Decisions taken in the 123rd meeting of the Genetic Engineering Appraisal Committee (GEAC) held on 27.2.2015

The 123rd meeting of the GEAC was held on 27.02.2015 in the Ministry of Environment, Forest and Climate Change (MoEF& CC) under the chairmanship of Shri Hem Pande, Additional Secretary, MoEF& CC and Chairman, GEAC.

The deliberations and decisions taken in the GEAC meeting in respect of Agenda item 5 are as follows:

Agenda item No 5: Consideration of applications related to recombinant Pharma

5.1 Permission for import of Vector Mune Fowl Pox –Mycoplasma gallissepticum (MG) Poultry Vaccine from USA and Marketing in India by M/s Ceva India Pvt Ltd., Delhi

5.1.1 The Committee noted that the proposal of M/s Ceva India Pvt Ltd for import of Vectormune FP MG Poultry Vaccine from USA and Marketing in India was discussed in its 121st meeting of the GEAC held on 18.7.2014 wherein the Committee decided, in the first instance, to obtain comments from the experts prior to placing the proposal in GEAC agenda.

5.1.2 Mycoplasma gallissepticum (MG) is a Live Fowl Pox vector. The recombinant virus of VECTORMUNE FP MG was developed by inserting the mgc3 and 40K genes of Mycoplasma gallissepticun in to the fowl pox virus genome. The efficiency of VECTORMUNE FP MG was approved in target animal by challenged with virulent strains of fowl pox virus (FPV) and MG. Quantity of the product to be manufactured/ imported per year is 5,000 vials per year.

5.1.3 The Committee decided to defer decision on the proposal as there is a difference of opinion amongst experts. The Committee was of the view that the applicant should clarify concerns raised by the experts and also submit revised document with complete data before the proposal is considered by the GEAC. The Committee also opined that the applicant may be advised to make a detailed presentation in the next GEAC meeting. It was also decided to invite experts from TANUVAS and Division of Animal Science, Department of Agriculture as special invitee when the proposal is considered next by the GEAC. .

5.1.3 In view of the above, decision on the proposal was kept in abeyance.

5.2 Permission for Import and Market of Bursal Disease-Marek's Disease Vaccine, Serotype 3, Marek's Disease Vector (Vaxxitek HVT+ IBD) by M/s Sanofi –Synthelabo (India) Ltd. Mumbai.

5.2.1 The Committee noted that the request of M/s Sanofi- Synthelabo for import of above vaccine from M/s Merial Select Inc. USA and marketing in India was considered by the GEAC in

its 118th meeting held on 21.3.2014 wherein the Committee decided, in the first instance, to obtain comments from the experts prior to placing the proposal in GEAC agenda.

5.2.2 The Vaxxitek HVT+IBD is a live vaccine against Bursal Disease-Marek's Disease prepared from a Marek's disease vectored Bursal Disease recombinant virus. The starting material is a Turkey Herpes virus (HVT), FC-126 strain isolated from turkey blood obtained through American Type Culture Collection. It is a veterinary medicine for use in healthy one day old chickens and healthy 18 to 19 days old chicken embryos as an aid in the prevention of Marek's disease and infectious bursal disease.

5.2.3 The Committee decided to defer decision on the proposal as there is a difference of opinion amongst experts. The Committee was of the view that the applicant should clarify concerns raised by the experts and also submit revised document with complete data before the proposal is considered by the GEAC. The Committee also opined that the applicant may be advised to make a detailed presentation in the next GEAC meeting. It was also decided to invite experts from TANUVAS and Division of Animal Science, Department of Agriculture as special invitee when the proposal is considered next by the GEAC. .

5.2.4 In view of the above, decision on the proposal was kept in abeyance. ,

5.3 Permission for Import and market of the Canine Distemper -Adenovirus type 2-Coronavirus-Parainfluenza- Parvovirus Vaccine, Modified Live Virus, Live Canarypox Vector, Leptospira Canicola – Icterohaemorrhagiae Bacterin (Recombitek® C6/CV) by M/s Sanofi-Synthelabo (India) Ltd.

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5.4 Permission for Import and market of the Canine Distemper-Adenovirus type 2-Parainfluenza-Parvovirus Vaccine, Modified Live Virus, Canarypox Vector, Leptospira Bacterin (Recombitek®C6) by M/s. Sanofi-Synthelabo (India) Ltd.

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5.5 Permission for Import and market of the Canine Distemper-Adenovirus type 2-Parainfluenza -Parvovirus Vaccine, Modified Live Virus, Canarypox Vector (Recombitek® C4) by M/s Sanofi-Synthelabo (India) Ltd.

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5.6 Permission for Import and market of the Canine Distemper-Adenovirus -Parvovirus Vaccine, Modified Live Virus, Canarypox Vector (Recombitek® C3) by M/s Sanofi-Synthelabo (India) Ltd.

1. The Committee noted that the above four requests of M/s Sanofi- Synthelabo for import of above vaccines from M/s Merial Select Inc. USA and marketing in India was considered by the GEAC in its 118th meeting held on 21.3.2014 wherein the Committee decided, in the first instance, to obtain comments from the experts prior to placing the proposal in GEAC agenda prior to placing the proposal in GEAC agenda.

2. These vaccines are for vaccinating dogs against common diseases in India such as canine parvovirus (CPV) enteritis, canine Distemper (CD), Canine infectious hepatitis (ICH), canine adenovirus 2 (CAV 2) and leptospirosis.

3. The Committee decided to defer decision on the proposal as there is a difference of opinion amongst experts. The Committee was of the view that the applicant should clarify concerns raised by the experts and also submit revised document with complete data before the proposal is considered by the GEAC. The Committee also opined that the applicant may be advised to make a detailed presentation in the next GEAC meeting. It was also decided to invite experts from TANUVAS and Division of Animal Science, Department of Agriculture as special invitee when the proposal is considered next by the GEAC. .

4. In view of the above, decision on the proposal was kept in abeyance. ,

5.7 Permission to conduct Phase III clinical trials on study titled "Immunogenicity and Safety of a Tetravalent Dengue Vaccine manufactured by Sanofi Pasteur, SA Lyon, France in healthy subjects aged 2 to 45 years in India (Protocol No. CYD 48) by M/s Sanofi Pasteur India Private Limited, Mumbai.

5.7.1 The Committee considered the request of M/s Sanofi Pasteur India Pvt. Ltd, Mumbai, for permission to conduct Phase III clinical trials to study "Immunogenicity and Safety of a Tetravalent Dengue Vaccine manufactured by Sanofi Pasteur, SA Lyon, France in healthy subjects aged 2 to 45 years in India (Protocol No. CYD48)" .It is a human use vaccine. Quantity of the product to be imported 1470 CYD Dengue vaccine doses for phase III clinical trials. It is intended for prevention of dengue illness caused by dengue virus serotype 1, 2, 3 and 4.

5.7.2 The Committee also noted that the name of the Vaccine: Internal name of the vaccine is: CYD (Chimera Yellow Fever Dengue) Dengue Vaccine. International name (WHO): Tetravalent Dengue Vaccine (Live, attenuated).

5.7.3 The Committee observed the following objectives of the proposal:

I. Is to use the CYD dengue vaccine in a phase III trial in India (*study* CYD48: *Immunogenicity and Safety of a Tetravalent Dengue Vaccine in Healthy Subjects Aged 18 to 45 Years in India*, sponsor Sanofi Pasteur).

II. CYD48 is a Phase III randomized, observer-blind FOR THE FIRST AND 2ND VACCINATIONS And single blind for the 3rd vaccination, controlled, multi-center trial in 420 subjects in India with enrolled in 2 groups , 3 vaccinations (0, 6, and 12 months) followed by a 6-month safety follow-up.

III. The subjects will be randomized in a 3 to 1 ratio to receive CYD dengue vaccine or control.

IV. Inclusions in children, adolescent, and adult age cohorts (2-11 years, 12-17 years and 18–45 years of age) will be done and the randomization will be stratified according to site and age group.

V. Group 1: CYD dengue vaccine (n=315)

VI. Group 2: Control vaccine (n=105)

All subjects will receive 3 doses and will provide blood samples for baseline flavivirus (FV) status (before the first dose) and for vaccine immunogenicity assessment after each of the 3 doses.

5.7.4 The Committee also took note on the Regulatory Status: CYD dengue vaccine is an investigational product, to date two phase III large efficacy studies (CYD 14 & CYD 15) have been completed the vaccination and long-term follow-ups are ongoing in Asia and Latin America. Up to Feb. 2014 more than 28,000 subjects have received at least one dose of CYD dengue vaccine. The vast majority of exposed subjects are children (14066), 2-11 years of age, and adolescent (120956), 12-17 years of age.

5.7.5 The Committee noted that the Company has conducted Phase II clinical trials to study titled “Immunogenicity and Safety of a Tetravalent Dengue Vaccine manufactured by Sanofi Pasteur, SA Lyon, France in healthy subjects aged 18 to 45 years in India (Protocol No. CYD 47)

5.7.8 In view of the above and based on the recommendations of experts the Committee approved the conduct of Phase III Clinical trials on study titled “Immunogenicity and Safety of a Tetravalent Dengue Vaccine manufactured by Sanofi Pasteur, SA Lyon, France in healthy subjects aged 2 to 45 years in India (Protocol No. CYD 48).

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