

**Decisions taken in the 43rd Meeting of the Genetic Engineering Approval
Committee (GEAC) held on 9th June 2004.**

Opening Remarks of the Chairperson

The Chairperson informed the members about certain procedural guidelines formulated by the Ministry to streamline the working of the regulatory bodies. In this context a document "Good Practices in Environmental Regulations" circulated among the members. The Chairperson explained that these guidelines would be applicable to the functioning of the GEAC.

Decisions

1. Permission for import and marketing Betaferon (interferon beta-1b) 0.25 mg in India by M/S. Zydus Cadilla from Germany.

1.1 The Committee noted the following:

- a) Phase-III studies of 2 years duration have been conducted both in USA and Canada. The product was tested on about 338 patients in total during the clinical trials. The product was declared to be safe/effective in those studies.
- b) There was no need to generate PMS data as the product had been approved for marketing in about 80 countries.

1.2 Taking note of the above and recommendations made by RCGM, DCGI and the expert from CCMB, the Committee accorded approval for import and marketing of Betaferon (interferon beta-1b) 0.25 mg by the Applicant.

2. Permission for manufacture and marketing of r- Hepatitis B Vaccine by M/s Biological E. Ltd., Hyderabad.

2.1 The Committee noted the following recommendation of the sub-committee after site inspection:

- a. As the company has installed adequate facilities for handling raw materials, waste materials treatments including wastewater treatment, on-site risk assessment and management and occupational health surveillance etc. GEAC may consider according permission to manufacture and marketing of the r-Hepatitis B vaccine by the company.
- b. Even though the quality of the product is stated to confirm to the national and international standards like I.P., U.S.P. etc., the company may undertake further research activities to purify the product to the maximum possible extent and to characterize residual impurities.

2.2 During the deliberation the purity profile of the product was discussed and it was felt that a mechanism for periodic verification/monitoring is necessary to ensure that the purity specification of the product should be consistent with the specifications approved by DCGI. The representatives of the DBT and the DCGI informed the committee that these were being followed.

2.3 The Committee also took note of the explanation submitted by the company in conducting Phase-III clinical trials without the approval of GEAC. On the issue of procedural lapse, the GEAC noted that essentially it is a problem of regulation since the company had been directed by the DBT to obtain the approval of DCGI. The GEAC therefore decided to condone the procedural lapse.

2.4 Based on the facts of the case and taking into consideration the recommendation of the sub-committee, the GEAC accorded approval for manufacture and marketing of r-Hepatitis B vaccine by the company.

3. Permission for manufacture and marketing of insulin by M/s Biocon India Ltd., Bangalore.

3.1 The Committee took note of the explanation submitted by the Applicant in not complying with certain procedural directions issued by DCGI/ DBT.

3.2 The Committee also noted that the report of RCGM regarding the containment facilities was still awaited. The Member Secretary RCGM informed that the matter was to be placed before the RCGM in the next meeting and the report would be forwarded to GEAC.

3.3 The Committee requested the Member Secretary RCGM to respond to the averments made by the applicant regarding the reasons for non-compliance of the procedural norms. Decision on the proposal was therefore deferred.

4 Permission for import and marketing of r-Human Interlukin-2 (rhIL-2) from Laboratories Pablo Cassara Argentina by Glenmark Laboratories Pvt. Ltd.

4.1 The committee took note of the earlier decisions taken by the GEAC to permit import of the product directly for PMS and held the view that the decision should be taken based on merit of the case. The Committee also considered the grounds on which the waiver of Phase-III clinical trials were sought. After detailed deliberations the view taken was:

- i. The contention about difficulties in availability of sufficient number of patients for conducting Phase-III clinical trials on the grounds of rarity of disease in a country like India was not found tenable.
- ii. Duration of the treatment and high cost cannot be a consideration for exemption from clinical trials.
- iii. Phase-III clinical trials are conducted under the Drugs and Cosmetic Act. No recommendation for waiver of Phase-III clinical trials has been received from DCGI.

4.2 Taking into consideration the facts of the case the Committee concluded that it would not be possible to entertain the request of the company for waiver of Phase-III clinical trials.

5 Permission for import and marketing of r-human Erythropoietin (rhEPO) manufactured by Shenzhen SPEC- Bio- Pharmaceuticals Industry Co. Ltd. China by M/s V.H. Bhagat Co, Mumbai.

5.1 The committee took note of the earlier decisions taken by the GEAC to permit import of the product directly for PMS. The Committee also considered the grounds on which the waiver of Phase-III clinical trials were sought. After detailed deliberations the view taken was:

- i. The contention about difficulties in availability of sufficient number of patients for conducting Phase-III clinical trials on the grounds of rarity of disease in a country like India was not found tenable.
- ii. Duration of the treatment and high cost cannot be a consideration for exemption from clinical trials.
- iii. Phase-III clinical trials are conducted under the Drugs and Cosmetic Act. No recommendation for waiver of Phase-III clinical trials has been received from DCGI.

5.2 Taking into consideration the facts of the case the Committee concluded that it would not be possible to entertain the request of the company for waiver of Phase-III clinical trials.

6. Permission for import and marketing of r-human growth hormone (somatropin) Formulations by M/s. Novo-Nordisk India Ltd., Bangalore from M/s Novo-Nordisk A/S. Novalle, 2880, Bagsvaerd, Denmark.

6.1 The Committee considered the explanation submitted by the company vide their letter dated 22.4.2004 regarding import of the product since 1990 under OGL. During the course of deliberations it was also pointed out that the product Somatropin (Recombinant human growth hormone) is available and registered in more than 80 countries. Further, the 1989 Notification became effective on 13th September 1993. The Committee also took note of the comments received from DBT, DCGI and CCMB.

6.2 After considering all the facts of the case it was concluded that essentially the procedural lapse was a problem of regulation since the company had not been directed to obtain the approval of GEAC while renewing the import license. The GEAC therefore decided to accord ex-post facto approval for import and marketing of the product. The GEAC also requested DCGI while renewing the import license for other recombinant products to check whether approval of GEAC has been obtained and if need be, to issue necessary directions. It was also suggested that for this purpose necessary amendments under Rules could be considered.

7 Implementation of the recommendation made by the Task Force on application of Agriculture Biotechnology under Prof. M.S. Swaminathan:

7.1 The Committee considered various issues, which included recommendations of the Swaminathan Task Force, the RCGM and the requests from various forums for relaxation of the operational norms. The need and timing of the contained trials under RCGM, large scale trials under GEAC and AICCIP trials under ICAR and the possibility of conducting the above trials simultaneously was also debated. During deliberations, following points emerged:

- i. On the specific recommendations of Swaminathan Committee report, the view taken was that before giving inputs it would be desirable to make available a copy of the report to the members so that they may take a holistic view on its recommendations. The Chairperson assured that a copy of the Task Force report would be made available to the members of GEAC.

- ii. The representatives of the ICAR and Ministry of Agriculture informed the Committee that the Ministry in consultation with other concerned Ministries was examining the Task Force recommendations, therefore any observations made pertaining to the Task Force report need only be taken in the context of specific cases pending before the GEAC. It was recognized by the Committee that the final authority to take a decision on the recommendation of the Task Force would be the Govt. for which the Ministry of Agriculture would be taking appropriate action by inter-ministerial consultation. Any views formulated taking the above Task Force recommendation into consideration represents the views of the GEAC about the operational norms and would be subject to the final policy decisions to be taken by the Govt.
- iii. On the recommendation of categorizing the Bt cotton hybrids into notified, popular and new hybrids/ varieties it was stated that only the Centrally Notified Hybrids/ varieties, which have been evaluated under the AICCIP-ICAR trials, should fall under the "Notified Category". The Committee rejected the suggestion for a separate "Popular Category" since it may introduce an element of subjectivity lacking scientific merit.
- iv. On the issue of the need and timing of contained trials under RCGM for Bt cotton varieties/hybrids containing approved event (MON 531), the Committee broadly accepted the recommendations of RCGM. However, the committee was of the view that waiver of contained trials for all Bt cotton hybrids/varieties containing approved event, instead of being followed as a standard norm, should be on the basis of case to case verification as recommended by the RCGM. Some views were expressed that it would be better to have contained trials and instead waive the requirements of large-scale trials under GEAC. However, the consensus arrived at was that contained trials can be waived and large scale trials under GEAC be continued. This was however subject to confirmation of the scientific claim, the level of protein expression and morphological equivalence to the corresponding non Bt hybrids as determined by appropriate scientific tests. The Committee also took note of the submission made by the DBT representative that RCGM takes into account relevant scientific facts before taking a final view on any proposal.
- v. On the issue of large-scale trials and ICAR trials, the view taken was that ICAR trials should be initiated in tandem with the large-scale trials and not prior to it. For new hybrids it was agreed that the current practice of two years of large-scale and ICAR trials could continue. For notified hybrids/varieties, the need for second year trials under GEAC/ICAR should be based on the results of the first year trials. However, the matter regarding duration of ICAR trials falls within the purview of the ICAR /MOA.
- vi. On the issue of operational norms for new gene/new event, the view taken was that the existing operational procedures may continue.

7.2 On the two specific cases considered by the GEAC in the last meeting, as regards the case of M/s J.K. Agri Genetics the Committee noted that the Bt cotton hybrids developed by the company are not Notified varieties but contain Cry 1Ac gene in a new event. Therefore, the prevalent operational norms regarding biosafety assessment and other trials for gene stability and agronomic evaluation would be required. In the case of M/s Nuziveedu Seeds Ltd. the Committee noted that RCGM in its meeting held on 13.5.2004 has waived the requirement of contained trials taking into consideration that the approved event MON 531

has been introduced into the Notified non-Bt hybrids namely Bunny and Mallika. After deliberations the view taken was that before the request of the Applicant for conducting large-scale trials is considered, the Committee desired to know about the details of their seed production and regulatory approvals obtained for development and production of seed. The Committee requested Member Secretary RCGM to provide facts of the case to the GEAC on the specific points. Decision on the matter would be taken after receipt of the report from Member Secretary, RCGM.
