## Third Laureate Research & Development

Project Title: Production of live infectious bursal disease (Gumboro) vaccine

Executive Organization: Razi Vaccine & Serum Research Institute

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## **Abstract:**

Infectious bursal disease (IBD) is an acute contagious viral disease of birds. Vaccination is the main strategy for prevention of the disease. Because all of two and half milliard doses of IBD vaccine are imported, it is decided to produce it in Iran. In this regard, the virus seed was propagated in SPF egg according to international standards (OIE, FAO, EP). Diagnostic serological tests and molecular examinations were done. Then, the bacteriology, purity, titration, reversion to virulence, bursabody index, immunosupression and efficacy tests were performed on this sample. The results indicated that the vaccine virus is an intermediate strain. Dose of the IBD vaccine was set up on SPF chickens. The laboratory trial was scaled and the clinical trial was done three times with different ways. These results were compared with an imported intermediate IBD vaccine. According to serological assays and challenge, the developed IBD vaccine induces an adequate immunity in both SPF and commercial chickens and had no adverse effects. Also, it is found there is no significant difference between the developed IBD vaccine and an imported one. The IBD vaccine is licensed, produced in large scales and marketed.





