Registry of Clotting Factor Concentrates

WFH 50 YEARS OF ADVANCING TREATMENT FOR ALL
WORLD FEDERATION OF HEMOPHILIA

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The Registry was created in 1997 by Dr. Meirione Costa e Silva and Dr. Carol Kasper for the International Society on Thrombosis and Haemostasis. Its purpose is to help medical personnel identify available concentrates and stay abreast of manufacturing changes.

The registry provides an overview of products available for export and clarifies differences among them. (There are many products manufactured for use in single countries that are not included in the registry.) It also helps doctors and pharmacists identify products that patients are offered during their foreign travels or those they may bring home with them, or have sent to them.

Plasma obtained from donations of whole blood is called recovered plasma. Plasma obtained by apheresis is called source plasma. Donors of whole blood are not paid any substantial amount in any of the countries listed in the registry. Donors of apheresis plasma are paid in most countries.

Several national fractionation centres produce concentrate from domestic recovered plasma for domestic use. A few fractionators (for example, CSL in Australia, Grifols in Spain and Biotest in Germany) accept plasma from other countries, fractionate it separately, and return it as concentrate to the donor country, a process called contract or toll fractionation. Several fractionators use source plasma from countries permitting paid apheresis. Such plasma may be blended with smaller amounts of unpaid recovered plasma.

In 2011, Talecris became a subsidiary of Grifols. Some Talecris products manufactured before the merger may still be within their labeled shelf life and Talecris-labeled products are still manufactured and available in some countries

Within the tables, concentrates are grouped first according to method of fractionation, then according to method of viral inactivation or degree of purification from lowest to highest. Fractionators cite the purification level of clotting factors as specific activity, or the amount of the desired clotting factor per milligram of total protein, minus any added albumin (SA s Alb). Specific activity may actually be measured or may be an approximation. Retention of plasma after donation and before processing to ascertain further information about a donor is called inventory hold or quarantine.

Recombinant clotting factor concentrates are also included in the registry.

Because new products are coming on the market every year, the WFH plans to develop an online version of the registry that will be updated in real time.

TABLES PRESENTED IN THE REGISTRY

Table 1-A: Serologic Tests on Individual Donor Plasma
Table 1-B: Plasma Inventory Hold and Nat Testing of Mini-Pools
Table 2: Factor VIII Concentrates Made by Precipitation (PPT), Gel Permeation or Ion Exchange Chromatography
Table 2A: Von Willebrand/factor VIII concentrates for the management of VWD
Table 3: Factor VIII Concentrates: Affinity Chromatography, or Recombinant
Table 4: Prothrombin Complex Concentrates ("PCC"; concentrates of prothrombin and factors VII, IX and X)
Table 5: Concentrates Primarily Intended for Use in Patients with Inhibitors: Activated Concentrates (Bypassing agents)
Table 6: Highly Purified Factor IX Concentrates
Table 7: Other Clotting Factor Concentrates
Table 8: Concentrates of Anti-Thrombotic Factors: Anti-thrombin concentrates

WORLD FEDERATION OF HEMOPHILIA PRODUCT SAFETY STATEMENT

The WFH is not a regulatory agency and cannot make recommendations relating to the safety of specific blood products. The regulatory authority in a particular country must make these judgments based on domestic legislation, national health policies, and clinical best practices.

A government or regulatory authority can ensure the safety of a blood product by determining the source of the plasma, the viral inactivation processes used in manufacturing, and the results of clinical trials related to the product in question.

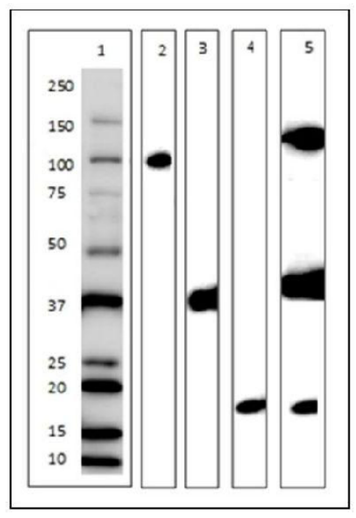
To properly assess the safety of a factor concentrate, national regulatory agencies must have detailed, verifiable information on:

- The quality of the plasma raw material including the regulatory status of the plasma supplier, donor epidemiology, donor exclusion criteria, screening tests done on the blood/plasma, quality assurance measures, details of the inventory hold system, the plasma pool size, and testing of the plasma pool.
- The manufacturing process, including the manufacturing steps and related in-process controls, specific viral inactivation and removal steps, process consistency, and batch release specifications.
- The final product, including the product's history, and clinical studies demonstrating the product's safety and efficacy.

The WFH recommends that concerns about the safety and efficacy of products be expressed to the relevant authorities including asking them to share the information they have obtained from the manufacturer in answer to the key questions outlined above.

SEROLOGIC TESTS ON INDIVIDUAL DONOR PLASMA:

- Syphilis
- HIV 1-2
- p-24 antigen
- HTLV-1
- HTLV-2
- HBcAb
- HBsAb
- HBsAg
- HCVAb
- ALT1
- B-19 parvovirus



IN-PROCESS TESTING

- inventory hold
- mini-pool size
- mini-pool NAT tests
- manufacturing pool NAT tests
- NAT on final product

INFORMATION ON FINAL PRODUCTS

- brand name
- company
- site of manufacture
- plasma source - paid/unpaid
- export/domestic fractionation
- viral inactivation steps
- specific activity minus albumin

DISCLAIMER

The *Registry of CFCs* is intended to provide general information on factor replacement products. The World Federation of Hemophilia does not engage in the practice of medicine and under no circumstances recommends particular treatment for specific individuals. Dose schedules and other treatment regimes are continually revised and new side effects recognized. WFH makes no representation, express or implied, about drug doses or other treatment. For these reasons it is strongly recommended that individuals seek the advice of a medical adviser and/or consult printed instructions provided by the pharmaceutical company before administering any of the drugs referred to in this poster.

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