

**MINUTES OF THE 89<sup>th</sup> MEETING OF THE  
REVIEW COMMITTEE ON GENETIC MANIPULATION (RCGM)  
HELD ON 25.05.2010 IN THE DEPARTMENT OF BIOTECHNOLOGY**

Dr. V.P. Kamboj, Chairman, RCGM extended a formal welcome to the members of RCGM for the 89<sup>th</sup> meeting and initiated the process of the meeting.

The list of participants is given at Annexure-I.

2. The committee adopted the minutes and recommendations of the 88<sup>th</sup> meeting of the RCGM.

3. On action taken report, the Member Secretary informed that during the 88<sup>th</sup> RCGM meeting, a total of 50 applications including information items were considered and the Secretariat is in the process of issuing the requisite permit letters on the recommendations of the RCGM and GEAC.

**4. Proposals considered:**

**4.1 Applications in the area of r-DNA Pharmaceuticals**

The Committee considered applications to import 2 ATG+/+ and ATG5-/- Mouse Embryonic Fibroblast cells, stock culture of GMO (rBCG 30 ARFM II), research cell banks of CHO cell line expressing adalimumab gene; mammalian cell line expressing Rituximab, and genetically attenuated recombinant dengue virus strains. Applications to extend the validity of the import authorization for the import of CHO cell line expressing the monoclonal antibody-Infliximab; recombinant Rabies-G canine adenovirus type-2 vector vaccine, frozen antigen & vaccines virus; and three recombinant products viz. Insulin Lispro R, Insulin Lispro 25/75 & Insulin Lispro 50/50 were also considered by the Committee. The Committee also considered application to conduct clinical trials on pandemic H1N1 and seasonal trivalent influenza VLP vaccines in India. Applications to conduct dose response study of live attenuated rabies vaccine strain, preclinical toxicity studies on recombinant human Interleukin 11, human parathyroid hormone, and recombinant human insulin; development of recombinant human enterokinase enzyme for research and industrial applications; ORA-DPC in dogs through subcutaneous route; pre clinical toxicity study reports on recombinant Palivizumab; and request for waiver of pre-clinical toxicological studies on GCSF were also considered. After deliberation on each application, appropriate decision was taken by the Committee. Information on R&D works was also noted by RCGM.

**4.2 Applications in the area of Agriculture.**

The Committee considered applications for permission to import transgenic maize parental lines, T-DNA insertion mutant lines of *Arabidopsis*, immunological reagents, rice seeds per line of three events incorporating the *AlaAT* gene, and plasmid containing *ipt*, *HvAlaAT* and *OsNHX1* genes; to receive transgenic rice seeds of T2 generation expressing DREB2 gene and seeds of uncharacterized T1 generation cotton seeds with *ASAL* gene, proteins of *cryIAb* and *pat* genes and antibodies; proteins of *mepsps* gene and antibodies; and to export seeds of various transgenic rice plants and stress tolerant PDH45 gene construct in binary vectors. The committee also considered protocols to conduct study on the effect of Bt. protein on soil microflora during the Bt brinjal crop growing in open field.

The Committee also considered applications to conduct net house trials of bio-efficacy, protein expression, phenotypic assessment and seed production of the selected events of transgenic cauliflower and cabbage containing *cry1 Ba*, *cry1Ca* and *bar* genes; bio-safety research trials level-1 trials on transgenic corn hybrids namely NK6240 containing *cry1Ab* gene; and request for renewal of permission for green house production of stacked transgenic corn hybrid seed containing Bt 11 event and GA21 event, and seed multiplication of transgenic corn lines containing *mepsps* gene and *Cry 1 Ab* gene. After deliberation on each application, appropriate decision was taken. Information on R&D works submitted by IBSCs was also noted by RCGM.

**5. Any other point with the permission of the Chairman.**

RCGM also considered draft additional protocols for herbicide tolerant GM crops.

The next meeting of the RCGM was scheduled on 22.06.2010. No other transaction took place and the meeting ended with vote of thanks to the Chair.

The minutes are approved.

Sd/-

(Dr. V.P. Kamboj)  
Chairman, RCGM and  
INSA Honorary Scientist

Place: Lucknow  
Date: 05.06.2010

## Annexure-1

### List of participants

1.	Dr. V.P. Kamboj, Honorary Scientist, INSA	-	Chairman
2.	Dr. B. Sesikeran, NIN, Hyderabad	-	Member
3.	Dr. Anjali A. Karande, IISC, Bangalore	-	Member
4.	Dr. D.P. Tiwari, GBPUA&T, Pant Nagar	-	Member
5.	Dr. A.K. Panda, NII, New Delhi	-	Member
6.	Dr. Dilip Kumar De, BCKV, West Bengal	-	Member
7.	Dr. Raj K. Bhatnagar, ICGEB, New Delhi	-	Member
8.	Dr. S.J. Rahman, ANGRAU, Hyderabad	-	Member
9.	Dr. P.K. Gupta, CCSU, Meerut	-	Member
10.	Dr. I.S. Katageri, ARS, Dharwad	-	Member
11.	Dr. K.C. Bansal, NRCPB, New Delhi	-	Member
12.	Dr. K.V. Prabhu, IARI, New Delhi	-	Member
13.	Dr. S.K.D. MAjumdar, IISR, Luknow	-	Member
14.	Dr. K. Satyanarayana, ICMR, New Delhi	-	Member
15.	Shri S. Sinha, Scientist-G, DBT	-	Member
16.	Dr. K.K. Tripathi, Scientist-G, DBT	-	Member Secretary

### Other representatives:

17. Dr. S. Kilari, Intervet, Pune
18. Dr. S. Harinarayana Rao, M/s. Reliance Life Sciences, Mumbai
19. Dr. Sachin Tendulkar, M/s. Reliance Life Sciences, Mumbai
20. Dr. Sriram Padmanabhan, M/s. LUPIN Ltd., Pune