 1.3 Submission Certification
   - 1.4 Authorization Letter
     - 1.4.1 Authorization to act as a regulatory agent on behalf of the submission sponsor
     - 1.4.2 Authorization to access information submitted by another company/ sponsor
     - 1.4.3 Authorization to share information with other agencies
   - 1.5 Drug Submission Application Form (HC/SC 3011)
   - 1.6 Veterinary Drug Submission Fee Application Form
   - 1.7 Animal Ingredient Form
   - 1.8 Draft Product Labels
   - 1.9 Patent Forms/Documents
   - 1.10 GMP Status Information and Establishment Licence Information
   - 1.11 Prior Submissions
   - 1.12 Submission and Product Summary
   - 1.13 Summary of Batch Information
     - 1.13.1 For NDS and ABNDS
     - 1.13.2 For SNDS, SABNDS and NC
   - 1.14 Summary of Qualification for an ABNDS or a SABNDS Submission
   - 1.15 Information Package for the Canadian Food Inspection Agency (CFIA)
     - 1.15.1 Drug Residue Monitoring Methods
     - 1.15.2 Drug Premix Products
   - 1.16 Foreign Registration Information

Part 4: Efficacy

4. PART IV. REQUIREMENTS FOR EFFICACY
   - 4.1 Comprehensive Summary
   - 4.2 Sectional Reports
     - 4.2.1 Microbiology Studies
     - 4.2.2 Laboratory Studies
     - 4.2.3 Animal Model Efficacy Studies
     - 4.2.4 Clinical Pharmacology Studies
       - 4.2.4.1 Pharmacokinetic Studies
       - 4.2.4.2 Bioavailability Studies
       - 4.2.4.3 Pharmacodynamic Studies
     - 4.2.5 Dose Determination Studies
       - 4.2.5.1 Optimum Dose Studies
       - 4.2.5.2 Challenge Studies
     - 4.2.6 Dose Confirmation Studies
       - 4.2.6.1 Pivotal Studies
       - 4.2.6.2 Clinical Studies
     - 4.2.7 Supplementary Supportive Efficacy Studies
     - 4.2.8 Pharmacovigilance Data
   - 4.3 Curriculum Vitae of Investigators

Veterinary Biologic

Veterinary biologics are animal health products such as vaccines, antibody products, and in vitro diagnostic test kits that are used for the prevention, treatment, or diagnosis of infectious diseases in animals, including domestic livestock, poultry, pets, wildlife, and fish.

Veterinary Biologic

- The Health of Animals Act defines a veterinary biologic as follows:

"veterinary biologic"

(a) a helminth, protozoa or micro-organism,

(b) a substance or mixture of substances derived from animals, helminths, protozoa or micro-organisms, or

(c) a substance of synthetic origin

that is manufactured, sold or represented for use in restoring, correcting or modifying organic functions in animals or for use in the diagnosis, treatment, mitigation or prevention of a disease, disorder, abnormal physical state, or the symptoms thereof, in animals.

Veteriary Drug vs. Veterinary Biologic

- **Veterinary drugs** include substances, or mixtures of substances, manufactured, sold or represented for use in the diagnosis, treatment, mitigation, or prevention of disease, disorder or abnormal physical state, or its symptoms in animals.

- **Veterinary biologics** include veterinary vaccines and antibody products used to treat or prevent infectious diseases in animals, as well as diagnostic test kits for the diagnosis of infectious diseases in animals

CFIA Licensure of Veterinary Biologics

- requirements for licensure: must be shown to be **pure**, **potent**, **safe**, and **effective**
- data demonstrating the product can be manufactured and used without adversely affecting animal health, human health, food safety or the environment
- a risk-based approach is used to evaluate the efficacy and safety of the product in the target species & potential detrimental effects for non-target species, humans and the environment.

CFIA Licensure of Veterinary Biologics

Canadian manufacturers of veterinary biologics are required to hold a valid Canadian ***Veterinary Biologics Establishment Licence*** and a corresponding Canadian ***Veterinary Biologics Product Licence*** listing all products produced for sale or distribution.

CFIA Licensure of Veterinary Biologics

No.	Name of product:	Origin			
		Canadian (CAN)	United States (US)	Other countries	Check (✓) to confirm inclusion
1.	Cover letter introducing submission and identifying regulatory contact	R	R	R	
2.	*Application for Services* - Form CFIA/ACIA 4720 and applicable fees	R	R	R	
3.	*Veterinary Biologics Information* - Form CFIA/ACIA 1503	R	R	R	
4.	*Application for Permit To Import Veterinary Biologics into Canada* - Form CFIA/ACIA 1493	N/A	R	R	
5.	Copy of *United States Veterinary Biologics Establishment License,* Manufacturing Authorization, or equivalent	N/A	R	R	
6.	Copy of *United States Veterinary Biological Product License,* Marketing Authorization, or equivalent	N/A	R	R	
7.	Justification for use of veterinary biologic in Canada	R	R	R	
8.	Outline of Production (OP)	2 copies	1 copy + APHIS 2015 and S of C	2 copies	

References

- Management of Regulatory Submissions

http://www.hc-sc.gc.ca/dhp-mps/vet/legislation/guide-ld/mors-gspr_pol-eng.php

- Guidance for industry preparation of veterinary new drug submissions

http://www.hc-sc.gc.ca/dhp-mps/alt_formats/hpfb-dgpsa/pdf/vet/vdd_nds_guide-eng.pdf

- Veterinary Biologics Q&A

http://www.inspection.gc.ca/animals/veterinary-biologics/licensed-products/questions-and-answers/eng/1318483540758/1320705655744

- Veterinary Biologics Guideline 3.1E: Guidance for Preparation of New Product Licensing (Registration) Submissions for Veterinary Biologics

http://www.inspection.gc.ca/animals/veterinary-biologics/guidelines-forms/3-1e/eng/1328225508353/1328225600916

- New Product Submission Checklist - Vaccines

http://www.inspection.gc.ca/animals/veterinary-biologics/guidelines-forms/3-1e/checklist-vaccines/eng/1328237224354/1328237316124

- Veterinary Biologics Program Service Standards (Response Times)

http://www.inspection.gc.ca/animals/veterinary-biologics/guidelines-forms/service-standards/eng/1328228207748/1328228291143

Q & A