IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

THE JOHNS HOPKINS UNIVERSITY, a Maryland corporation, BAXTER HEALTHCARE CORPORATION, a Delaware corporation, and BECTON DICKINSON AND COMPANY, a New Jersey corporation,	)	
Plaintiffs,	)	Civil Action No. 94-105-RRM
v.	)	
CELLPRO, a Delaware corporation,	)	
Defendant.	)	

DECLARATION OF DR. JERRY A. HAUSMAN

Submitted by:

POTTER ANDERSON & CORROON
William J. Marsden, Jr. (#2247)
Joanne Ceballos (#2854)
P.O. Box 951
350 Delaware Trust Building
Wilmington, Delaware 19899
(302) 984-6000
Attorneys for Plaintiffs

OF COUNSEL:

Steven J. Lee
KENYON & KENYON
One Broadway
New York, New York 10004
(212) 425-7200
Attorneys for Plaintiffs

Donald R. Ware
Peter B. Ellis
FOLEY, HOAG & ELIOT LLP
One Post Office Square
Boston, Massachusetts 02109
(617) 832-1000Attorneys for Plaintiffs

Michael Sennett
BELL, BOYD & LLOYD
Three First National Plaza
70 West Madison Street
Chicago, Illinois 60602
(312) 807-4243
Attorneys for Plaintiff
Baxter Healthcare Corporation

Dated: April 28, 1997

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

THE JOHNS HOPKINS UNIVERSITY, a Maryland corporation, BAXTER HEALTHCARE CORPORATION, a Delaware corporation, and BECTON DICKINSON AND COMPANY, a New Jersey corporation,	)	
Plaintiffs,	)	Civil Action No. 94-105-RRM
v.	)	
CELLPRO, a Delaware corporation,	)	
Defendant.	)	

DECLARATION OF DR. JERRY A. HAUSMAN

I, Jerry A. Hausman, D.Phil., declare as follows under penalties of perjury:

1. I am Macdonald Professor of Economics at the Massachusetts Institute of Technology. A copy of my curriculum vitae is attached hereto. I have previously testified on the subject of damages in this matter.

2. I understand that CellPro has asked the Court for a partial stay of any permanent injunction in order that CellPro may continue to sell therapeutic disposable products (12.8 therapeutic disposables) to United States bone marrow transplant centers, for use with CEPRATE SC devices which CellPro has previously installed at such centers.

3. Unless the Court decides that CellPro should be permitted to profit from such sales, CellPro should be allowed only to keep that fraction of its revenue which is required to cover the incremental costs of the disposable product. If CellPro is allowed <u>more</u> than its incremental costs of manufacturing and selling the 12.8 therapeutic disposables being sold in the U.S., revenues from those sales would be supporting CellPro's other products, its operations abroad, its ongoing research and development efforts, and its general, administrative and overhead costs.

4. The incremental costs of 12.8 therapeutic disposables are defined as the difference in CellPro's costs with or without selling those disposables. In other words, only those costs which would disappear if CellPro were not making those particular sales are properly included among incremental costs. In particular, incremental cost calculations should not include the allocations of fixed costs, overhead and research and development expenditures typically made for accounting purposes to determine the net "contribution" of particular sales to a company's net margin. This framework holds true because these costs would still remain even if the particular sales were not made because they are necessary for other operations of the company. (Incremental profit calculations are the usual basis for lost profit estimation in patent infringement proceedings.)

5. CellPro should therefore have to pay its average revenue per unit (based on sales of 12.8 disposables made at normal prices to the therapeutic market in the regular course of business) minus its average incremental cost per unit. Average incremental cost per unit (AIC) is the incremental cost of the product divided by the number of units so sold:

$$AIC = [TC(Q, \text{other operations}) - TC(0, \text{other operations})]/Q$$

where TC(Q, other operations) equals the total cost of the company, assuming the company supplies Q units of the product and engages in other operations, and TC (0, other operations) equals the total cost of the company assuming the company does not make the particular sales in question but nevertheless engages in its other operations. Those other operations might include supplying of other products, continued clinical investigation, or research and development activities.

6. I have reviewed the declaration of William Simpson recently submitted by CellPro.. Mr. Simpson has put forward estimates of the "variable" cost of the 12.8 therapeutic disposables. The "variable" cost defined by Mr. Simpson appears to include costs that should not be part of AIC. For instance, R&D costs and sunk capital costs are typically not incremental to the cost of the particular sales at issue, but Mr. Simpson has included them in his "variable " cost estimate.

7. Even taken on their own terms, Mr. Simpson's calculations appear to substantially overstate CellPro's average costs. He has calculated average "variable" cost per unit by dividing his "variable" cost estimate by the number of units sold during CellPro's past fiscal year. But CellPro sold therapeutic disposables in the United States only for one quarter of that year, while the "variable" cost totals used are those for the entire fiscal year. Since significant economies of scale are likely to exist (i.e., costs will increase much more slowly than revenues, because marginal cost is less than average cost), Mr. Simpson's methodology leads to a substantial overstatement of the average "variable" cost per unit.

8. If the fiscal year "variable" costs were divided by a full fiscal year of sales (four times actual sales for the US), the average "variable" cost per unit would likely be much lower. This adjustment alone results in a "contribution margin" per unit of close to $2,000.

9. Moreover, Mr. Simpson's calculations include many costs which are not properly attributable to the sales of 12.8 therapeutic disposables. Paragraph 10 and Schedule 1 to the Simpson declaration assert that CellPro's incremental cost of manufacturing and selling 12.8 therapeutic disposables is $2,418.92 per unit. That figure represents a total of the figures shown on Schedule 3 (average manufacturing cost per unit) and Schedule 4 (average marketing and selling costs per unit). In my opinion, these per-unit cost figures are overstated for at least the following reasons:

- As previously noted,. Mr. Simpson's margin calculations include an entire fiscal year's worth of expenses, against revenues which, in the United States, represent only about three months' worth of sales (the CellPro device was not approved for sale in the United States until December 1996).

- The data appear to relate to all 12.8 products, not just the 12.8 therapeutic disposables. In other words, they appear to include the total cost of manufacturing the CEPRATE SC device itself, the LC34 laboratory column and its disposables, any other CD34-based products which CellPro may be making as part of its ongoing product development efforts, and products being supplied to researchers or clinicians free of charge. The costs of manufacturing and selling these products should not be included in the incremental cost of manufacturing and selling 12.8 disposables to the therapeutic market.

- It is unclear whether the very substantial "Employee Costs" shown in the Schedule 3 table of "Manufacturing Costs" include only direct labor or whether they include all employment costs associated with CellPro's manufacturing operations, including manufacturing overhead. Only direct labor costs should be taken into account in calculating the incremental cost of a particular product. It is also unclear whether the "Manufacturing Costs" (apart from "Freight and Duty") include the cost of any ex-U.S. manufacturing activities.

- The "Sales and Marketing Costs" shown on Schedule 4 raise the same questions. Not only do they represent an entire year's worth of costs included with a fraction of a year of U.S. sales, but they appear to include all costs associated with CellPro's sales and marketing organization — not just the incremental cost of distributing 12.8 disposables to U.S. bone marrow transplant centers. Incremental costs should not include the cost of sales and marketing management, sales and marketing overhead (such as consultants, computers, library materials, general marketing programs). It should also be noted that nearly $600,000 of CellPro's "marketing expense" represented free placements of the CEPRATE SC device ("Instruments Placed Not Sold"). This figure does not represent a direct cost of making and selling the disposable products.

10 I also believe that Mr. Simpson's average sale price data of $3934 per unit (Schedule 1) may be biased. It is my understanding that CellPro's current U.S. price for the therapeutic disposables is $4300 per unit. I also note that the nine-month sales data which CellPro provided to plaintiffs (PTX 913) show that CellPro's European sales of therapeutic disposables (virtually the only regular course of business sales made during that period) were made at an average selling price of $4,308 — almost $400 per unit more than the average selling price reported by Mr. Simpson. It is likely that some of the units included in Mr. Simpson's calculation were transferred at other than regular course of business prices.

11. While I would need to have a detailed breakdown of the revenues and expenses associated with CellPro's various activities to make an accurate calculation of CellPro's incremental costs and incremental profit margin with respect to 12.8 therapeutic disposables to be sold in the United States,[1] it is my opinion, based on my review of the incomplete data attached to

[1] CellPro has not produced the "unaudited statement of operations" on which the Simpson declaration is based. To be useful for calculating incremental cost, that statement would have to provide detailed breakdowns of the costs of CellPro's operations by individual product and geographic territory, as well as a detailed description of the costs included in each category.

Mr. Simpson's declaration, that CellPro's actual incremental profit margin on those products will exceed the $2,000 minimum which I understand has been proposed by plaintiffs.

12. If the Court permits CellPro to recover its actual average incremental cost (AIC) of manufacturing and distributing therapeutic disposables to United States bone marrow transplant centers, CellPro will not end up "net out of pocket" as a result of that activity. CellPro will, of course, lose money on its operations as a whole, but that loss results from the fact that CellPro is still, for all intents and purposes, a start-up research and development-based company without any substantial product line which it is legally entitled to sell.

13. If CellPro recovers more than its incremental cost of manufacturing and distributing therapeutic disposables to U.S. bone marrow treatment centers, the additional amount would contribute generally to CellPro's ongoing research and development efforts, to its general, administrative and overhead costs, and/or to the costs of producing and selling other products. While this contribution alone would not turn CellPro into a profitable company, it would mean that CellPro is deriving a net economic benefit from continuing to sell infringing products. Moreover, to the extent that the Court permits CellPro, during any partial stay of an injunction, to attempt to increase demand for its product line by, for example, manufacturing and installing (with or without charge) additional CEPRATE SC devices, that action would further expand the economic benefit to CellPro.

14. CellPro has substantial business and market incentives to continue selling therapeutic disposables to the U.S. therapeutic market even if those sales make no contribution to R&D or to corporate overhead expenses. Companies with $50-$60 million in cash that find themselves blocked in one endeavor do not typically go out of business; rather, they seek to

develop other, related products or services which build on the technological and human capital they have already developed, or they acquire new product lines or technology through purchase, licensing or joint venture. While this transition is taking place, however, CellPro has a very strong incentive to remain active and visible in the marketplace, developing and cementing relationships with researchers, customers and potential customers, as well as public awareness of the company. Consequently, provided that CellPro does not suffer any direct, immediate loss as a result of each incremental sale (i.e., if it recovers its incremental cost of sale), CellPro has significant economic incentives to continue selling its therapeutic disposable products.

I declare under penalties of perjury that the foregoing is true and correct. Signed this 27th day of April, 1997.

J. A. Hausman

Jerry A. Hausman

CERTIFICATE OF SERVICE

I, William J. Marsden, Jr., hereby certify that on this 28th day of April, 1997, copies of the within document were caused to be served on the attorneys of record at the following addresses as indicated:

VIA HAND DELIVERY

Gerard M. O'Rourke, Esquire
Connolly, Bove, Lodge & Hutz
1220 Market Street
Post Office Box 2207
Wilmington, Delaware 19801-2207

VIA FEDERAL EXPRESS

Coe A. Bloomberg, Esquire
Lyon & Lyon
633 West Fifth Street, 47th Floor
Los Angeles, California 90071

William J. Marsden, Jr.