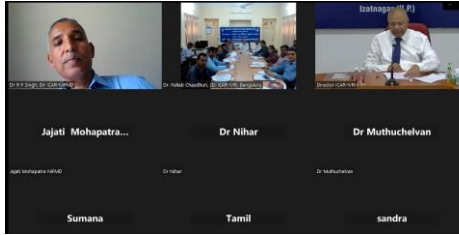


Workshop on “*In vitro* assays to quantify FMD vaccine antigens for FMD vaccine manufacturers” held on 15th September 2023 at ICAR-IVRI, Bengaluru



IVRI, Bengaluru has conducted a workshop on “*In vitro* assays to quantify FMD vaccine antigens for FMD vaccine manufacturers” on 15th September 2023 to impart training to the industry partners of the international collaborative Project on FMD Vaccine Quality Testing and Enhancing India's Animal Vaccine Testing Capabilities. In the workshop, ten participants from industry including Brilliant Biopharma, Hyderabad; Indian Immunologicals Ltd, Hyderabad; Biovet, Bengaluru and Sanvita Biotech, Hyderabad were present.

The program started with welcoming of the participants and dignitaries by Dr Pallab Chaudhuri, JD, IVRI, Bengaluru. Overview of the workshop was given by Dr V Bhanuprakash. He narrated about difficulties in getting the seronegative animals, importance of serological assays for quality control (QC) of vaccines and their requirement for quantification of antigens during vaccine production as in-process control assays. Further, he briefed about the main objectives of different work packages of the WRL project.



Dr RP Singh, Director, ICAR-NIFMD & Coordinator of the WRL program introduced the conceptualization of the project and stressed upon importance of supplying biologicals for the QC assays to the industry partners. He re-emphasized the need for application of the assays in the downstream processing/ in-process quantification of the antigens during vaccine production. Dr Singh mentioned that main interest of the project team, vaccine manufacturers, and QC agencies is to have a quality FMD vaccine.



Dr Triveni Dutt, Director, ICAR-IVRI stressed upon the fact that FMD is of global concern. He opined that the prevention and control of FMD is national priority, and the effective collaboration with the industry in terms of quality and quantity of FMD vaccine is utmost important. Mass vaccination program of susceptible population is flagship program of Govt. of India. IVRI is engaged in giving technological backstopping to this effort, especially FMD research and quality control. He mentioned that alternate animal model for QC testing to replace cattle challenge experiments is being developed. The Director has acknowledged the financial support extended by DAHD, Govt. of India.

Technical session of the workshop involved demonstration of *in vitro* assays to quantify FMD vaccine antigens. Dr P Saravanan and Dr M Hosamani demonstrated the VHH ELISA and mAb based VP4/VP2

ELISAs. In the concluding session, meeting was conducted in hybrid mode with scientists from IVRI Bengaluru; NIAH, Baghpat; NIFMD, Bhubaneswar and WRL and TPI (UK). They interacted with the participants from FMD vaccine manufacturing industry. It was discussed that the ELISA tests are handy tools to measure the intact 146S content of vaccine antigen. This could be utilized as an in-process control tool during vaccine manufacturing. It was suggested that the FMD manufacturers would utilize the ELISA reagents at their facility using their antigens stocks of vaccine preparations and provide feedback.

The workshop ended with vote of thanks by Dr. B.P. Sreenivasa.

