以下の3つの理由から行動をとらなかったと、H14.4.5 三菱ウェルファーマ社報告書内で推察されている<sup>66</sup>。

①FDA は承認取消し理由にB型肝炎ウイルスの伝播リスクがクリオプレシピテートより高いことをあげているが、この時点で、旧ミドリ十字社では逆受身赤血球凝集(RPHA)法でB型肝炎ウイルスのスクリーニングを行っていたこと。

 ②当時米国で上市されていた当該製剤と異なり、旧ミドリ十字社の製剤(非加熱)には、紫 外線照射に加えて血清肝炎の防止を目的にβプロピオラクトン処理が施されていたこと。
③当時入手していた肝炎報告数が少なかったこと。

<sup>&</sup>lt;sup>66</sup> H14.4.5 三菱ウェルファーマ社報告書 p.4

[Docket No.77N-0409] Fibrinogen (Human) of Licenses<sup>67</sup>

AGENCY. Food and Drug Administration.

ACTION. Notice.

**SUMMARY**. This document announces that all licenses issued for the manufacture of the biological product fibrinogen (human) were revoked as of December 7, 1977. and the sale, barter, or exchange of fibrinogen (human) by any manufacturer was prohibited as of that date. This action was taken at the request of the licensed manufacturers because the effectiveness of fibrinogen (human) is questionable and other products that carry lower risks of transmitting hepatitis may be used in its place. The Commissioner further gives notice that fibrinogen (human) already sold delivered by the manufacturer may not be resold after July 1, 1978.

**DATES**. Effective date of revocation of all licenses for the manufacture of fibrinogen (human) was December 7, 1977.Exisiting stocks of fibrinogen (human) were prohibited from sale, barter, or exchange by the manufacturer as of that date. Fibrinogen (human) in distribution as of that date is prohibited from sale, barter, or exchange by owners or custodians after July 1, 1978.

## FOR-FURTHER-INFORMATION CONTACT

<u>Michael L.Hooton or Al Rothschild Bureau of Biologics (HPB-820).</u> Food and Drug Administration, Department of Health, Education, and Welfare, 8800 Rockyille Pike, Bothceda <u>Md\_20014;301-443-1920.</u>

## SUPPLEMENTARY INFORMATION

The Commissioner of Food and Drugs revoked product licenses issued to Merck Sharp & Dohme Division of Merck & Co. Inc. establishment license No.2; Cutter Laboratories ,Inc. establishment licenses No.8; E.R. Squlbb & Sons, Inc. establishment license No.52; Bureau of Laboratories , Michigan. Department of Public Health establishment license No.99; and Travenol Laboratories, Inc. Hyland Division establishment license No,140, for the manufacture of fibrinogen (human) and prohibited the sale, barter, or exchange of fibrinogen (human) by the manufacturers as of December 7,1977.

Fibrinogen is the component of blood that forms clots. Deficiencies or abnormalities of fibrinogen, whether hereditary or acquired, may lead to poor blood clotting and abnormal bleeding.

Fibrinogen (human) is a biological product that has been licensed since 1947. The product has been recommended for treating patients who are bleeding and have low fibrinogen levels and for prophylaxis in patients with abnormally low fibrinogen levels when a major stress to the blood

<sup>67</sup> 空欄部分は資料からの判読が不能だった箇所である。

coagulation system is anticipated. Because the human homeostatic process consists of a series of complex vascular and biochemical reactions, fibrinogen level alone is not always a valid measure of appropriate therapy. In most cases where the administration of fibrinogen is indicated, many abnormalities exist and simple infusion of fibrinogen will not produce normal coagulation. For this reason, the clinical effectiveness of fibrinogen (human) is difficult to assess, and there are few valid indications for its use.

Fibrinogen (human) is prepared from plasma pooled from a large number of donors. Heat treatment to inactivate hepatitis B virus in fibrinogen (human) will adversely affect the potency of the product. For these reasons, fibrinogen (human) administration is associated with a higher risk of transmitting hepatitis B than products derived from single units of plasma. In those few clinical cases in which fibrinogen replacement is deemed necessary by the attending physician, cryoprecipitated antihemophilic factor (human) and other products prepared from single units of plasma may be used as a source of fibrinogen. This will diminish the hepatitis risk.

The Advisory Panel for Review of Blood and Blood Derivatives, established pursuant to 601.25 (21 CFR 601.25), therefore recommended that fibrinogen (human) be withdrawn from the marketplace and that other products, such as cryoprecipitated antihemophilic factor (human), be used as a source of fibrinogen in the few clinical cases in which such therapy is indicated. In response to the panel's recommendations, all licensed manufactures of fibrinogen (human) requested that their licensed be revoked and waived the opportunity for a hearing pursuant to 601.5(a) (21 CFR 601.5(a)).

Accordingly, the Commissioner announces the revocation, effective December 7, 1977, of all product licenses for the manufacture of fibrinogen (human). To facilitate the orderly transition by physicians, hospitals, and blood banks from the use of fibrinogen (human) to other appropriate products used for treatment of clotting problems, and pursuant to section 351(a) of the Public Health Service Act (42 U.S.C. 262(a)), the Commissioner is hereby giving notice that fibrinogen (human) which has already been sold and delivered by licenses may be resold through July 1,1978, or the expiration date whichever is earlier.

Dated: December 27, 1977.

Joseph P. Hoe. Associate Commissioner for Compliance.

出所) H14.4.5 三菱ウェルファーマ社報告書 別紙1