UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

THE JOHNS HOPKINS UNIVERSITY, a : Case No. 94-105 RRM Maryland corporation, BAXTER

HEALTHCARE CORPORATION, a Delaware: corporation, and BECTON DICKINSON

AND COMPANY, a New Jersey corporation,:

Plaintiffs,

٧.

CELLPRO, INC., a Delaware corporation,

Defendant.

DECLARATION OF DR. MARY HOROWITZ

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- I, Mary Horowitz, M.D., do hereby declare:
- 1. I am a Professor at the Medical College of Wisconsin and am the Scientific Director of the International Bone Marrow Transplant Registry ("IBMTR") and the Autologous Blood and Marrow Transplant Registry ("ABMTR"). A copy of my curriculum vitae is attached hereto as EXHIBIT A.
- The IBMTR is a research organization, under the auspices of the Medical College of Wisconsin, that has been collecting data on allogeneic bone marrow and peripheral blood. transplants since 1972. The ABMTR, established in 1990, is a similar organization collecting data on autologous bone marrow and peripheral blood transplants. The combined IBMTR/ABMTR database now contains data on approximately 60,000 transplants. Using the IBMTR/ABMTR database, clinical researchers, medical statisticians and others can, for example, track the outcomes of particular kinds of transplants for particular categories of patients with particular diseases and can, for example, track survival times, disease-free survival times, mortality rates, and causes of transplant-related mortality and morbidity. One of the uses to which the IBMTR database is often put is to provide "control group" data--that is, historical data categorized by

appropriate, which data can be used by clinical researchers to determine, for example, whether the data obtained from a recent protocol does or does not reflect improvements in safety and/or efficacy compared to historical experience with similar patients suffering from similar ailments.

- data for a CellPro-sponsored Phase II clinical trial which aims at improving the safety and efficacy of half-matched (haploidentical) parent-to-child transplants in children with high-risk leukemias and lymphomas whose prognosis, in light of historical success rates of conventional therapies and transplants with older technologies, is very poor. In this Phase II trial, the CellPro CEPRATE® SC stem cell concentrator is being used to prepare stem-cell enriched and T-cell depleted transplant suspensions from the GCSF-mobilized peripheral blood of haploidentical parent donors.
- 4. Historically, the rate of disease-free long-term survival of children with advanced, high-risk leukemias, after receipt of haploidentical transplants, has been in the range of only about 10 to 20 percent. Major causes of mortality have included graft-versus-host disease ("GVHD"), failure to engraft,

infection, and the effects of the far-progressed disease itself.

Although CellPro's Phase II clinical trial is still ongoing and

the data are too recent to yield conclusions about long-term

survival, a successful outcome would represent an important

advance in cancer treatment.

In addition to the CellPro's CEPRATE® SC stem cell concentrator, CellPro now has a second-generation device, the CEPRATE® TCD column, which produces a stem- and progenitor-cellenriched and T-lymphocyte-depleted suspension in two steps, the first being positive selection of stem and progenitor cells withthe 12.8 antibody, the second being positive selection of Tlymphocytes with a different antibody that is specific to a Tlymphocyte marker. Our institution is currently exploring whether CellPro's TCD column affords a better means than our current method of T-cell depletion for allogeneic transplants. (T-cell depletion is important because T-cells are known to play a causative role in GVHD, which is an important cause of morbidity and mortality in the allogeneic transplant setting.) If the CellPro TCD column were to become unavailable, our study of the device would obviously have to cease; and if in fact the TCD device affords a superior therapeutic option for allogeneic transplant patients, then not only our research interests but

also the welfare of our patients would suffer if we were deprived of access to the device.

- I am also involved (jointly with colleagues at this institution and the Northwestern University Medical School and the University of Indiana) in a pilot study that uses the CellPro CEPRATE® SC stem cell concentrator for autologous transplants of patients suffering from severe autoimmune diseases. Among patients whom we have treated and plan to treat in the course of this pilot study are patients who have a particularly aggressive form of multiple sclerosis, an autoimmune disease that attacks the nervous system and causes progressive paralysis and death. As eligibility criteria for inclusion in this study, patients must be in a late stage of the disease; all conventional therapies must have failed to help them; and they must have a poor short-term prognosis, subject to whatever help the experimental therapy might afford them. Although this is a new and still-ongoing study, preliminary results are extremely encouraging. The therapy has apparently arrested the progress of the disease in all patients so far transplanted, and some amelioration of symptoms has also been observed.
- 7. If the CellPro device were to become unavailable, these very promising autoimmune studies would come to a halt.

Even if it is assumed that another immunoselection device, such as the Baxter device, is equivalently useful for the purpose (an assumption which I have not tested), and even if it is further assumed that such a device could be obtained, together with the maker's permission to use it in our autoimmune studies, still a substantial delay would inevitably be encountered due to the need to put in place the necessary user agreements, governmental and institutional approvals and the like. Because the patients involved and to be involved in our autoimmune pilot studies are, by definition, persons with poor short-term prognoses, some of these patients would die, and others might become ineligible for the studies due to further deterioration in their conditions, during the period of delay that would be occasioned by a changeover (assuming that a changeover were otherwise possible) from the CellPro device to another stem-cell immunoseparation device.

8. For at least the foregoing reasons, I believe that if the CellPro CEPRATE® SC stem cell concentrator, and/or the CEPRATE® TCD column, were to become unavailable in the United States for patent-related reasons, this would have severe negative impacts on the progress of important clinical research, as well as on the welfare of patients for whom the CellPro

devices might hold the key to a superior treatment option, or even the only treatment option, against a fatal disease.

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Milwaukee, Wisconsin, this 7th day of April 1997.

MARY HOROWITZ, M.D.

CURRICULUM VITA

Name:

Mary M. Horowitz

Date: April 7, 1997

Social Security No:

128-48-4808

Home Address:

2914 North Summit Avenue Milwaukee, Wisconsin 53211

Home Phone:

414/964-0389

Date of Birth:

July 31, 1954

Place of Birth:

Brooklyn, New York

Family Status:

Husband - Mark J. Horowitz

Children - Jason (1976), Sarah (1981) and Joseph (1992)

Office Address:

International Bone Marrow Transplant Registry

Medical College of Wisconsin 8701 Watertown Plank Road Milwaukee, WI 53226

Office Phone:

414/456-8325

Office Fax:

414/266-8471

Education:

1972-1974:

State University College of New York at Buffalo

1974-1975:

University of Wisconsin-Milwaukee, B.S., Zoology

1976-1980:

Medical College of Wisconsin, M.D.

1987-1991:

Medical College of Wisconsin, Division of

Biostatistics/Clinical Epidemiology, M.S.

Hospital Training:

1980-1984:

Resident, Internal Medicine, Medical College of Wisconsin,

Milwaukee

1984-1985:

Chief Resident, Internal Medicine, Medical College of

Wisconsin, Milwaukee

1987-1989:

Fellow in Hematology/Oncology, Medical College of

Wisconsin, Milwaukee

Licensure:

Wisconsin State Medical License 24175

DEA BHO423157 (#104448),

Board Certified Internal Medicine, 1985