

Internal Correspondence

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To: F. D. Griffith - Medical, Toxicology Services - 220-2E-02
From: R. G. Perkins - Medical, Toxicology Services - 220-2E-02
Subject: Summary of the Review of the FC-143 Two-Year Feeding Study
Report to be presented at the January 7, 1988 meeting with DuPont
Date: January 5, 1988

3M

In response to a request from DuPont Company, Haskell Laboratory for Toxicology and Industrial Medicine, Greg P. Sykes, V.M.D., one of their staff pathologists, was invited to a meeting at 3M to discuss the subject report. At the request of Toxicology Services, Robert G. Geil, D.V.M., and Conrad D. King, D.V.M., Ph.D., the consultants who wrote most of the report, were present to meet with Dr. Sykes.

The initial meeting on the morning of December 30, 1987 was held in the Building 220-2E Toxicology Services offices. The discussion at that time was primarily of the plans for Doctors Geil and Sykes to review certain microscopic slides of testicular tissue and of the goals that we hoped to achieve by the meeting. Dr. Sykes explained that DuPont has a policy for review of two-year toxicity studies in animals and within the policy there are guidelines for classification of the study compound based on any findings of tumors. It is my understanding that this policy outlines procedures for notification of employees of the conclusions. It is my understanding that preliminary deliberation at DuPont has led them to the point within the policy structure to consider that, based on the findings of an increased incidence of benign Leydig cell tumors in the rats fed 300 ppm of FC-143 for 24 months, they may be obliged under their policy to call FC-143 a carcinogen in animals.

Dr. King stated that he stands by the conclusions of the report, recognizing the increased incidence of mammary and testicular tumors under these particular experimental conditions. The conclusion is that, "Based on the incidence, types of tumors, time of tumor appearance, malignancy patterns of tumors and survival rate after two years, FC-143 is not considered to be carcinogenic in the rats." Dr. Geil concurs with that conclusion.

**Exhibit
1343**

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There was discussion of the testicular lesions and a conclusion that attempts to judge the lesion should be made after Doctors Geil and Sykes reviewed the slides later in the day. Dr. Geil prepared the pathology report for the study; however, Sykes had not seen the slides.

The meeting was resumed at 1:00 p.m. in the Riker Laboratory area of Building 270-3S with J. L. Allen, Ph.D.; S. V. Elrod, Ph.D. and L. B. Sibinski serving as hosts for the afternoon session. Doctors Geil and Sykes reviewed all of the testicular tissue slides from the study except for those from the one-year, interim sacrifice. Dr. Sykes agreed with Dr. Geil's original classification of the lesions as benign Leydig cell tumors of the testes. During this time Dr. King reviewed the final report and gave specific attention to note other findings in the animals with benign Leydig cell tumors and determined time of death of those animals with Leydig cell tumors.

During the summation period, the following conclusions were reached:

1. All the pertinent information is in the report as it was issued.
2. The increased incidence of benign Leydig cell tumors in the high dose animals may be test article related. The changes were considered to be associated with a compound-related increased hepatic metabolic activity and subsequent alteration of endogenous hormonal metabolism.
3. The finding of the increased incidence of benign Leydig cell tumors is not considered to be significant in regard to the risk assessment for humans exposed to FC-143.

Not resolved at the end meeting is the matter of how DuPont will elect to respond to the information within the framework of their established policy. This matter may be resolved after Dr. Sykes confers with Charles Reinhardt, M.D., and other persons at Haskell Laboratory.

The advice of Doctors Geil and King, as consultants to 3M, is basically to stand by the report as issued. They suggest that 3M send a letter to DuPont that provides further explanation of the evaluation of the data. In that regard the following statement written by Dr. King in the draft report must be included in relation to the findings of Leydig cell tumors. "A primary test substance effect in this regard cannot be ruled out; however, it would seem that this is more of a test substance exacerbation of a strain-related enzootic condition."

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Additionally, the letter should clarify that the historical data on Leydig cell tumors was cited correctly in the final report as issued. We recognize, however, that the incidence of Leydig cell tumors in Hazleton F1 untreated controls was given rather than the incidences for Leydig cell tumors in Hazleton control animals. The latter incidence was 10.1% overall with a range of 2 to 23%.

This summary has been discussed with Doctors Geil and King to assure that it accurately represents their opinions. If there are questions, please contact me.

RGP:bh (TS108 2.21)