Generic Biotech: Science or Politics?

Before the generic Biopharmaceutical Manufacturing in Asia Conference
March, 2004

There is a famous commercial on American television that begins with a long, powerful introduction of the speaker before a large audience. He walks slowly to the podium, solemnly looks at the audience, utters just one word and then turns and walks off the stage.

In that television moment, he utters the name of a company. The purpose of that commercial is to convey that the corporate name tells it all.

I could do the same tonight.

- ***Let me pose the question that for us is "the eye of the dragon"***

Is the campaign preventing entry and development of generic biotech companies into the world market based on science and politics?

In Yankee-speak, the answer is a no-brainer: Politics.

That is where our journey to success must begin. That is the arena in which I will concentrate my remarks.

For other matters, we are fortunate to have Bob Zeid with us; he thought my scientists how to shape the development of their master cell banks to meet FDA requirements.

We have Suzette Kox, who will explain how the European generic industry fought off disaster and opened the door for consideration of a generic biotech regulatory pathway.

I want to learn how Argentine generic biotech companies can market generic biotech products.

There are some serious competitors here who will have my full attention as they open up their secrets for us to contemplate.

I am also most impatient to learn how the Chinese plan to register generic biotech products. One country has to lead the parade; perhaps it is the new China. Or maybe India. They are the two nations that are most feared by the multinational pharmaceutical companies ... Companies that are hell bent to keep us from competing even after a patent expires. When you know... As we do... that their prizes are hundreds of times cost, you can understand their desire to maintain their monopolistic market.

Sadly, both these strongly independent nations, India and China, on pharmaceutical matters, often sit on the sidelines confusing multinationals corporate interests with American policy. There are signs that this is changing. It must change.

While other nations linger on the sidelines, sometimes twiddling their thumbs, often fighting off pressures from the multinationals and western nations... some posed as threats... Malaysia this week courageously stepped forward to take leadership, to challenge the World Trade Organisation and provide some leadership in this stalemate. We will review Malaysia's action later in this talk. What has and is happening under WTO directly impacts on the expansion of our ventures.

All of us here today have another challenge that transcends but also enhances our business goals. It is a challenge that is the basis for both my passion and my excitement.

When the developing nations conspired to prevent the sale of life- saving medicines to the poor nations, it was Asia... India, China, Thailand and others .... that took up the challenge. The poor nations of the world

look to Asia to supply the safe, effective and affordable medicines they need to survive the epidemics that are the plague of the poor. They are our silent audience.

The companies in this room are breaking the sound barrier to open the doors to the next generation of affordable medicines... medicines now denied not only to the poor and developing nations, but to the developed nations as well. If history is any guideline for what we face, the multinational and biotech corporations will not sit on the sidelines and allow us to compete, to expose to the world their unconscionable high prices for medicines that can be affordable when a patent expires or when a nation is in desperate need to help its own citizens. Together, as businessmen and scientists, we have a chance to alter that reality.

Many of the companies in this audience have met the scientific challenge. We know how to produce generic biotech products that are medically interchangeable with brand products although the multinational companies and the brand biotech companies smugly continue to insist...with great success... that what we have already accomplished is impossible.

- ***Listen to the official position of the Biotechnology Industry Association:***

".....Biologics cannot be well characterized outside of proprietary information... due to differences in the composition of a biotechnology product or how the product is manufactured, different versions of the same differ in certain respects from the innovator product. Experience has shown that even small product differences can result in significant safety or efficacy differences."

Translated that means "perpetual patents" and that is precisely what they have achieved.

But in that statement, as we will see, they planted the seeds that can undermine their false contentions.

- ***On generic biotech, I prefer the clear, simple answer provided by one of the world's most famous scientists, Dr. Roger Williams, the head of USP. When confronted by the media with the biotech claims answered:***

... It is also difficult to build a 747 but no one questions that more than one company can build that aircraft.

Too many regulatory agencies ... some under severe pressure from politicians and the biotech lobby and assisted by international agreements included in WTO, TRIPS (Trade Related Aspects of Intellectual property) and WIPO... have...to use another slang but descriptive phrase..."rolled over" to accommodate multinational corporations and the biotech industry. Until recently, in my country, FDA appeared to be a wholly owned subsidiary of bio. When a generic company approached them about a product, the answer was always the same : Impossible with the unstated implication of "go away and don't bother me."

Brand Biotech has now reached beyond the thirty year patent law now being successfully negotiated on a bi-lateral basis with Morocco or the twenty year patent law injected into WTO or the barriers created to deny AIDS medicines to the eighty-five hundred people who die of that disease every day of the year when we have, as former President Clinton noted...when we have the medicines that can convert a certain death sentence into a chronic illness and we are not using them.

Bio has have fulfilled the wildest fantasy of big Pharma: they now have perpetual patents on their products.

As businesspersons and scientists we intensely dislike politics... We avoid it like the plague... that is not our business and most of us detest the time it takes to chase and destroy false or scientifically absurd propaganda.

It is my thesis today that we must enter the political arena, if we are to be allowed to bring our science into world markets.

Fortunately, we have a roadmap to follow and we start that climbing from both truth and experience. And we are not without allies to help us.

This meeting reminds me of the early days of the United States generic industry when nine companies joined forces to create the Generic Pharmaceutical Industry Association. The odds against us were astronomical and while each of the entrepreneurs was a competitor, we quickly realized that we would only succeed if we worked together. We viewed ourselves as torpedoed survivors adrift in a lifeboat in heavy seas and each of us had to bail to stay afloat or we would sink together.

That analogy is not an exaggeration. What happened then is happening now. As we recount some of the barriers to chemical generic entry into the market, I am sure you will recognize arguments that are now used to block biological competition today.

When we started the generic association, there was no regulatory pathway for the FDA... Or at any other regulatory agency... with the exception of Canada... to certify that our generic chemically based clones were medically interchangeable with a brand name counterpart. When a patent expired, we could only claim five percent of the market.

When I used my subpoena power on behalf of New York State, we learned there were expired patents and no competition.

While the immediate start-up commercial horizon for generic biotech companies are the handful of biotech products now off patent or coming off patent in the near future there are hundreds more now in the market or coming to market that are protected by these perpetual patents. Up to forty percent of new medicines have a biologics base.

My board has already asked me to look for niche products not now on the immediate list and we are beginning to examine biotech patents that are not all they seem to be.

When I was CEO of a generic company in the States, we had a brilliant attorney, who examined established and unquestioned patents and we successfully challenged a dozen of them in and out of court. To give you an idea of the financial success of that attack, I can share with you what we reported in our prospectus: we paid that attorney... who worked on a percentage of sales...two hundred and fifty million dollars. Why were we so successful? No one had looked before.

I suspect as we dig into the biotech patents, we will find the same lies and false science on which the patents were based.

Ironically, the Orphan Drug Act, legislation designed to find pharmaceutical solutions for diseases without large patient populations, protects many of the biotech exclusivities. The generic industry working with the National Organization of Rare Diseases was responsible for that legislation. Those bio exclusivities only last seven years.

I am often asked how could big Pharma keep generics out of the market? How could they continue their monopoly after a patent expired?

First they paved the way with propaganda that generics medicines were made in bathtubs were unsafe and most likely dangerous. Their proof: Our prices. How could you produce a modern medicine to world standards and charge such low prices? To many, that provided thin logic.

Who were their targets? The prescribing physician, the scientific academic, the media and the patient.

They did not have to prove their argument, they only had to instill fear and uncertainty.

It is an ugly story to repeat, but even the major medical journals would not take our advertisements and they routinely published studies by academics that questioned that a generic could ever become a clone of the branded, patented product. What was often not revealed was that big Pharma was secretly financing many of these academics or as was discovered recently, writing the scientific papers for them to sign.

Everyone here has read similar stories about generic biotech products that are not based on fact but accepted because some scientist attaches his name to the article.

Every state in our union had laws that prevented the use of generic drugs. Those laws were enacted after our military decided not to pay the high prices for off-patented medicines and went offshore to purchase from foreign generic companies. Fear that this competitive disease would spread led to the anti-substitution laws.

Now the multinationals use trade organizations like WTO and bilateral agreements to achieve the same anti-generic substitution goals.

How did we change all of this?

First, Pharma went too far. After the New York expose that one hundred and sixty essential medicines were off-patent without competition, they published a scientific study from a famous University that said that patent laws had been cut in half by bureaucratic regulation and gained massive support in our Congress to extend patent laws for seven years for all existing and future patents. That would have ended generic competition.

There was only one problem. The study was a lie and we caught them.

When the battle was over, we helped to create legislation, the Drug Price Competition Act, Hatch-Waxman, that provided a logical scientific pathway for regulation that in turn assured doctors, hospitals and patients that when a generic drug was substituted for a brand product, it was...and this is very important to us here today...when a drug was substituted it was "medically interchangeable" with the brand and all other generic clones.

One debate today is what to call a generic biotech product...substantially similar? Can we call it a clone? From my point of view, it is not necessary to get caught up in that debate...one that reminds me of the theological debate of how many angels can dance on the head of a pin. What we want in legislation is the phrase "medically interchangeable" That's it.

Earlier I spoke of international agreements that block our entry into the marketplace. I recently encountered these new barriers when I volunteered to help Dr. Yusuf Hamied, Chairman and Managing Director of Cipla of India, a brilliant chemist and a great humanitarian, when he decided to offer AIDS medicines to the poor nations of the world not at the $ 12-15,000 they could not afford to pay, but at less than a dollar-a-day. He also creatively and legally combined the three major AIDS drugs into one tablet taken twice a day and on December first last year, the World Health Organization recommended this triple fixed dose combination as the first-line treatment for AIDS.

The multinationals used every trick in the book to block generic companies from providing the poor nations with affordable AIDS medicines. Often the barriers were buried in WTO agreements.

THE BARRIERS THAT BECAME BARRIERS FOR AIDS GENERIC MEDICINES ARE THE BARRIERS WE WILL FACE IN MARKETING AND DEVELOPING GENERIC BIOTECH PRODUCTS FOR BOTH DOMESTIC AND EXPORT CONSUMPTION. MANY OF THE GENERIC BIOTECH COMPANIES ARE NOT AWARE OF THIS THREAT TO THEIR PROGRESS.

One universal barrier for the generic industry is the twenty-year patent law that was the entry fee for nations wanting to join the World Trade Organization. This law that goes into effect in nine months, abolishes all national pharmaceutical legislation and takes away the right of nations to determine how they could respond to a medical crisis.

When the poor nations of the world complained that this was too high a price to pay, an escape hatch was created within TRIPS that allowed them in times of national crisis to set aside patent laws and if necessary issue "compulsory licenses" to generic or other companies to manufacture the product at rational prices. This right can also apply to life saving generic biotech products especially those with questionable patents or where the biotech company is engaged in ever-greening to extend patent life.

Yet even when AIDS was devastating countries throughout the developing world, not one country...not one...used this exception and as a consequence only one percent of the thirty million afflicted in Southern Africa were being treated although Indian and Southeast Asian companies were manufacturing the medicines that could prolong their lives until a cure was discovered.

This led some of us to propose that we replace TRIPS with a south-to-south organization, a TRIPS north and a TRIPS south. Let the developed nations live by their laws and allow the other nations to protect the health of their citizens. When India, Brazil and twenty other nations decided that the agricultural subsidies of the west were preventing them from exporting their crops, they bolted and created an organization to change WTO. We are urging that medicines be added to their campaign.

Then, just last week, one nation, Malaysia had the courage to step forward to put WTO to the test: Could a nation act in its own self-interest? They issued the first "compulsory license" that sets aside patents for AIDS medicines and pays the patent holder a fair royalty. That compulsory license was issued to Cipla. Now the fat is in the fire. Will WTO live up to its promises? And if not, what is the next step?

This battle is vitally important to generic biotech. Our medicines, like those for AIDS, are now being denied to people dying and suffering, no matter that a patent has expired.

The results of two other multinational campaigns now underway in countries throughout the world impact on how we can function in the years ahead.

The first is "data exclusivity."

As you know, the reciprocal side of a patent is the release of scientific data, so that during the period of the patent exclusivity science does not have to stand still. Usually data is released within five years. In Europe, they have doubled that time frame to ten or more years and in all of your nations... all of them ... similar covert campaigns are underway to increase data exclusivity.

The second issue is what we call "Bolar."

Under the Drug Price Competition Act...now copied by nations around the world...you can import a small amount of API to enable a generic company to complete its regulatory requirements so that on the day the patent expires, the generic company ready to ship and sell its product.

The multinationals have now enacted laws throughout Europe that will not allow the export of even this small amount of raw material until AFTER a patent expires thus increasing patent life by several years. Most often this decision is made outside of public view.

Please...I plead with you...when you go home, see if these insidious actions...hidden behind politics and confusing language... are moving towards political approval. If they are, stop them.

You will hear today of other similar actions that will impact on your ability to market your product either domestically or for export.

The multinationals and the biotech companies fear the generic biotech companies more than they do the companies producing AIDS medicines. Biotech products sell for between $ 3000 and $ 300,000 a year and they know, we know just how much it costs to produce finished product. We know that setting aside amortized capital costs, it is often less expensive to manufacture a generic biotech product than a chemically-based generic.

As noted earlier, the branded biotech industry is now operating under a handicap exposed when they cited the reasons for denying generic competition. When these companies return to regulatory agencies for technical or manufacturing changes...the same changes they say prevent us from creating medically interchangeable competition...they have unwittingly created a generic pathway for us to follow and this fact has opened up a split within their industry. Let me quickly explain.

One side of the biotech industry...mostly from the large multinational companies... want more flexibility in the biotech "draw the line in the sand" approach because the current regulatory flexibility is essential for them. In California, two years ago, in closed sessions, this issue was argued. The hard line won.

The biotech industry also has a fallback position. As you know, many brand biotech companies manufacture identical products that are now used interchangeably in hospitals. But in what I would call a criminal conspiracy, they have all agreed not to take the shorter generic path to medical interchangeability, but to repeat the very expensive full New Drug Application process. If they use the abbreviated processes now open to them that would, in effect, also open the procedures to generic biotech. Other speakers will address this issue.

How will they come at us? They will repeat the process used to retard generic entry into world markets. They will use some new buzzwords. They will tell the politicians that "out-sourcing" will be endangered if they side with generics.

A few days ago, I read in the Economics Times of India that the biotech industry "is now looking to India that has a strong base in custom synthesis and a huge scientific talent? What they will say in the private corridors of power is that if you want biotech to invest here, stay away from generics. This is an argument frequently used in other situations and usually becomes the unfulfilled promise.

Keep in mind that they do not have to tell the truth.

Before I end this talk, I would like to share with you some concepts we have developed on how we can move forward.

It goes almost without saying that we must have regulatory clarity in order to proceed and invest. We must be part of the process. To do that, we need to be organized.

Personally, in terms of regulation, I favour working towards "end points" so we can demonstrate medical interchangeability. We cannot afford to get embroiled in what I call scientific or regulatory claptraps. We know the science, we can demonstrate success and it is from these facts that legislative and regulatory pathways must be created not some political argument disguised as science.

Here I am somewhat conservative. In the legislation that some of us are recommending, we propose small phase three clinical trials that enhance the science. This approach offers the compromise up front, on our terms.

We need to insure that what any of us legally introduces into the market is safe and effective by world standards. Imagine if Bio had a real argument to use against us rather than the propaganda they now use?

I propose that for this aspect of the legislation we use what is called a "sunset clause" so that after five years these more stringent requirements end.

As we move ahead, we cannot cut corners. Although brand companies routinely make mistakes that would destroy a generic company, we cannot afford to make a mistake. We must adhere to universal GMP standards and validate our cell banks.

I do not support the two-door theory of manufacturing: one door for the domestic market and another for export...and I assume all of us is eventually targeting the markets of the developed nations where the prices for these life-saving products are astronomical.

I urge you to do as some of the generic biotech companies have done: Work together formally or informally to exchange information on the political situation...don't let them pick us off one nation at a time. Once again I feel we are all in the same lifeboat.

We have great strengths and we are gaining political support. In the United States, the major sponsor of the Drug Price Competition Act, a conservative Republican Senator, Orin Hatch of Utah, has already warned the biotech industry that it can not continue along the perpetual patent pathway and must permit generic competition.

There are other leaders in other countries, but we must provide them with the information from other countries and other situations.

Beware of administrative solutions that propose conditions that require product-by-product regulations or apply only to certain products. The administrative solution approach looks good at first blush, but from experience we know this avenue provides too many variables for intelligent planning.

We must have the regulatory agencies bound by rational and fair legislation.

After we passed the Drug Price Competition Act, a reporter asked me why we were successful after trying and failing for so many years. I said that once we were able to move the issue from behind closed political doors and into the open where people could understand how their lives were being impacted, the politicians had to chose between the financial contributions to their campaigns and the votes they need to win re-election.

With the help of the media, with the assistance of the non-governmental organization, with the facts of life and death, with have a very strong story to tell.

- ***Finally, permit me a personal note:***

I take a special pride at the end of each day because I can go home and look at my children and grandchildren confident that whatever talents and drive I may have are dedicated to saving lives, not improving luxuries or building widgets. In that, all of us here today, are joined.

As a businessman, I think I understand what creates loyalty and trust and it is not just salaries and benefits. When you provide a purpose you can build a successful organization. So I am not responsive to those who surround us, those who attempt to pull us back from our ethical standards so they can be more comfortable with theirs.

I also cannot leave India without acknowledging a debt to the culture of this nation and how it helped to shape my life.

As some of you know, I was in the civil rights movement in the South of the United States where I was born and raised. When I advocated equal rights for people of color in our schools, the community turned on me and while the decent people stood on the sidelines and did little, the racists ruled. My response was to return violence with violence, but then I met Dr. Martin Luther King who urged me to learn about Mahatma Gandhi who had shaped his thought and to that lesson I owe my debt to India.

There is not a week that passes that someone does not send me an e-mail that ends with the quote from Mahatma Gandhi that sums up what I have tried to convey this morning. That quote goes like this:

First they ignore you, he wrote.

Then they laugh at you.

Then they fight you.

Then you win.

Thank you.

The Perfect Storm

Presentation at Fifth Annual Global Strategy Summit, Barcelona, Spain
March, 2006

• *Abstract*

Two-thirds of the world's population is systematically being denied access to life-saving medicines.

• *Why?*

A perfect storm of political intrigue, corporate greed and a lack of political will has congealed into a reality that will mark the AIDS pandemic as a harbinger of things to come.

This talk will focus on how the pharmaceutical multinationals, western governments and even United Nations agencies helped bring about this fiasco and will attempt to answer Cipla's question printed full page in media worldwide on AIDS day, 2006:

"What's the use of developing life-saving medicines if you can't make them available to the patient?"

Ladies and Gentlemen,

In this discussion, we will examine these cases which illustrate why two thirds of the world's population is being systematically denied access to affordable medicines:

-Tamiflu and Roche: Is Roche Blocking Competition for Avian Flu?

-Novartis and Malaria: The Strange Anti-Competitive Alliance with WHO.

-Anti-Generic AIDS Campaign Continues.

Political Barriers to Competition.

Let me warn you at the outset, this is not a scientific, legal or economic presentation... it won't pinpoint markets for us to enter or products to challenge or legal pitfalls to avoid.

No responsible scientist or regulator doubts that we can...and have... mastered the challenges of science and manufacturing. Governments and institutions in their purchases and inspections confirm the generic industry can provide safe, effective and affordable medicines.

Why then are two thirds of the world's population deliberately and systematically being denied access to the life-saving essential medicines we manufacture?

A few years ago, I was asked to join the UN's Millennium's working group on Access to Medicines and commissioned to create a document explaining the generic industry and the problems it faced in providing access to essential medicines in the poor nations of the world. I titled that document: "Generic Medicines: The Solution or The Problem?" I could have written the same report thirty years ago, ten years ago and will be able to write it again next year.

For half a century, our challenge has not been science but politics. The political and economic goals for most of the major multinational pharmaceutical companies are to extend patents or exclusive market life beyond the limits established by law. A patent rewards proven innovation with market exclusivity, but these protected rights are conditioned on releasing information, so science does not stand still. The multinationals not only extend legal patent rights, but they often deny release of the information required to advance science.

In reaching these goals, my government, the United States, acting as the designated "front" for the EU, Switzerland, Australia and Japan, often uses what I call "sweet talk" to promise jobs, pharmaceutical R and D and other inducements to governments like India to follow their lead and swaps promises interlaced with threats to achieve the multinational pharmaceutical goals.

In these matters the "perpetrators" act like sailors who make promises in the dead of night and in the early morning when the blush is still on the rose, slip away, board a ship and sail off to another romance leaving a little something on the night table. The current destination is China.

Last year before a EU Parliamentary Committee, I tried to sum up the situation this way:

"At sea a Perfect Storm develops when uniquely three or more forces of nature combine to create a catastrophe from which there is virtually no escape. I was reminded of this fear as the New Year dawned on us and a perfect storm of political intrigue, corporate greed and a lack of political will congealed into a reality that will mark the AIDS pandemic as a harbinger of things to come.

I noted the perfect storm was fifteen years in the making in the backrooms of politics and I tried to sum up the political traps this way:

"The pharmaceutical perfect storm consists of TRIPS, TRIPS Plus, bi-lateral and regional agreements and superimposed national laws like India's Exclusive Marketing Rights, the Indian Ordinance, in which India exchanged its ten year exemption from compliance with WTO's twenty year patent requirement for a "locked mailbox" into which, beginning in 1995, patents were confidentially filed.

*The mailbox was opened in January, 2005 and as a result the several thousand life-saving medicines that India developed from generic innovation to APIs (*raw materials) to final formulations will not only be denied by twenty year patents to the poor of India, but to the Third World that traditionally looks to India and China as their suppliers of safe, effective and affordable medicines.*

Why, as an American, I ask is the United States and its western allies supporting an indefensible monopolistic business plan that systematically and globally denies medicines to patients who cannot afford the multinational or western prices and on the other hand refuses to license for a fee the rights to generic companies that can manufacture and ship the medicines within the strict guidelines of European and often FDA requirements and sell them at affordable prices?

In the Balkans, where I had operations the classic multinational business behavior is to license medicines to companies for a fee because it would be less expensive than creating their own marketing operations. Why isn't this a worldwide standard? Why are poor countries denied this accepted business practice? And why aren't the international agencies speaking up on behalf of the poor nations? Why does the media, attracted to dramatic situations, leave the story without persisting to determine how the poor of the world are denied affordable medicines?

Here are three real time examples of how this system works and the human consequences that result.

• *The Tamiflu Mystery*

Beginning in October last year western nations began spending billions of dollars to frantically stockpile Tamiflu as a hedge against the anticipation of a flu virus more virulent than the pandemic that killed upwards of forty million people in 1918 and 1919. ***In that pandemic, two point five percent of the victims died; today one of every two victims infected with avian flu die.***

Human infections develop, as you know, when birds are handled or eaten. The lingering fear is the virus will mutate for easy transmission between humans. The virus has spread from Asia to Europe to Africa

and to the Middle East. I was in Geneva when one dead bird was found in the lake and a cat died of the virus in nearby France. Both incidents set off reactions that go beyond justified and normal concern. My estimate earlier this year was that the virus will reach North America by the end of the summer and I wish that estimate is proven wrong. I personally believe that there were two cases of human-to-human mutation in Vietnam and my curiosity has led to a personal inquiry to see if my fear is right or wrong.

Two medicines offer hope of controlling human avian flu (H5N1) but neither is a vaccine and questions linger about their effectiveness, but the experts conclude there is no other alternative but to be prepared. The world's top scientists who have studied the H5N1 flu say the answer as to the potential for a pandemic is not "if" but "when"...if not this year, predictably in the future.

The leading H5N1 product is Tamiflu (oseltamivir), in tablet form, two tablets a day for five days, marketed and controlled by Roche; the other is Relenza, a Glaxo product that must be inhaled. These medicines must be used within forty-eight hours of the visual onset of avian flu. Victims caught in time become very ill but they stand a strong chance of surviving.

This month, India faced a near panic when bird flu attacked one section of the country; India predicts it may cost a billion dollars to contain the spread of the virus. The first line of defense is to isolate the areas of contamination and systematically search out and destroy birds or animals that have been infected.

For the Indian occurrence the government had neither the brand nor the generic versions of Tamiflu (oseltamivir) stockpiled. It purchased the brand version when the generic version, approved by the government, was being produced in India. The question, of course, is why?

Gilead a biotech company in California discovered Tamiflu and entered into an agreement with Roche in 1996 to further develop and market the product. A few years ago, Gilead sued Roche to regain their rights arguing that Roche had failed to market the medicine and had contaminated Tamiflu with glass particles and other misdeeds in its manufacturing process.

On 14th October, 2005 the New York Times reported that Cipla had cloned Tamiflu and reported that Cipla's Chairman, Dr. Yusuf Hamied, pledged to sell the medicine "at humanitarian prices to poor nations" as Cipla had done when it opened the AIDS market to anti-retrovirals at a dollar a day back in February, 2001 ...the multinational price was between twelve and fifteen thousand dollars per patient year.

In India, Tamiflu is currently not under patent but remains in the "locked mailbox" awaiting Indian approval. Tamiflu beat the deadline to enter the locked box by only two months. If Tamiflu had fallen into the pre-1995 period, Indian companies would be free to clone Tamiflu without fear and supplies would flow to many patients in Third World at humanitarian prices.

As we speak, the Indian Parliament is considering exempting oseltamivir from patent protection for India. This does not solve the problem of export to nations where a patent may apply.

With Cipla willing to face the expected Roche challenge, other countries... Vietnam, Korea, Taiwan, the Philippines and Argentina quickly announced they would attempt to use a compulsory license to manufacture Tamiflu. Taiwan said they had also cloned Tamiflu but had not made a challenging announcement to Roche until after Cipla opened the " Pandora's Box."

The World Health Organization after talks with Roche reported it would take Roche ten years to manufacture the medicines for the twenty percent of the world's population that would, at a minimum, require treatment.

That fact, in itself, for pure humanitarian if not legal terms should have required Roche to expeditiously license competition without forcing nations to resort to the difficult-to-impossible compulsory licensing option included in WTO and TRIPS.

• *Roche's Scientific Smokescreens*

Facing the mounting challenges, Roche was under pressure to create arguments to delay or prevent competition to increase Tamiflu supplies for a frightened world.

The Director of WHO, an agency created in part to be the voice of those who had no voice in the political corridors of power joined with Roche and said that "patents must be respected."

A Roche company spokesman, his back now protected by WHO, drew the line in the sand:

"Roche intends to be the sole manufacturer of Tamiflu," he said.

The patent would control. There would be no licensing.

What about the poor people of the world who could not afford the medicine?

UN Secretary General, Kofi Annan disagreed with WHO. He urged drug companies to be "helpful" by not letting their patent claims interfere with access to medicines.

"I wouldn't want to hear the kind of debate we got into when it come to the HIV anti-retrovirals," he said.

(Kofi Annan was courageous to mention the AIDS problem because the UN became the partner of the multinationals in denying generic access to AIDS medicines, erecting a barrier that it required two years to remove. That barrier using typical multinational double-speak was called "Expedited Access to Essential Medicines." It actually increased prices for AIDS medicines. Ministers of Health said signing the agreement with the UN and the multinationals prevented them from purchasing generic drugs. A monopoly had been created. This absurdity ended after two years due to the courageous actions of one person in the Pan American Health Organization).

Roche, now faced with Cipla's unbending challenge, began to darken the horizon with "scientific" smokescreens. I put quotes of doubt around the word scientific.

The first was the claim that worldwide production would be limited by a shortage of "starter" materials for the approximately ten steps required to produce Tamiflu.

Key to the Tamiflu process is a Chinese plant that blossoms as star anise or as it is known in the market, spicy anise. The plant grows wild, Roche said, in only four Provinces in the south of China.

Spicy anise is essential to create shikimic acid, a pre-requisite to undertake Tamiflu manufacturing. Companies quickly learned that almost the entire spicy anise crop was committed to Roche.

Further, Roche told the media, an "explosive" process made it very difficult for the competition to reverse engineer and manufacture Tamiflu.

WHO, again based on information from Roche, said it would take a company several years before it could produce Tamiflu.

In short, the doors were closed to competition leaving the market to Roche to exploit.

In frustration, I asked Dr. Hamied "who in the world knows the most about Tamiflu?"

Dr. John Frost at Michigan State University, he said.

When I called, Dr. Frost asked me: "what shortage?"

The next day I was in East Lansing, Michigan where Michigan State University is located.

During my inquiry, I learned that Dr. Frost and Michigan State University had patented a process that extracted shikimic acid using a fermenter and e/coli and the University had awarded a non-exclusive license to Roche and the University's controller reported Michigan State University had received royalty payments confirming Roche's use of the process.

It was not difficult for some in the media to conclude that the shortage was a fiction. Here is what the New York Times reported:

"Roche had used Professor Frost's method in recent years...but (Frost) says he heard the company had cut back.

"'I am completely astonished about the gnashing of teeth and the wringing of hands about the shikimic acid,' Dr. Frost told the New York Times: '...the bottleneck should not be shikimic acid availability.'"

Frost also told the Times the "people he knew at Roche told him the company had curtailed the fermentation of shikimic acid to devote fermenting equipment to more valuable products. If so, that would increase the pressure on star anise supplies."

Later the Financial Times and other newspapers reported that Roche's Tamiflu production did not depend on spicy anise alone...one third had been produced using the fermentation process. Later Roche told the media it would increase fermentation production to two-thirds in 2006.

One barricade down.

The New York Times also confirmed that Roche said it would take a newcomer two to three years to be able to start production. Taiwan said it had completed its reverse engineering in less than a month.

In Roche's defense, they corrected their statement as being too conservative.

Roche also claimed that production was too dangerous for most companies because it contained an "explosive" process, a fact widely repeated in the media. The implication was clear: only a company like Roche could handle that contingency.

The Wall Street Journal and several of the API producers exploded that fiction.

The Journal reported that while "Roche officials ... repeatedly said producing Tamiflu was a dangerous process... (it) turns out to be relatively routine according to some pharmaceutical executives familiar with the chemistry."

Under pressure, Roche began to negotiate with "one hundred companies" interested in sub-licensing the Tamiflu manufacturing process. After a long delay, this week Roche finally announced that several countries would join with Roche in production of Tamiflu, but the conditions and circumstances of these agreements have not been revealed. To my way of thinking, Roche is insuring monopolistic control of a medicine that potentially could kill millions of persons. I am disturbed that in the interim Roche was the only company able to accept the stockpiling orders from western nations. The ten-year WHO prediction rings in my ears. What, God forbid, that human-to-human mutation has occurred during the structured delay by Roche? No company, no policy, no person should have life-and-death control in a potential pandemic.

Wall Street has classified Tamiflu as a billion dollar blockbuster medicine. Billion dollar medicines, as this audience knows, is the focused goal of multinational pharmaceutical companies.

Ironically Roche during the selection process... the same Roche that Gilead had accused of abusing the manufacturing process...required prominent generic companies to complete a seventy-two-page questionnaire as to their competence.

Does this mean that Roche cannot produce safe and effective medicines? Of course not. Roche has a deserved reputation as effective, reliable, competent... and I believed...what tense do I use?...a responsible manufacturer.

In my vocabulary, profit or patents are not "bad" words. They are the facts of commercial commerce all things being equal.

But when a pandemic strikes, profits and patents need to move to the sidelines to save lives. To combat avian flu, this must be a war and we cannot permit "war profiteers".

We missed the boat on AIDS and we should have learned that lesson as generics waited on the sidelines as millions...that is not an exaggeration...died. Roche needs to share the Gilead product with others through voluntary licensing for a fee, especially in the third world.

The crisis of supply will not diminish. It will worsen. Recently the United States government withdrew the current flu medicines saying they were not working and urged physicians to use either Tamiflu or Relenza. This will increase the potential shortage.

In Europe and the United States, an off-label use of Tamiflu is being recommended. There are reports that during a pandemic one tablet a day may prevent infection. Not only governments but also people are stockpiling the medicines.

A Tamiflu treatment in Europe costs sixty-plus dollars and in the United States approximately eighty dollars ... a thirty-three percent increase in what pharmacists charge for the medicine. Pharmacists in France and Switzerland told me their supply of Tamiflu had been exhausted.

Without significant generic competition, new demands will only add to the problem of responsible production for poor nations.

It is my view that only widespread, immediate manufacturing of oseltamivir by generic and other companies will provide the protection recommended by WHO. Maybe that will happen as avian flu invades western countries. You do not have to be a rocket scientist to chart the migration of birds worldwide.

Let's turn to a continuing battle that is costing millions of lives each year when medicines are available and affordable.

• *Continuing Barriers to Affordable AIDS Medicines*

Millions of poor people are sentenced to death each year because affordable and available AIDS medicines are not available to them. There are, of course, the classic barriers that arise in resource short nations ranging from distribution to corruption. Those are not the barricades we will address today. Instead we will focus on the continuing artificial barriers created to protect market share from viable competition.

As many of you know, Dr. Yusuf Hamied of Cipla responded to requests from poor nations and NGOs to create an affordable AIDS medicine in a dosage form that could be used in difficult circumstances. He combined three of the most effective anti-retroviral (ARV) medicines into one tablet taken twice a day and reduced the price to under a dollar a day.

The multinational treatment required products from three companies...three profit centers... with twelve to eighteen pills taken at various times of the day at a price of $12-15,000 a year per patient.

***Dr. Hamied's scientific creativity and innovation**...a phrase that is often avoided when discussing generic medicines...has arguably saved and will continue to save millions of lives. All of you here today should take pride in the fact that our industry, day in and day out, provides the affordable medicines that save and prolong lives and alleviate pain and suffering.*

To provide price competition for AIDS medicines was and is a continuing fight. It began when thirty-two multinationals, with the support of the US and European governments, sued in a South African court to block generic use.

The South African case ended almost by happenstance when Cipla and Doctors Without Borders...that won the Nobel Prize for its work... signed an agreement for the "triple" ARV... Triomune ...at a dollar a day and the worldwide media compared the two prices...a dollar a day vs $12-15000 a year... on front pages and in editorials including the Wall Street Journal that ran four lead investigative news stories probing the reasons for lives being lost when medicines were available. When the multinationals could no longer withstand the outrage of the world, they abandoned their lawsuit.

The economic breakthrough meant sixty patients, not one patient, could be treated at the generic price that tumbled to under $200 per patient year.

Other generic companies in India and elsewhere quickly began to manufacture the low priced medicines available to the UNICEF, NGOs and nations in need.

• *Generic AIDS Medicines Become First-Line Treatment*

On AIDS day in 2003 the World Health Organization designated the triple...not the multinationals' products... as first-line treatment for AIDS.

• *Global Fund Blocks Use of Generic Medicines for AIDS*

*I cannot refrain from reporting that the Global Fund under direct pressure, **prohibited use of the generics pre-qualified by WHO as safe and effective and recommended as first-line treatment for AIDS. The Fund was the major source of AIDS funding for poor nations.***

The Non-Governmental Organizations (NGOs) associated with the Fund petitioned the Board of Directors highlighting the absurdity and cost in lives of their anti-generic policy and contrasted that position with the pleas of the Fund for additional financing to meet the identified needs of poor nations.

That report was languishing until a courageous person risked his career by sliding the NGO document across a table to a friend in a coffee shop at the Geneva airport. The document made its way to the New York Times.

*Shortly thereafter the Global Fund dramatically reversed its policy **and mandated the use of generic AIDS medicines** provided they had been pre-qualified by WHO. (Score one for the home team).*

In all, thirteen roadblocks were erected to delay or deny competition following the South African decision. They continue to this day.

• *President Bush to the Rescue*

It was President George W. Bush who breathed life into the AIDS program for poor nations.

In an unexpected, emotionally presented announcement in his January 2003 State of the Union message the President said with the dramatic drop in prices of AIDS medicines from $12,000 to $300 the United States could not stand on the sidelines when doctors were telling patients who could not afford the medicine

"to go home and die." He successfully campaigned for a five-year fifteen billion dollar appropriation for what we expected would include the low cost medicines he cited in his talk.

That did not come to pass. Quickly the multinational lobbyists converted that promise into a series of barricades that effectively prevented widespread generic competition.

For those of you who do not remember, the World Health Organization with the help of all western nations except the United States that had refused to participate, created a European-based pre qualification process including on site GMP inspections, bio studies to insure interchangeability with the brand products and was, in effect the system that Europe, Canada, Australia and others ***required for their own citizens.***

For the Bush monies, the United States insisted on the additional approval of the Food and Drug Administration an expensive, lengthy and unnecessary process.

A Catholic Church relief organization in Africa, in protesting to the US government, spoke for the NGOs when they reported that the US mandate to only purchase the expensive brand name products meant they would have to dramatically curtail their treatment of dying patients. In addition, the multi-tablet regime of the brand name products purchased from three different companies...the multinationals refused to join forces and create a combination triple...required a parallel distribution and education process which would create chaos and reduce the monies available for treatment.

One by one the generic companies seeing the impossibility of opposing the nation with the purse strings and the imminent award of seven billion dollars for AIDS from the President's pledge, began to seek the un-necessary requirement of FDA approval.

The disappointment ran deep. Those working with dying AIDS victims...including this speaker... had cheered the President's pledge as the first light at the end of the dark AIDS tunnel in the poor nations of the world. Two billion a year for five years at $200 a patient was almost too good to be true.

My friends think I am either nuts or naïve, but I believed that President Bush meant the monies to be spent on the lower priced medicines without the roadblocks. Maybe he will read this...who knows. Miracles do happen.

The life-and-death FDA change was a one-day story in the media.

Former President Clinton summed it up this way:

"We have the affordable medicines to convert a certain death sentence into a chronic illness and we are not using them."

• *The Strange Alliance of Novartis and WHO on Malaria.*

Among those who die of malaria each year are more than a million children and once again medicines are available to save their lives.

As most of you know, the two low cost medicines (chloroquine and SP) traditionally used to treat malaria became ineffective due to resistance and WHO correctly recommended that in most cases they no longer be used. On that basis, funding sources, in most instances, refused to finance purchase of the ineffective medicines.

Fortunately, a Chinese herb, Artemisia annua, produced the leaf from which artemisinin is extracted. This substance when combined with another generic product to increase its half-life, artemisinin creates the medicine...the Artemisinin-based combination (ACT)...so urgently needed for hundreds of millions of people at risk of succumbing to drug-resistant falciparum malaria.

Artemisa grows wild and was harvested and processed by companies in China and Vietnam. Fortunately, Artemisa could be grown in many climates and could be farmed by both small and commercial farmers. The crop takes nine months to ripen.

On an urgent basis, international agencies asked our help to encourage generic manufacturers to enter the market with ACTs. We were formally advised that the only product in the market, Novartis' Coartem ...a combination of artemether, from artemisinin and lumefantrine ...was too expensive when compared to the products it was replacing.

One of the several recommended treatments was a more affordable and effective artemisinin-based combination therapy containing amodiaquin, the generic drug increasing the medicines half life and making it an effective treatment for the "hundreds of millions of people" that WHO said were at risk of drug-resistant falciparum malaria." WHO estimated the need at 130,000,000 treatment courses in 2005.

As in the Tamiflu case just one company without competition to keep prices fair cannot meet the need.

The Global Fund quickly adjusted its financing for the replacement products.

Generic companies were also advised that a public-private partnership was working to create a synthetic artemisinin but the results were four years off. They were advised no patent claims would result from the synthesis process. This, however, created a "glass ceiling" for investors knowing that their crop might be archaic and the small farmers would need new crops to sustain the new income from artemisinin. This created special circumstances that investors needed to incorporate into their planning.

WHO also indicated Novartis would not exercise patent rights for Coartem.

On the basis of this information, generic companies began to formulate and manufacture ACTs.

Quite suddenly new problems emerged. With the willingness of the Global Fund to fund ACTs, China and Vietnam quickly formed a virtual cartel and raised prices nine hundred percent. Official "jaw boning" failed to control the rise in prices.

In June 2005 the various malaria "stakeholders" met in Arusha, Tanzania only to learn that Novartis would ***not*** *permit generic competition for Coartem and planned to maintain its control over what amounts to a monopoly market. Their plan was identical to the one created by the multinationals that prevented and later delayed the use of generic AIDS medicines pre-qualified by WHO.*

WHO had agreed to become the "agent" for Coartem in exchange for a Novartis commitment to sell the product in the poor nations at a no-profit price, to say the least, a unique situation?

Further, WHO recommended Coartem as a "first-line treatment" and refused to give similar status to the ACTs they had so actively and effectively promoted. Subsequently, African countries reluctantly listed Coartem as their drug of choice.

Novart is notified the countries present in Arusha they could not meet their WHO commitment to provide the required supply of Coartem; they told the nations represented in Arusha that Novartis would not be able to confirm orders until one month before they were due for shipment. Only in rare situations would any commercial operation accept such terms without severe penalties.

WHO remains unable to answer a key commercial question about the non-profit agreement: Did this WHO quotation include certain corporate-wide costs that in multinational companies are standard procedure. Those costs when added to production had forced several brand companies to abandon their efforts to compete with generic companies.

In its report on the Arusha meeting justified some of their actions based on their belief that when the "alleged" Coartem patent expired there would be generic competition.

Those of us who had campaigned to interest generic companies in manufacturing ACTs felt betrayed. One European company threatened a legal action based on the decisions announced in Arusha. As a concession, the Chinese and Vietnamese companies attending the Arusha meeting privately pledged to use their new profits to expand production. Some manufacturers learned that Novartis had committed itself to much of the added African production.

• *Sanofi-Aventis Malaria Products Will Not Be Patented*

In contrast to the Novartis stand, Sanofi-Aventis said it would not patent its malaria fixed dose combination (FDC)...all drugs in one tablet...similar to the AIDS triple...and would assist companies interested in making the product. This commitment appeared to be reinforced in a private letter from the Chairman to Sanofi-Aventis executives explaining this was a humanitarian project and urged them to assist both manufacturers and growers whenever possible.

I find the WHO-Novartis stand incomprehensible and contradictory, one that demands a clear explanation without the expressed fear that Novartis would withdraw its offer to WHO if hard questions were asked.

Well, we are asking hard questions that require answers. For Novartis, a very successful competitive company, it is a valid commercial inquiry. They must answer the questions raised. Too many lives are at stake.

• *Generic Biotechnology Competition Stopped by Politics.*

In my own industry, generic biotech, politics blocks regulatory pathways for these prohibitively expensive products. As you heard yesterday, upwards of thirty percent of new products are biologically conceived and it is estimated that within a few years that market share will rise to forty percent. These products sell for $3,000 to $300,000 per patient year, with clusters at $12,000 and $50,000.

Many of us have developed medically interchangeable medicines for biotech products whose patents have expired. Right now these pilot batches await regulatory pathways in Europe and the United States. Without procedures to prove generic and brand biotech products are interchangeable, it is impossible to offer competition in developed nations to the fastest growing segment of the pharmaceutical industry.

To provide politicians with some shred of credibility for opposing the creation of these regulatory pathways, the biotech multinationals have once again disguised and dressed up their argument as scientific. This is precisely the argument used to keep chemical generics out of the US market for thirty years.

Before that political barrier to chemically based products was removed, the generic industry only captured a seven percent market share ***after*** *a patent expired. Most consumers were forced to pay brand prices for their medicines, frequently forcing those without coverage or resources to go without their medicines.*

Today, within weeks after a patent expires, up to eighty percent of the market shifts to generics with up to a ninety percent reduction in price. That is what will happen when the biotech pathway is established.

The brand biotech industry has good cause to fear us: we know the actual cost of manufacturing these products and as they are revealed the unconscionable profits generated will shock the world.

There is one harbinger of hope on the horizon: Europe seems to be moving towards providing regulatory pathways for generic biotech products.

Other Current and Effective Barriers to Generic Competition

The most serious deterrent to low priced medicines for the poor nations of the world began with the World Trade Organization and its pharmaceutical contents that mandated twenty-year patents for all new medicines (excluding certain additional periods of market exclusivity). The poor nations of the world were reluctant signatories but they were "sweet talked" into believing that provisions would be included to allow a nation to declare a medical emergency and move aside patents. The "small token" left on the night table turned out to be counterfeit: the promise that poor nations could sell their agricultural products to the west. As you know, European and American subsidies made competition impossible. The United States has offered to change its policies, but Europe stands firm.

Not satisfied with the WTO Pharma provisions, the United States has entered or is entering into bi-lateral agreements eliminating many of the protections promised when the poor nations signed up. While these negotiations are underway or after they are signed, few are aware of the small print designed to delay or exclude generic competition. Only recently have the Latin American nations resisted the US pressures; similar rebellions are occurring in Thailand and perhaps in Australia. But with the media generally unaware of the consequences of these deals, opposition is slow in forming.

Finally, let me share with you one or two cute tricks used to prevent low cost generics from their markets.

So-called "Lesser Developed Nations (LDCs)" were given additional time to conform to WTO requirements. Sounds good until you hear the rest of the story.

The LDC definition was decided in an obscure United Nations Committee. ***I believe deliberately excluded from the LDC exemption were the only nations capable of exporting generic medicines: India and China.***

We must reopen the definition of Lesser Developed Nations and include those who can supply them. It remains to be seen if the UN will cooperate with us.

Key to acceptance of the WTO agreement by poor nations was the pledge that poor nations in a health crisis have the right to move patents to the side and either import or manufacture the needed medicines. That provision has never been used even when AIDS medicines cost $12-15,000 a year and generics were available for under $200. Most nations complain the procedures are unclear, archaic and require concessions difficult for them to accept. They seldom report the behind-the-scene promises or threats.

How can you change WTO actions when 147 nations votes "yes" and one nation votes "no" ...and the one "no" vote carries the day. WTO requires consensus.

That vote took place just before the WTO meeting in Cancun in 2003. On the agenda was the unanimous Doha Declaration that removed many of the restrictions against generic competition. Guess who voted "No?"

• *The Sunny Side of the Street*

Dr. John P. Garnier, Glaxo's Chairman, recently told BBC 4 "patents were not an issue in increasing the supply of Relenza" the other avian flu drug. He said he would license competition and has actively sought out generic and other manufacturers.

As noted earlier, Sanofi-Aventis will not exercise patent rights for its malaria breakthrough.

In full-page advertisements carried in newspapers and magazines throughout the world, Cipla posed the issue of patents vs profits vs lives this way:

"What's the use of developing life-saving medicines if you can't make them available to the patient?"

Somewhere between these two truths is the logical and socially responsible answer.

Thank you for listening.

If Truth Be Told

"How Diverted AIDS Funds Resulted in a Million AIDS Deaths and Threaten a Million More."
April, 2009

More than a million persons have died from AIDS as the result of a "mysterious" regulation that crippled the program former President Bush considers one of his major accomplishments in office.

The lives of a million more are now in immediate jeopardy.

A stroke of a pen can save those lives.

That's the hard truth.

Here's the full story.

- ***Background:***

In his 2003 State of the Union, President Bush reached out to Congress for massive assistance to the worldwide AIDS program. In emotional terms, he leaned forward and told the Congress:

"Because the AIDS diagnosis is considered a death sentence, many do not seek treatment. Almost all are turned away...A doctor in rural South Africa describes his frustration...many hospitals tell people, 'You've got AIDS. We can't help you. Go home and die.'"

He continued:

"...no person should have to hear those words...the cost of these drugs have dropped from $12,000 a year to under $300 a year which places a tremendous possibility within our grasp...seldom has history offered a greater opportunity to do so much for so many."

With unexpected speed Congress created PEPFAR ("The President's Emergency Plan for AIDS") and appropriated fifteen billion dollars to be spent over five years for worldwide treatment of AIDS, the first light at the end of the AIDS tunnel. In 2008 Congress approved another fifty billion dollars for AIDS and Malaria.

PEPFAR became a hallmark of Bush's effort to rehabilitate his reputation overseas, a goal he enhanced in Africa as evidenced by the recent Associated Press headline from South Africa: Bush's Legacy: A Thank-You from Africa for His War on AIDS. "A chorus of praise for George that echoes (from South Africa) to the desserts of Namibia, the hills of Rwanda and villages of Ethiopia." On April 9, 2009 the Washington Post, citing an academic study, joined in the praise: "One of the more positive legacies of the Bush administration is...PEPFAR. It is an unprecedented multiyear and multibillion-dollar commitment by the United States to combat the epidemic's deadly march across Africa.

The former President never misses an opportunity to remind his audiences that only 50,000 of the thirty-six million afflicted with HIV/AIDS in sub-Sahara Africa were being treated before PEPFAR.

Why then did a million people die when monies were available to keep them alive?

And why are another million now vulnerable to the same "mysterious" regulation?

• *The Inside Story:*

What former President Bush did not reveal... or did not know... and he may not know to this day...was why, deep inside the White House the regulation was created and a well coordinated team from the White House, the State Department, the Trade Office, the AIDS Czar and Health and Human Services continued to oppose what the President had promised in his State of the Union and Congress ratified?

Before PEPFAR, members of team had joined thirty-four multinational pharmaceutical companies in their legal action to prevent implementation of South Africa's "Medicines Act' that allowed sale of lower priced generic drugs, including those for AIDS. The White House argued that permitting the use of generics conflicted with "intellectual property rights."

They had good cause to be concerned.

• *Enter Dr. Yusuf Hamied:*

In 2000, Dr. Yusuf Hamied responding to desperate pleas from religious and non-governmental organizations, created a fixed dose combination of the three most important AIDS medicines, Triomune, (the "triple") reducing the virtually prohibitive daily regime of a dozen doses a day from three multinational companies to a single tablet taken in the morning and another at night ***and dramatically cut the yearly patient cost from $15,000 a year to a dollar-a-day.***

Triomune became the World Health Organization's recommended first-line treatment for AIDS a judgment accepted by every developing and poor nation, but implementation was blocked by Pharma's legal action in South Africa.

Tragically, Dr. Hamied's accomplishment went virtually unnoticed by the popular and the medical media.

• *Unexpected Help:*

Unknown to Dr. Hamied, a team working within the Ralph Nader network were seeking to locate the raw materials used to create AIDS drugs, a step towards providing the world with a generic equivalent.

David Langdon, an associate and a former Peace Corps Volunteer in India, reached out to me as a generic drug manufacturer to see if I could assist the Nader team that included John Richard, who managed the Nader network, Jamie Love and Rob Weismann who were focusing on removing barriers to the enactment of the Medicines Act.

I could not answer their question and I left the Washington meeting with four squares drawn on a blank sheet of paper each with a question mark inside.

Back in New York, I called Agnes Vares a major importer of raw materials for both brand and generic companies and at the time a Member of my Board of Directors. She was and remains a major humanitarian in her own right. She had our answer.

"Dr. Hamied," she said, "he's a brilliant chemist...a PhD from Cambridge...he is the Managing Director of Cipla in India...he's an iconoclast and a humanitarian who is not frightened by the multinationals."

My next call was to Dr. Hamied and within twenty minutes I knew Agnes was right and three days later our team was on a plane to London where we were joined by Dr. Denny Broun, a talented and dedicated French physician I first met at the World Bank where he fought to obtain medicines for poor nations that lacked a voice inside the Bank bureaucracy. At the time of our meeting Dr. Broun was leaving Geneva to become Director of UNAIDS in India.

Dr. Hamied explained Triomune was manufactured in an FDA approved facility using western standards. He said, with volume, Triomune could be sold at a dollar-a-day. He reminded us that under TRIPS (Trade Related Aspects of Intellectual property), created under the World Trade Organization, poor nations had the absolute right to import or manufacture Triomune or similar generic versions when medically required. He detailed the events, that made it impossible for him to market his product in Africa.

We listened and said we would volunteer to help politically if he would not give up his crusade. I was designated as the team's leader.

What could we accomplish?

• *A Happenstance Meeting in Paris:*

In the months that followed our commitment to Dr. Hamied, a happenstance meeting in Paris between the leadership of Doctors Without Borders (MSF) and Jamie Love led to a chain of events that was to open up the door to generic competition for AIDS medicines.

At the Paris meeting Jamie told the stunned MSF leadership of Hamied's work and within the hour they were on the phone with Dr. Hamied in Mumbai and agreed to join forces. It was one thing to step on Dr. Hamied, but another to step on MSF that had won the Noble Prize in 1999.

Within days the alliance between MSF and Cipla and the price comparison of $15,000 a year to a dollar-a-day was reported on the front page of the New York Times in a story written by Donald McNeil. In the days that followed his story, editorials throughout the world cried "shame". The Wall Street Journal wrote four lead stories explaining what was happening, keeping the outrage alive.

Fearful that the "pitchfork" anger ...not dissimilar to the rage following recent AIG revelations...was mounting, the multinationals called a press conference to announce they were withdrawing their legal action.

From bitter experience the generic industry knew what could happen next. The multinationals would fight generic use in each country and for each drug, delaying the process until generics were outspent and unable to proceed. It was a tactic that worked before.

There was one answer to that threat: "one-stop shopping".

Within a week Dr. Hamied and MSF arrived in Geneva to ask for a universal medical protocol that would be recognized in all developing and poor nations.

Fortunately, there was an unsung hero at WHO: Dr. Lembit Rago who had contemplated a similar plan. Subsequently, he brought together a distinguished team of regulators from the EU, Canada, Scandinavia and South Africa (the United States declined to participate, following its "goes it alone" philosophy). Six months later Dr. Rago was ready. The inspections paralleled western regulatory requirements including independent clinical studies and plant visits; soon generic drug applications were submitted and approved.

After investigations, a WHO committee of experts named the generic "triple" ...now produced by several companies...as first-line treatment for AIDS and no nation opposed their recommendation.

• *The Bush Administration Strikes Back:*

At the UN, Secretary General Kofi Annan recommended a central source for combining assistance for financing the disease and the Global Fund to Fight AIDS was created in Geneva. The Fund announced that WHO pre-qualification would be required to obtain financing.

Inside the Fund, the Bush Administration was represented by Ambassador William Steiger who was quick to alert Geneva he was a Godson of Bush One and that he had close personal and political ties to "his friend" Vice President Cheney. He warned the Fund if they used monies to finance generics, the United States would withdraw its funding, the Fund's largest contributor. Secretly, the Fund capitulated to US pressure.

But as fate would have it, another courageous civil servant risked his job when he asked me to meet him at a small coffee shop at the Geneva airport. There he silently pushed across the table an internal memo objecting to Ambassador Steiger's threat. Within days the story reached the New York Times and a few days later, as quietly as it had denied generic funding, the Fund changed its policy and required generic drugs preapproved by WHO, as a prerequisite for funding. The savings were enormous, "almost unbelievable" an African Ambassador told me.

The Bush Administration continued its opposition in other forums, often at worldwide meetings called to debate the wisdom of accepting WHO's regulatory procedures. These arguments forcefully presented secretly and effectively with some in UN leadership positions and in the public forums were "recycled" ideas used earlier to discourage generic use in the United States.

Their arguments were given pseudo "scientific" credibility in parallel campaigns by the American Enterprise and Hudson Institutes, often identified as "right wing think tanks." Both Institutes had immediate access to the media. We wondered "why in the hell's were they involved in denying generic AIDS medicines to poor nations?"

In one of the Geneva meetings held in the days before Christmas, 2002 the multinationals presented arguments for delay and "reflection" and were joined in the audience by academics from as far away as South Africa. When I questioned the sponsorship of some of the so-called "academics" their link to Pharma emerged but they claimed the ideas represented their "professional" views. Although outnumbered, the Non-Governmental organizations (NGOs) were represented; I spoke for the generic industry and believed we had lost the day.

At the conclusion of the meeting the Co-Chairperson, a respected professor at Columbia University, who had said little during the Conference, stood, leaned on his hands and in a soft, neutral voice said (paraphrased):

"I think you should know I am alive today because I had access to the medicines we are discussing."

The audience, somewhat surprised, remained silent, but they had no difficulty in understanding his message.

At a UN meeting chaired by Kofi Annan and attended by the Caribbean nations, the United States, the multinational pharmaceutical companies and the Caribbean nations signed on to a plan which, effectively, banned the use of generic AIDS drugs. Generic companies were prohibited from attending.

Two years later, at a meeting of the Ministers of Health from the Andean nations and Mexico, held in Lima, Peru Pharma attempted to extend the Caribbean...and by then the Central American nations...agreement to those nations. The Ministers made no secret of their contempt for the proposal and instituted one of their own, competitive bidding. The Pharma companies (with one exception) walked out and boycotted the meeting. Once again, a courageous bureaucrat within the Pan American Health Organization (PAHO), at great risk to his career, paved the way for the rejection of the U.N. decision.

• *Undermining the President's State of the Union Pledge:*

Shortly after Congress approved financing for the Bush initiative, Dr. Anthony Fauci, a respected scientist at the National Institutes of Health announced generic drug approvals would require FDA approval, a long costly process including long waits in line. Why Fauci? He was not in the regulatory process; that was FDA's domain?

Further, the generic "triple" ...Triomune...although widely used throughout the world...was classified as a "New Drug" and would require a long, expensive FDA process and could not use the US generic process, the Abbreviated New Drug Application (ANDA).

At week later, at a worldwide AIDS forum, Dr. Fauci and HHS Secretary Tommy Thompson were forced to answer questions from an outraged AIDS community. Why FDA? They were joined by many nations. But it was the international media's unending questions in press conferences that enraged the US delegation. In the end, when the U.S. delegation returned home, the FDA requirement was quietly withdrawn...but not for long.

Six months later, again without consultation, the FDA requirement was re-introduced in a front page, lead story in the Sunday New York Times. It was difficult to pinpoint who ordered the reinstatement of the requirement. The government was quoted as saying it would only require "weeks" for FDA approval. We knew it was impossible to obtain an NDA within weeks. By that time, the triple was in universal use. That use would continue, but without the PEPFAR monies. Once again the Administration had lied. They had withdrawn the requirement until the media lost interest and the NGOs went on to other causes.

As Chairperson of the FDA initiated "International Association of Generic AIDS Manufacturers (including Malaria and TB), I fought the requirement but could not gain traction either politically or in the media and finally capitulated but not before meetings at which most members of both FDA divisions were present either in person on by the microphone set in the middle of the conference table.

My message did not hide the facts or adhere to the FDA "rules of the road."

Paraphrased, this is what I said in a voice that did not disguise my anger:

"I realize this is not a scientific or FDA decision (I noticed some of those who came in their Public Health Service uniforms, quietly nodding their heads), it is a political decision that will result in millions of unnecessary deaths and is in direct contradiction to what President Bush initiated and Congress approved, but I have no other alternative, so on behalf of the Association, we capitulate."

• *Three Years for Approval With No Changes Required:*

FDA could not have been more cooperative but it required ***three years for Triomune to be approved. In the end, the FDA did not require a single change from the information previously submitted to WHO. During those years the brand name products President Bush rejected in his State of the Union were sold at four to eight times the generic price and treatment reverted to the rejected and difficult regime.***

As a result it is estimated that more than a million patients were denied treatment and died.

It was not a result that had not been forecast by the victims themselves. In Botswana, at one the Bush Administration's meetings to gain support for the FDA requirement, a woman who ran a Catholic AIDS Center predicted that for each patient she saved four would die (others said eight) and the dual regime of the PEPFAR brand requirement and the generic would also require dual staffing due to the different regimes.

Her concerns were rejected by Dr. Mark Dybul and other Bush executives managing the Botswana conference. Later, Dybul was raised to the rank of Ambassador and named to run the PEPFAR program. He never abandoned his anti-generic bias. In a Congressional hearing, he provided evasive answers when asked about the use of generics. When he finally released the data he cleverly dated results beginning after the triple was approved and nations were free to choose the generic triple...which they did.

Surprisingly Dybul was asked to remain in place at the outset of the Obama Administration, but a few days later, he was asked to clean out his desk and leave.

In addition to Thompson, Dybul and Steiger, the "hit team" included Randal Tobias, the AIDS Czar and former CEO of Lilly, Inc. who refused to consider removing or altering the FDA requirement, arguing that the United States requirements were superior to other approval programs and insured the safety of the medicines. He left government after his own indiscretions were uncovered.

• *The Results: 1.5 Million Use Generic Drugs*

Today more than 1.5 million persons in sub-Sahara Africa use generic medicines, up from the 50,000 former President Bush uses as his landmark. With brand prices dramatically reduced, another 500,000 continue to use medicines from multinational companies. The multinationals have refused to combine their medicines into a triple arguing that could invite "anti-trust" actions. The generic response: "...we will be your first witness in Court."

When they also rejected the plea to cooperate in developing a pediatric triple, Dr. Hamied, working with British scientists developed and manufactured the medicine. It sells for fifty dollars a year and has FDA approval.

• *Another Million May Die:*

About ten percent of the persons using first-line treatment must switch to a newer combination drug to stay alive. These "follow-on" medicines are too expensive for poor nations, but at the urging of NGOs and WHO the generic industry has created new combinations, some already submitted to WHO but generic companies are reluctant to submit dossiers to FDA because the expense and potentially long delays discourage them from going down the same road, a road now covered with the rose petals of PEPFAR financing.

Unless these medicines are made affordable, it will be déjà vu all over again, and another million or more patients will die. But there is a way out.

• *The Way Out:*

In approving the current fifty billion dollar PEPFAR appropriation, the Congress accepted a revision by Senator Kennedy allowing the HHS Secretary to designate another regulatory agency to conduct the studies and receive PEPFAR Funds.

Decades ago, US pharmaceutical companies complained that delays in FDA approvals were delaying sales in countries that had already approved their medicines. They threatened to move production overseas to reach those markets. If they could manufacture those medicines in the United States and ship to countries where they were approved and not wait until FDA approval movement of manufacturing would not be required.

Senator Kennedy (with the support of the generic industry) added a stipulation to the Pharma legislative exception: the drugs could be manufactured in the United States and sold abroad if the receiving nation had a strict regulatory authority. Leaving nothing to chance, Senator Kennedy named those countries.

As fate would have it, regulators from many of those countries created the WHO program.

The loophole in the current fifty billion dollar appropriation allows the HHS Secretary, with a stroke of his pen, to designate another regulatory authority to replace FDA approval, opening the door to a single approval, the WHO process.

If that happens, another million lives may be saved.

On AIDS Day in newspapers and magazines throughout the world, Cipla ran a single quote, mid-page, from Dr. Hamied:

"What's the value of developing life-saving medicines if you can't make them affordable to the patient?

Anyone Out There Listening?