US FDA regulatory approach to veterinary drugs used in aquaculture

Seafood is the most important food commodity consumed globally, accounting for nearly 20% of animal source food. It is forecasted that the world's population will require 232 million metric tons (MT) seafood by 2030, around 62 million MT more than the planet can expect to produce. The aquaculture production is expected to continue its growth contributing significantly to the global seafood trade and providing around 109 million MT while wild fisheries will stay stable with production of 61 million MT. However, achieving a higher aquaculture production level to meet the future raising global demands cannot compromise seafood safety and quality. The aquaculture expansion, associated with increasing intensification and diversification, might require the use of veterinary medicines to prevent and treat disease outbreaks, assure healthy stocks and maximize production. It is essential to protect animal health and ensure good animal welfare through the prevention, control and treatment of conditions that cause animal suffering. The use of appropriate antimicrobial treatments is one of the effective management responses to emergencies linked to infectious epizootics. But, routine or systemic use of drugs to compensate for poor hygienic conditions or management practices can lead to problems related to increased frequency of bacterial resistance and the potential transfer of resistance genes from the aquatic environment to other bacteria. Furthermore, imprudent use of antimicrobials may also result in the occurrence of their residues in aquaculture products and, as a consequence, bans of those products by importing countries and economic losses. The judicious and responsible use of veterinary medicines is an essential component of successful commercial aquaculture production systems. This presentation will introduce the audience to the regulatory structure in the United States that applies to use of animal drugs in aquaculture.

Biography

Barbara Montwill is the expert on FDA regulatory policy with regards to food safety of aquaculture products. She received her MSc in Marine Biology from the University of Gdansk in Poland. Her professional career started at the Institute of Oceanology, Polish Academy of Science, where she conducted studies of the marine ecosystem in an area of environmental biology, ecotoxicology, and biogeochemical cycles. Her work at USFDA involves the formulation of policies and guidance on issues pertaining to aquaculture, particularly chemical contaminants and animal drug residues in seafood. She is engaged in the evaluation and audits of aquaculture food safety programs. She also provides training to aquaculture community. She participates in works of international and professional organizations (FAO COFI, Codex, and ISO) providing technical input on the subject of seafood safety.

barbara.Montwill@fda.hhs.gov

Notes: