AquAdvantage® Salmon - A case study of transgenic food animal applications for productivity enhancements in aquaculture
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A unique line of rapid-growth transgenic Atlantic salmon (AquAdvantage® Salmon) representing the culmination of nearly 20 years of intensive scientific development by AquaBounty Technologies has been submitted to the U.S. Food and Drug Administration (FDA) for regulatory approval. This genetically modified salmon possesses a single integrant containing a Chinook salmon growth hormone cDNA under the control of regulatory elements from an antifreeze protein gene derived from a marine fish, the ocean pout. The fast growth characteristics of this salmon and accelerated time to market size offer significant economic benefits and productivity enhancements to salmon aquaculturists. Significant resources have been devoted to systematically addressing scientific questions relevant to the FDA evaluation of this transgenic salmon, which if approved will constitute the first genetically modified food animal approved for human consumption by the U.S. FDA. Exhaustive studies assessing the safety, effectiveness, and composition of AquAdvantage® Salmon have been completed and submitted for FDA evaluation.