MEMORANDUM OF UNDERSTANDING

Between the

ANIMAL AND PLANT HEALTH INSPECTION SERVICE, UNITED STATES DEPARTMENT OF AGRICULTURE

and the

FOOD AND DRUG ADMINISTRATION, DEPARTMENT OF HEALTH AND HUMAN SERVICES

I. PURPOSE

This agreement reflects the understanding between the Animal and Plant Health Inspection Service (APHIS) and the Food and Drug Administration (FDA) regarding procedures and responsibilities for resolving jurisdictional issues/questions concerning the regulation of certain animal products as biologicals under the Virus-Serum-Toxin Act (21 U.S.C. §§ 151 et seq.), (VSTA), or as drugs under the Federal Food, Drug, and Cosmetic Act (FFDCA § 201(g)(1), 21 U.S.C. § 321(g)(1)).

II. BACKGROUND

The 1985 Food Security Act which provided for additional enforcement authorities under the VSTA and the regulations revising the definition of animal "biological products" in 1997 rendered the 1982 Memorandum of Understanding (1982 MOU) between the Animal and Plant Inspection Service, United States Department of Agriculture (USDA) and the Food and Drug Administration, Department of Health and Human Services (DHHS) obsolete. This Memorandum of Understanding replaces the 1982 MOU between the agencies.

Under the regulations implementing VSTA (9 CFR Part 101), animal biological products are all viruses, serums, toxins (excluding substances that are selectively toxic to microorganisms, *e.g.*, antibiotics), or analogous products at any stage of production, distribution, or sale which are intended for use in the treatment of animals and which act primarily through the direct stimulation, supplementation, enhancement, or modulation of the immune system or immune response. The term "biological products" includes but is not limited to vaccines, bacterins, allergens, antibodies, antitoxins, toxoids, immunostimulants, certain cytokines, antigenic or immunizing components of live microorganisms, and diagnostic components of natural or synthetic origin, or that are derived from synthesizing or altering various substances or components of substances such as microorganisms, genes or genetic sequences, carbohydrates, proteins, antigens, allergens, or antibodies.

Under the FFDCA (Section 201 [21 U.S.C. § 321] (g)(1)), drugs are defined as articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals and articles (other than food) intended to affect the structure or any function of the body of man or animals. Thus, articles that are intended to improve animal performance, such as increased production, weight gain and enhanced feed efficiency are considered to be drugs under the FFDCA. Although animal biological products are "drugs" within the meaning of the FFDCA, FDA regulates such products when they are not produced and distributed in full conformance with the VSTA and its implementing regulations (see 21 CFR § 510.4). The phrase "biological product" does not apply to antimicrobials, corticosteroids, steroidal and non-steroidal antiinflammatories, hormones, and products that are intended for use to treat disease but their primary mechanism of action is not immunological. See section IIIC of this MOU. These drug products are regulated under section 512 of the FFDCA (21 U.S.C. § 360b).

III. SUBSTANCE OF AGREEMENT

A. Exchange of information for jurisdictional issues

For the purpose of expediting the resolution of jurisdictional issues, APHIS and FDA agree to provide each other all information that has been submitted to their respective agencies regarding the product or issue to be decided as long as the release of such information has been authorized by the appropriate party. In order to comply with restrictions that limit sharing and/or discussing confidential business information (CBI), which includes confidential commercial information and trade secrets, the agency that brings forth the issue/question for resolution will be responsible for notifying the applicant of the uncertainty of jurisdictional authority, and the agency that wishes to reveal the information will be responsible for securing from the applicant authorization to share CBI with the other party. Alternatively, applicants may be requested by either agency to submit materials/information concerning products that pose jurisdictional questions to each agency. Such information will be provided to the liaison officers of the agencies, who are named in paragraph V of this MOU.

B. Standing Committee

APHIS and FDA agree to appoint a liaison from each agency to coordinate issues concerning regulatory responsibility and interested persons may contact the liaison officer of either agency regarding regulatory status. The agencies also agree to establish and maintain a standing committee of not less than three persons from each agency to address issues concerning regulatory responsibility for products which raise a jurisdictional or definitional issue.

The standing committee will meet at least once every three months and at such other times as may be necessary to address the status of such new products as well as to consider regulatory authority over them. The decision as to whether the product falls

under the VSTA or the FFDCA will be communicated to the applicant in writing by a representative of the agency determined to have regulatory authority.

C. Established product jurisdictions

This list is not all encompassing; the list focuses on those products that are known to us presently and/or are predicted to present a jurisdictional challenge in the future. It is agreed that the list may be jointly modified as necessary (see section VI of this MOU).

The following products, to the extent they meet the definition of "drug" in the FFDCA, will be regulated as drugs by FDA: 1) articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of animal disease if the primary mechanism of action is not immunological or is undefined (unknown); and 2) articles intended to solely affect the structure or function of the body of animals:

- 1. Antibiotics, including antimicrobial peptides such as alpha and beta-defensins, chemotherapeutics
- 2. Anti-inflammatories (steroidal and nonsteroidal)
- 3. Anthelmintics/Antiprotozoals, except vaccines
- 4. Competitive Exclusion products
- 5. Genetic constructs, excluding DNA vaccines and live vaccines that stimulate a protective immune response.
- 6. Stem cell therapies
- 7. Gene therapies and somatic cell therapies utilizing viral and non-viral vectors
- 8. Hormones, growth factors, growth promotants
- 9. Cytokines administered for systemic or anti-inflammatory effect
- 10. Cytokines intended to treat mastitis either as (a) stand alone therapies, (b) in combination with approved antibiotics or (c) any other treatment modalities.
- 11. Cytokines of human origin for human use already regulated under the FFDCA or the Public Health Service Act.
- 12. Cytokines that affect blood cell formation (hematopoiesis, erythropoiesis, myelopoiesis).
- 13. Interferons whose primary mechanism of action does not require stimulation of the immune system.
- 14. Agents or products administered to animals for the purpose of reducing human exposure to pathogens.
- 15. Whole blood, transfusion, and clotting products except serum and plasma products for passive transfer of immunity.

The following products will be regulated as biologics under the VSTA because they are intended for use to diagnose, cure, mitigate, treat, or prevent disease in animals and they work primarily through an immune process:

¹ For the purposes of this MOU, systemic administration of a cytokine will mean any route of administration in which the intended effect is expected to occur at a location/site other than at the site of administration.

- 1. Cytokines and/or interferons co-administered (a) with an approved vaccine produced by the sponsor and intended to be an integral component of the vaccine, (b) with an approved vaccine produced by another supplier, or (c) with an approved vaccine produced by the sponsor but not intended to be used exclusively with any one product.
- 2. Localized², including topically administered cytokines where the intent is to affect local immune responses and there is reasonable certainty that administration will not result in systemic circulation of the cytokine.
- 3. Cytokine nucleotide sequences administered, either as an integral part of a DNA vaccine, or administered as an adjunct to vaccine administration.
- 4. Bacteria, viruses, bacterial, and viral-derived products whose intended use is the treatment or cure of cancer in animals by immune mediated mechanisms.
- 5. Bacterial-derived CpG oligonucleotides administered as a stand-alone treatment. CpG oligonucleotides administered as part of a vaccine shall be considered to be an integral part of the vaccine acting as an adjuvant and will be regulated by the Agency with jurisdiction over the vaccine.
- 6. Vaccines, viruses, bacterins, bacterial extracts, allergens, antiserums, antitoxins, toxoids, diagnostics, and immunomodulators for the prevention and/or treatment of animal disease.
- 7. Immunoglobulins, serum, and plasma for passive transfer.

IV. NAME AND ADDRESS OF PARTICIPATING AGENCIES

Animal and Plant Health Inspection Service United States Department of Agriculture 12th Street and Independence Avenue, S.W. Washington, DC 20250

Center for Veterinary Medicine Food and Drug Administration 7500 Standish Place Rockville, MD 20855

V. Liaison Officers

Individuals in the following positions are designated as the liaison officers for the purpose of this agreement and shall be the primary contacts regarding any matters relative to the agreement.

² Local administration of a cytokine will mean a route of administration in which the effect of the cytokine is expected to occur at or near the site of administration.

A. For the Animal and Plant Health Inspection Service:

Donna L. Malloy, DVM, MPH Section Leader, Operational Support Center for Veterinary Biologics, Unit 148 4700 River Road Riverdale, MD 20737-1237 TEL. 301-734-8725

B. For the Food and Drug Administration:

Vitolis Vengris, DVM, PHD Division of Surveillance Center for Veterinary Medicine 7519 Standish Place Rockville, MD 20855 TEL. 240-276-9063

VI. Period of Agreement

This agreement, when accepted by both parties, will be effective indefinitely. It may be modified by mutual written consent or terminated by either party upon written notification to the other.

Approved for USDA/APHIS by:		
/s/ John R. Clifford	Date:	12/14/2012
Dr. John R. Clifford D.V.M.		
Deputy Administrator, Veterinary Services		
Animal and Plant Health Inspection Service		
United States Department of Agriculture		
Approved for DHHS/FDA by:		
/s/ Bernadette M. Dunham	Date:	02/04/2013
Bernadette M. Dunham, D.V.M., Ph.D.		

Director, Center for Veterinary Medicine
Office of Food and Veterinary Medicine
U.S. Food and Drug Administration
Department of Health and Human Services