THOMAS C. DREES, President
Alpha Therapeutic Corporation
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PLASMA FORUM - 1980

PLASMA SUPPLY-DEMAND WORLDWIDE
INTERNATIONAL BUSINESS

1. It's too bad that the U.S. Fractionation Industry is still so immature that it can't get the Plasma Index off the ground. The ABC got $90M from NHLBI to gather data on blood collection in the U.S. -- when 90% of the data is already collected in great detail by ARC, AABB and CCBC. We will end up forcing the U.S. Government to spend our tax money to collect this data. Since the Volunteer Blood System collects 10MM units/year and already reports in great detail, the 10¢/unit given by NHLBI to ABC is another total waste of taxpayers dollars.

2. This year, I'm going to go at the Plasma Supply-Demand Worldwide from the Fractionater/user viewpoint. Here are my estimates of the fractionaters and their capacities. 1979-80 was not running at capacity since this was, and is, a soft year for demand of Albumin.

U.S. Manufacturer	1979 Capacity	1980 Capacity
Alpha	800,000 liters	1,200,000 liters
Armour	600,000 "	800,000 "
Cutter	1,200,000 "	1,400,000 "
Hyland	1,000,000 "	1,200,000 "
Massachusetts	50,000 "	50,000 "
Merck	100,000 "	-------
Merieux	100,000 "	?
Michigan	50,000 "	50,000 "
N.Y.B.C.	100,000 "	300,000 "
Parke-Davis	100,000 "	-------
	4,100,000 liters	5,000,000 liters

(Includes recovered plasma, fractionation of ARC, NYBC and some export powders and pastes of SA, ISG, AHF.)

Diagnostic Plasma	480,000 liters	500,000 liters
Total Fractionation Capacity	4,480,000 liters	5,500,000 liters

Recovered - AABB	400,000 liters	500,000 liters
Recovered - ARC	600,000 liters	700,000 liters
Recovered - CCBC	60,000 liters	60,000 liters
Total Recovered Plasma	1,060,000 liters	1,260,000 liters
Export Plasma (EST.)	1,300,000 liters	1,500,000 liters

Whole Blood

ARC - 5,000,000 units of Whole Blood X .500 =	2,500,000 liters
AABB- 5,000,000 Units of Whole Blood X .250 =	2,500,000 liters
CCBC- 50,000 Units of Whole Blood X .250 =	25,000 liters
	5,025,000 liters

CAN THE VOLUNTEER BLOOD SYSTEM REPLACE THE PAID PLASMA SYSTEM?

Present volunteer blood donors provide approximately 10,000,000 donations per year in the U.S. -- one-half from the American Red Cross, and one-half from others, equal to 3% of the population. Three percent (3%) of 210,000,000 = 6,300,000 who give an average of 1.5 times per year = 9,450,000 donations X 250 ml = 2,500,000 liters of plasma maximum. They actually report approximately 1,000,000 liters of plasma, mostly recovered.

Paid plasma collection in the U.S. equals 4,000,000 liters per year, equal to approximately 8 million donations. If volunteer blood donations were the only source of plasma, then for the volunteer sector to produce 4,000,000 additional liters of plasma they would need 4,000,000 liters X 4 (250ml) per volunteer donation of 500ml, or 32,000 donations which is equal to 16% of a 210,000,000 U.S. population.

Also, almost no hyperimmunes (requiring stimulation and frequent donation) would be collected, so anti-D, hepatitis, tetanus and others would be unavailable to patients and if the collection of AHF were at the same rate as American Red Cross, 400,000,000 international AHF units would be wasted. Furthermore, what would happen to the extra 32,000,000 donations of red blood cells? Would they be thrown away-- as in Europe (Euroblood)? They certainly should not be transfused.

Could the U.S. increase volunteer donations from 3% of the population to 19% (3 ÷ 16)? The Red Cross currently uses at least $54,000,000 of Public Service Advertising per year which equals $10/donation. Even if they spent only an equal amount per donation, $10 X 32,000,000, a total of $32,000,000, would they recruit

32,000,000 new donors? I submit they would have to spend much more to get five times as many donors, and increase their facilities and people by at least five times.

I submit this is impossible and the effort would not be worth the cost to the American public for a phony moral issue. The true moral issue in paid vs. volunteer blood is simply: IS THERE AN ADEQUATE, SAFE, COST EFFECTIVE SUPPLY OF BLOOD AND PLASMA? IF THE CONTROVERSY REDUCES THE SUPPLY, THEN THE CAUSE OF THE CONTROVERSY IS IMMORAL.

European Manufacturing Capacity - 1979 by Liter of Plasma

1.	H. Behring	750,000 liters
2.	Biotest	100,000 liters
3.	Immuno	850,000 liters
4.	Kabi	250,000 liters
5.	Merieux	600,000 liters
6.	RC, WG	375,000 liters
7.	Others (Netherlands, Finland, U.K., Swiss)	855,000 liters
		3,780,000 liters

European manufacturers also buy large quantities of Albumin powder, ISG powder and paste, and AHF powder and paste from the U.S. for further manufacturing. France, served by CNTS, U.K. served by National Transfusion Service, are poorly served and volumes are small. Benelux, Switzerland and Finland appear to be well served by R.C., but total population is small - - 20,000,000.

German market is bigger than the rest of Europe combined -- $200,000,000 versus $120,000,000 -- West Germany does the best job in blood component therapy.

Supply - 1980 average FF plasma price $45-$50/liter, down from $50-$55 - (20% drop). SA volume down by 20-25% - SA price off from $35 - $25 --(30%); Plasma Centers combined total down by 40%.

Recovered plasma - $10 - $25 -- down from $40 - $48 in the last six months; $30 X 500,000 = $15MM loss to the U.S. Blood Banks.

The balance of 1980 will be a tough year for plasma suppliers, and tougher for fractionaters, because prices are down by 30% and demand is down by 25% = 55%.

The U.S. is in a recession...higher unemployment means more donors and less elective surgery = A Soft Market. Auto plants and their suppliers are shut down. Steel mills. Defense industry will be up -- but later in 1980.

The industry is caught in the classic cyclical pressure of 1979-80; 1975-76; 1972-73; 1968. However, some will survive and recover, and get ready for the 1983 down cycle.

Long-term growth rate for SA = 15-20%; AHF is better than SA. Growth in treatment.

EXPORT OF AHF CAUSES HIGH PRICES IN THE U.S. -- TRUE OR FALSE?

The facts are these: The U.S. Hemophilia Federation would like to get AHF free, or at a cheaper price, because the U.S. does not have a National Health Plan. They reason that if the U.S. reduced exports of AHF to Europe and Japan, there would be an over-supply in the U.S. and the U.S. price would come down. This is classical economic supply-demand dogma.

Actually, what happens is just the opposite. The high prices in West Germany--43¢; Japan--40¢; U.S.--17¢; Sweden--60¢; Italy--35¢; and Spain--43¢; subsidize the low prices in the U.S. (12¢). If the U.S. plasma, cryo and AHF were not exported for higher prices, the U.S. AHF would have to be sold for a higher price or the U.S. manufacturers would not make AHF. The U.S. Hemophiliac Federation has heard these arguments, but do not want to accept them. The U.S. hemophiliacs have never been short of AHF once the capacity was in place in 1974.

U.S. Market in Units	Export in Units
300,000,000 AHF Units	100,000,000
.10	.40 Avg. Price
$30,000,000	$40,000,000

$40,000,000
$30,000,000

$70,000,000 ÷ 400,000,000 AHF Units = .175¢

Thus, if the export market were closed to U.S. companies, U.S. hemophiliacs would have to pay at least 17½¢ per unit or do without.

Frace, U.K., Holland. Third World; Latin America -- New potential. ARC-Dutch RC monopoly -- German RC - tax.

As the U.S. feeds the world, so does the U.S. bleed for the world -- or more correctly -- plasmapheresis itself for the rest of the world.