WHAT IS CYTOMEGALOVIRUS?

Cytomegalovirus, or “CMV,” is a herpes virus, and is related to the pathogens which cause herpes simplex, chicken pox and infectious mononucleosis. CMV is a common infection which 50% to 80% of all Americans have acquired by the age of 40. In gay men, the estimated infection rates climb as high as 90%. For most healthy persons who acquire CMV after infancy there are few symptoms and no long term health consequences. Some persons with symptoms experience a mononucleosis-like syndrome with prolonged fever, and a mild hepatitis. Once a person becomes infected, the virus remains alive, but usually dormant within that person’s body for life. Rarely does it cause serious disease unless the person’s immune system is suppressed due to therapeutic drugs or disease.

CMV is transmitted through prolonged contact with the body fluids of a previously infected person, and is most likely to be found in urine, blood, saliva, tears, semen and breast milk. CMV can also be transmitted to a baby through the placenta or during birth. A person may be secreting infectious CMV without any detectable signs or symptoms. However, most CMV disease in people with HIV is caused by reactivation of a previous infection when the immune system can no longer hold the virus in check.

However, for children, whose immune systems have not yet fully developed, and for people whose immune systems have been damaged by HIV or by immunosuppressive drugs, CMV can be a deadly infection.

CMV is the virus most commonly transmitted to children before birth. About ten percent of babies infected with CMV infection during pregnancy show symptoms of the disease, such as hearing and vision problems as well as mental retardation. In the U.S., more than 5,000 babies are born each year with some degree of retardation or deafness related to CMV infection.

For immune suppressed people — including people with AIDS — CMV most frequently causes retinitis, a disease of the eyes that may lead to blindness. CMV can also cause pneumonia or disease in the gut. Because CMV infects the whole body,
Cyclophosphamide

Cyclophosphamide, given in very low doses, may reduce the activity of B-cells, which are abnormally overactive in people with HIV and which may contribute to progression to AIDS. In collaboration with doctors at New York University, St. Luke's-Roosevelt Hospital, and Albert Einstein Medical College, CRIA has launched the first trial of this drug in AIDS. As uncontrolled use of cyclophosphamide may be dangerous, CRIA recommends using this drug only in controlled clinical trials. This study is now enrolling.

Methotrexate

CRIA is participating in this study organized by the National Institutes of Health. Methotrexate is an immunosuppressive drug used in cancer and autoimmune diseases. The study will evaluate the safety of the drug in HIV-positive people with at least 350T-cells. The study will also test whether methotrexate can inhibit immune activation, which is believed to speed HIV reproaction. This study is now enrolling.

Nutrition Supplement Comparison

Many people with late-stage HIV infection experience weight loss and, loss of lean body mass has been associated with risk of death in PLWAs. This study will evaluate two different kinds of nutrition supplements for preventing loss of lean body mass. People with HIV infection and less than 100 T-cells are eligible to participate. This study is now enrolling.

Testosterone

Many men with AIDS have low levels of testosterone, a natural hormone which regulates their secondary sexual characteristics. Testosterone replacement may help men with HIV gain muscle mass, and may improve mood, energy and sexual function. This 12 week pilot study will evaluate the effects of testosterone injections on mood and muscle mass of men with HIV infection, weight loss and low testosterone levels. All participants will receive testosterone as well as a state-of-the-art body composition analysis. This study is now enrolling.

The Kaposi's sarcoma (KS) Study

The KS Pathogenesis Project has sent nearly 100 tissue, urine and blood samples to our collaborators, at the National Cancer Institute. These samples were collected from people with AIDS-KS by our New York-based physician team. In September 1995, the project joined forces with Drs. Yuan Chang and Patrick Moore to further work on their discovery of the "KS herpes virus," which may be the cause of KS. The project is exploring the cause, growth and spread of KS lesions and is now enrolling.

Delavirdine (T90)

In order to infect new cells, HIV makes use of an enzyme called "reverse transcriptase." Delavirdine is a new drug that blocks the activity of this enzyme and prevents HIV from infecting cells. People with 200-500 T-cells who have taken AZT for six months or less will be assigned to receive AZT+delavirdine or AZT + placebo (sugar pill). People with less than 300 T-cells who have taken AZT, and who have been on ddI for less than four months will be assigned to take ddI + delavirdine or ddI + placebo. This study is now enrolling.

Norvir (Protease Inhibitor)

CRIA is participating in a study of Norvir (ritonavir), a member of a new class of drugs that inhibit HIV reproduction. This study of the drug is a follow-up to the one that resulted in the recent FDA approval of Norvir. We are now examining the long term safety and activity of the drug.

 Nevirapine

Like other available anti-HIV drugs, nevirapine prevents HIV from infecting new cells by blocking activity of the "reverse transcriptase" enzyme. CRIA is part of a collaborative effort to test the effects of Nevirapine on the immune system and on levels of HIV. This study has been completely enrolled.

For more information on any of these studies, please call Connie Abellardo, Gloria Howard-Mello or Douglas Mendez at CRIA at (212) 924-3934.
GANCICLOVIR AND FOSCARNET: THE FRONT LINES AGAINST CMV

Currently, the two main treatments for CMV are ganciclovir and foscarnet. Both drugs were approved by the FDA based on studies showing that they can delay progression of CMV retinitis. Both, however, may cause serious toxicity, and require special monitoring. The choice of appropriate treatments is often based on their different toxicity profiles, as well as on differences in the difficulty of administering the treatments. Although the variations in the way the drugs are administered are slight, they vary significantly in associated toxicities.

Both ganciclovir and foscarnet are administered by central intravenous lines, which require surgery to implant. The implanted catheter may expose a patient to the risk of serious bacterial infections, and must be kept very clean. People with catheters should carefully inspect the catheter insertion site each day, and report any evidence of irritation, infection, tenderness or fluid discharge immediately to their physician.

Ganciclovir treatment begins with a two-week "induction treatment," in which the patient receives a one-hour infusion two times a day. Patients then receive a one-hour infusion five to seven days a week for the rest of their lives.

Foscarnet treatment also starts with an induction treatment, in which the patient is infused with drug for two hours two or three times a day for two to three weeks. After that, the patient receives a two-hour infusion every day for the rest of their life.

Ganciclovir is bone marrow suppressive. About 30% of people taking the drug experience major loss of "neutrophils," a kind of white blood cell. This loss can be corrected by using drugs like Neupogen or Leukine. Other drugs that are bone marrow suppressive (including AZT, Bactrim and pyrimethamine) are often discontinued when ganciclovir is being used, although patients should make sure they continue some form of PCP prophylaxis. Normal neutrophil production usually resumes within three weeks of stopping ganciclovir or switching to foscarnet.

Since foscarnet is potentially damaging to the kidneys, patients need to carefully measure levels of creatinine, an indication of kidney function. Other drugs that are toxic to the kidneys (including amphotericin B and pentamidine) may interact with foscarnet. Kidney damage can largely be prevented by hydration. Concentrated foscarnet in the urine can cause ulcers on the genitals if excess urine is not blotted from the skin.

In general, foscarnet is less well tolerated than ganciclovir by many patients, with almost one in four participants in some studies discontinuing treatment due to toxicity.

Both drugs have been tested primarily against CMV retinitis and, while each is used to treat CMV in other body parts, a few doctors report that they may be somewhat less effective against CMV outside the eye. It is important to note that neither drug is a cure, and CMV relapses in most patients taking anti-CMV treatment.

A study which compared ganciclovir and foscarnet found that foscarnet alone extended life slightly as compared to ganciclovir. This may be due to the fact that foscarnet has mild anti-HIV activity, or it may be due to the fact that people found it easier to take AZT with foscarnet.

In a more recent study which compared both drugs alone to a combination of the two drugs, the time to progression was significantly longer on the combination therapy. In the end, however, these patients had a decreased quality of life due to the long daily infusion times and the combined toxicities of the two drugs.

Researchers are continuing efforts to make ganciclovir and foscarnet easier to take. An oral form of ganciclovir has been approved for maintenance therapy and for prevention of CMV (see page 10), and an oral form of foscarnet is currently being tested. Other treatment advances are also discussed in this newsletter. However, for the moment, patients and physicians making decisions about CMV therapy will have to carefully weigh the pros and cons of available treatment.
Between regular visits with your health care professional, check your vision at least once a week for any changes or problems. By doing so, you can have the best chance of detecting and slowing the progress of CMV reinitis through prompt treatment.

1. Make sure that the Amsler Grid (on page 5) is well lit and located at a comfortable reading distance.

2. With glasses or contact lenses if you wear them, cover one eye and look directly at the black dot in the center of the grid.

3. Keeping your eye on the center dot, notice whether the lines and squares appear straight and equal.

4. Repeat the steps for the other eye.

5. If any area of the Amsler Grid looks distorted, blurred, discolored or is missing (see examples below), call your health care professional.
CIDOVIR: NEW HOPE FOR PEOPLE WITH CMV
By: Kevin Robert Frost

In March of 1996, the FDA approved a new anti-CMV compound (cidovir) made by Gilead Sciences, a biotechnology company based near San Francisco.

As with other available anti-CMV treatments, CMV retinitis progresses in nearly all patients despite continuous daily infusions of the drugs. For half of the patients receiving either ganciclovir or foscarnet, this progression usually occurs within a few months after beginning therapy. Most researchers now believe that the reason for this rapid progression is that very little therapy gets into the eyes of patients when the drugs are given intravenously or orally. Furthermore, the surgically implanted intravenous catheters used to administer foscarnet and ganciclovir are often associated with problems such as infections in the bloodstream which can be very serious.

Earlier this year, FDA approved a form of ganciclovir that can be implanted into the eye. These implants, manufactured by the Chiron Vision Corporation, deliver more drug to the eyes at much higher doses and the time to progression is increased to around 210 days according to one study. However, the implants have to be inserted surgically, and in a small number of cases may cause retinal detachments, a serious complication where the retina of the eye separates from the wall inside the eye. While doctors can reattach the retina, this complication usually has severe impact on the patient’s vision. Furthermore, because the implant only delivers drug directly into the eyes of the patient, many doctors feel that patients need to have another medication to prevent the disease from developing in other parts of the body.

Unlike ganciclovir and foscarnet, cidovir (formerly known as HPMPC) does not depend upon CMV being active to fight the virus. This, in combination with what seems to be a much longer duration of activity of the drug inside the body, makes cidovir a very promising anti-CMV drug.

However, like all CMV therapies, cidovir also has side effects, most serious of which seems to be its impact on the kidneys. In the early studies of the drug, scientists found that cidovir could cause damage to the kidneys when taken at higher doses. However, by giving a drug called probenecid with cidovir, they were able to minimize these side effects. Unfortunately, probenecid, an older approved medication that is sulfa based (as is Bactrim/Septa, a drug commonly used to treat and prevent PCP), may also be associated with side effects.

Gilead Sciences conducted two important research studies that formed the basis for their application to the FDA. The first study compared 25 patients given cidovir to 23 patients who were untreated until the disease progressed. All study participants were newly diagnosed with CMV retinitis and had disease that was not considered to be sight-threatening.

Those patients who were assigned to the treatment group were given 5mg/kg of cidovir intravenously, once a week for the first two weeks, and then 5mg/kg of cidovir given intravenously once every two weeks thereafter. All patients were closely monitored by their ophthalmologists, and pictures of their eyes were taken at each visit.

The results of this study were first presented at the 2nd Annual Conference on Retroviruses and Opportunistic Infections held in 1995. Gilead reported that the time to progression for patients treated immediately with cidovir was 120 days, while the time to progression for those patients who were deferred therapy was 22 days.

The most common adverse event in this study was the development of kidney problems which resulted in nearly 25% of the patients in the treatment group having to stop their medication. Reactions to probenecid were common, and at least one patient in the study had to stop medication as a result of a probenecid reaction.

A second study performed by Gilead compared a lower dose of cidovir (3mg/kg) to a higher dose of cidovir (5mg/kg) in patients who had not responded to or were intolerant to ganciclovir or foscarnet. An interim analysis of the first 100 patients in this study showed that disease in half the patients receiving the 3mg/kg dose had progressed within 49 days, while half of the patients receiving the higher dose progressed within 115 days. The difference was considered significant, and the study was halted.

Again, in this second study, adverse events tended to focus on kidney problems resulting from the cidovir, and reactions to the probenecid. However, investigators were able to minimize the extent of the kidney problems by stopping cidovir at the earliest signs of kidney problems. Furthermore, by giving the study participants intravenous fluids, the investigators found that they could further reduce the side effects of cidovir.

In both studies cidovir seemed to be effective in slowing the rate of progression of CMV retinitis, with the second study showing a dramatic improvement from earlier studies in physicians’ ability to slow progression of disease in patients who were not responding to other anti-CMV drugs.

Gilead is currently conducting a study wherein cidovir is injected directly into the eyes of patients with CMV retinitis. This study, which only recently got underway, is attempting to

(Cont. on page 7)
FDA APPROVES IMPLANT TO TREAT CMV RETINITIS

In March, the FDA approved the Vitrasert ganciclovir implant, manufactured by the Chiron Vision Corporation, to treat CMV retinitis in people with AIDS. Ganciclovir, one of two standard treatments for CMV, is usually given as a daily intravenous infusion, requiring an implanted catheter which can become infected. The Vitrasert implant eliminates the need for the catheter and for daily infusions by gradually releasing the drug directly into the eye. However, some doctors remain concerned that limiting treatment to the eye may open patients up to the risk of CMV disease in other body parts.

The FDA's approval was based on two major studies of the Vitrasert implant. One study, conducted by the manufacturer, compared the Vitrasert implant to intravenous ganciclovir infusions in 188 AIDS patients with newly-diagnosed CMV retinitis. The study found that the half of the patients on IV ganciclovir had CMV progression within 104 days, while half of patients on Vitrasert progressed within 216 days.

The other study, conducted by the National Eye Institute (NEI) of the National Institutes of Health, found that half of patients who waited for treatment following their diagnosis of CMV progressed within 15 days, while half of patients taking Vitrasert progressed within 226 days.

Implantation of the Vitrasert implant takes less than one hour, requires only local anesthesia, and is conducted in an outpatient, day-surgery setting. Patients receiving the implant generally have blurry vision in the operated eye for two to four weeks following surgery. After five to eight months, the depleted implant can be removed and replaced.

There is also a slight risk of retinal detachment with the implant.

Chiron Vision and Hoffman-LaRoche, manufacturer of ganciclovir, are cooperating on an ongoing study to test the usefulness of combining the Vitrasert implant with oral ganciclovir to reduce the patient's risk of developing CMV disease elsewhere in the body.

CIDOFOVIR: NEW HOPE (CONT. FROM P. 6)

follow up on results that were reported last year by Dr. William Freeman of the University of California/San Diego, in which Dr. Freeman treated patients with CMV by injecting cidofovir. Gilead’s study is a dose ranging study, and the company hopes to be able to gather information on the most effective and safest doses of cidofovir when it is used in this manner. To date, the most significant toxicity reported in Dr. Freeman’s study has been the development of hypotony, which is the loss of pressure within the eye. Though Gilead hopes to have results from this study later this year, injections of cidofovir in the eye are not yet approved by the FDA.

In conclusion, cidofovir seems to represent an advance for patients with CMV retinitis. Since it can be given intravenously every other week and improves time of progression of CMV over existing therapies, cidofovir may change the way doctors treat patients with this disease.

Kevin Robert Frost is the Director of the Community-Based Clinical Trials Program at the American Foundation for AIDS Research

REVIEW OF U.S. AIDS RESEARCH PROGRAMS RELEASED

A panel of more than 100 scientists, AIDS activists, and representatives from academia, drug companies has released a historic review of the government's $1.4 billion AIDS research programs. The report was sponsored by the embattled Office of AIDS Research (OAR) at the National Institutes of Health (NIH).

The panel's report called for bold new initiatives, including:

- substantial increases in the amount of money spent on unsolicited research proposals;
- a major new effort to develop an anti-HIV vaccine;
- important new programs to study behavioral and social interventions;
- a merger of the 12 clinical trial networks now performing therapeutic research;
- increased study of alternative therapies; and,
- efforts to attract new researchers to the AIDS field.

The panel also expressed concern that information systems at the NIH are insufficient to allow for tracking of monies set aside for AIDS research. As a consequence, the panel concluded, a substantial proportion of NIH AIDS funds were spent on projects that were not related to AIDS. The panel recommended that a uniform definition of AIDS research be developed to guide future oversight.

The report has been approved by the OAR Advisory Council. OAR Director Dr. William Paul must now develop an implementation plan.
Catching Up on CMV Activism: An Interview with Lynda Dee

CRIA Update recently spoke with Lynda Dee, a long-time AIDS activist, and the Executive Director of AIDS Action Baltimore. Ms. Dee served as a member of the Community Advisory Board of the Studies of the Ocular Complications of AIDS (SOCA) Program, a network conducting research on CMV retinitis for the National Eye Institute of the National Institutes of Health.

CRIA: CMV treatment has changed a lot in the past year. Can you tell us a little bit about that?
Dee: The standard of care for CMV is completely in flux, because of the approval of the ganciclovir implant, oral ganciclovir and because of cidofovir.

Until recently, ganciclovir was the standard of care for treatment of CMV. However, it’s very toxic; patients had to be tethered to an IV pole for a good part of every single day, and a catheter had to be implanted in the patient’s chest, exposing him or her to the risk of serious bacterial infections. So, we’ve tried to find less invasive and toxic drugs.

For people with immediately sight-threatening CMV, the new ganciclovir implant may be a good option. However, there is a risk of CMV in other parts of the body: there’s about a 50% chance of CMV in the other eye, and about a 33% chance of CMV pneumonia or disease in the gut. We may be able to reduce rates of CMV outside the eye by using oral ganciclovir. If it were my body, I’d think twice about using the implant alone – it probably works great on retinitis, but as you’re dying, you’ll have 20/20 vision.

I think a lot of people are trying to make CMV treatment better for patients, but the jury is still out. There are a lot of people trying a lot of different things – loading doses, changing maintenance doses, but no home runs yet. We’ve still got a lot of work to do.

CRIA: Where are we with CMV prophylaxis (prevention)?
Dee: I’m not sure what to tell you about the state of CMV prophylaxis. The main candidate right now is oral ganciclovir, but there have been studies that conflict about whether or not it works. The manufacturer has agreed to do another study using PCR technology (a way to measure DNA) to find out what’s going on here.

It’s important to remember that CMV mainly occurs in patients with less than 50 T-cells, and that only about 30% of those patients will get CMV. We need to be able to target prophylaxis to patients at highest risk. Maybe by using PCR, we can identify patients who are most likely to get CMV, and treat or prevent the disease.

The most important thing is to get doctors to warn their patients about the symptoms of CMV – floaters, blurry vision, sections missing from your vision. If you can get to an ophthalmologist and start treatment immediately, the outcome will probably be better.

CRIA: Do you think there are any “gaps” in CMV research?
Dee: We could really use some new drug development here. We need to look at immune function as a factor in development of CMV. Some researchers hope that by building the immune system, patients can fight CMV off. It’s a great idea, but it might be light years away. We also need some more basic science on the immune response to CMV.

CRIA: Has SOCA done a good job on CMV research?
Dee: SOCA has done a great job if an eyeball could walk down the street, talk, act and live your whole life for you. I just think you have to look at the whole body – both HIV and CMV are whole-body diseases, and you have to look at the way that all of these things interact. These people are ophthalmologists, not infectious disease specialists, and I’m not sure that personalitities haven’t gotten in the way of collegial cooperation. SOCA has an autocratic style, and a lot of people – both community representatives and investigators – have had a problem with that.

CRIA: Anything you’d like to say to people with CMV?
Dee: We’ve got a lot of work to do. The community needs to re-invest in this. I don’t see anything getting better without a lot of work -- and patients play a key role in that. In particular, they have to be willing to participate in studies.
it can cause illness in the brain, kidneys, throat, gall bladder, liver and other organs. Most people with AIDS do not develop detectable CMV disease until they have less than 50 T-cells. More than 90% of people with AIDS show signs of active CMV infection, and almost one-third will experience serious CMV-related disease.

CMV Retinitis

CMV retinitis is a sight-threatening eye infection which, left untreated, progresses relentlessly in about 90% of all patients. However, there are treatments that are available that can slow the advance of CMV retinitis, and help to stop progression of the disease from one eye to the other.

CMV directly invades the tissue of the retina in the eye, causing tears and tissue destruction. These tears can result in permanent loss of vision since retinal tissue cannot repair itself. The disease can also interfere with the optic nerve.

If the disease begins on the outside of the retina, then people may experience "floaters," or loss of peripheral vision. If the disease begins near the interior of the retina, then the patient will lose patches of sight or even have decreases in central vision. CMV retinitis is not usually associated with redness of the eye, pain or sensitivity to light.

CMV retinitis is usually diagnosed by an ophthalmologist. Patients with very low T-cell counts should receive a regular ophthalmologic examination. In addition, people who think they might be at risk can monitor their vision using the Amsler Grid on page 5 of this newsletter.

Available treatments may arrest the progression of CMV, but cannot eliminate the virus from the retina. Consequently, once CMV is diagnosed, the patient will usually require treatment for the rest of his or her life.

There have been many recent advances in CMV treatment, some of which you can read about in this newsletter. In the coming years, researchers hope that CMV therapy will become more effective, and less difficult for patients to tolerate. Realizing this goal will require a much greater commitment to CMV research.

IS 50/50 GOOD ENOUGH FOR YOU?

PREVENTING CMV: WHO KNOWS WHAT TO DO?

In an effort to make CMV treatment easier to administer, manufacturer Hoffman-LaRoche developed an oral formulation of ganciclovir. At first, the drug was used for maintenance therapy in patients who already had CMV. Studies suggested that oral ganciclovir could delay disease progression, as compared to "delayed treatment," and the drug was approved for use as maintenance therapy in November of 1994.

Researchers also tested oral ganciclovir for preventing CMV in patients with advanced AIDS and no signs of disease. In a study designed by the manufacturer, oral ganciclovir was able to halve the rate at which patients developed CMV disease as measured by very advanced diagnostic techniques. There was also some suggestion that patients using oral ganciclovir lived longer than patients who did not, however this trend was not significant, meaning that researchers could not be sure if the survival difference was real.

However, another study, conducted by the Community Program for Clinical Research on AIDS (CPCRA), used a different method for diagnosing the disease. This study focused on the kinds of diagnostic techniques more commonly used by doctors in the community (non-opthalmologists), and found no reduction in rates of CMV for patients using oral ganciclovir. Again, there was a suggestion that oral ganciclovir might prolong survival, however the results were not significant.

CPCRA researchers have suggested that some of the discrepancies in study findings may be a result of interactions with other AIDS drugs. Further analysis is underway.

Overall, oral ganciclovir appears to be less toxic than I.V. ganciclovir. While the toxicities that do appear, including anemia and neutropenia, are the same, the rates and severity of toxicity seem to be decreased using oral ganciclovir.

In 1995, the FDA approved the drug for use in preventing CMV in very advanced patients (usually people with less than 50 T-cells). However, oral ganciclovir is very expensive, costing about $20,000 per year. People considering its use should, therefore, think hard about the different information about the drug's usefulness, as well as the toxicities associated with treatment, and the cost.
On March 1st 1996, the Food & Drug Administration approved Abbott Laboratories’ Norvir™ brand ritonavir for sale to people with HIV/AIDS, based on evidence that the drug could lower viral burden and improve T-cell counts in healthier patients, and could delay disease and death in sicker patients. CRIA was a participant in one of the key studies leading to this approval.

In a study of more than 1,000 patients with less than 100 T-cells, the death rate in patients taking standard anti-HIV drugs in combination with Norvir was about half that of patients taking only the standard treatments.

The study lasted only about seven months, and researchers caution that the effects of longer Norvir treatment are, as yet, unknown.

Norvir is one of only four drugs that have been shown to extend survival free of new AIDS-related events. In particular, many doctors are impressed that the drug is so effective in very late-stage patients.

However, Norvir can cause severe side effects, including nausea, vomiting, “taste perversion,” a tingling sensation in the lips and mouth, and abnormal sensations, like a severe sunburn. Norvir is processed by the liver, which takes about two weeks to begin fully metabolizing the drug, and until then very high blood levels may result in serious side effects. After two weeks of treatment, most of the side effects are expected to pass, but they can be reduced by taking ritonavir with meals that have a high fat content.

Sharon Mester, a PLWA in New York, said, “On about the fourth day of taking this drug, I felt like I was going to die. I talked to my doctor, and she recommended that I keep taking the capsules for a few more days. The side effects started to get better and eventually they went away.”

Abbott Laboratories has also recommended that patients beginning treatment with Norvir “dose escalate.” They suggest beginning with three capsules twice a day for one day, then increasing to four capsules twice a day for two days, then five capsules twice a day for one day, and then up to the standard dose of six capsules twice a day.

David Barr, Director of Treatment Education and Advocacy for Gay Men’s Health Crisis, said, “It’s important that people understand that these drugs are very different from the kinds of anti-HIV drugs we’re used to. We can’t just change doses to reduce side effects. We can’t just stop doses, or take a few days off from treatment. We can’t just combine protease inhibitors any way we want to. Also, we have to be very careful about what drugs we’re taking with our protease inhibitors.”

Because of the way that the liver processes Norvir, the drug may interact negatively with many other common medications, including some drugs that are often used to treat PLWAs. In particular, a treatment called rifabutin, which is frequently used to prevent Mycobacterium avium Complex (MAC) should not be combined with Norvir. A complete list of drugs that should not be used with Norvir is provided in the table at the center of the page.

Abbott Laboratories has compiled an education program about these interactions for patients and physicians. For more information, call 1-800-441-4987.

The company has also developed a special initiative, known as the Norvir Reimbursement and Temporary Assistance Program (NOR-TAP) for uninsured patients and other people who cannot afford the drug. People with HIV/AIDS can call 1-800-659-9050 to get an application. Based on information provided by the patient and physician, a consultant will review the application and determine eligibility for the program.

Norvir comes in a liquid or a capsule form. The capsules seem to cause less toxicity than the liquid. Both forms must be refrigerated: the liquid form can be left out of the refrigerator for about 30 days, while the capsules should be unrefrigerated for no more than two days.

Spencer Cox is the Editor of CRIA Update.
CRIA WELCOMES NEW STUDY COORDINATOR

CRIA's Research Department is welcoming a new staff member -- Study Coordinator Douglas G. Mendez-Leger. Dr. Mendez-Leger was born and educated in the Dominican Republic, and has worked as Senior Research Coordinator at the Bronx-Lebanon Hospital Center's community-based research program. His specialty is obstetrics/gynecology, and he has published a number of articles on the subject.

Clinic Director Dr. Connie Abelardo said, "Dr. Mendez-Leger brings an outstanding and important set of skills to the CRIA staff, including his experience in community-based research working with minority and underserved patient populations. We are glad to have him with us."

MARTINA NAVRATILOVA ANNOUNCES DONATION TO CRIA

In February, tennis star Martina Navratilova announced that the Rainbow Endowment was donating more than $50,000 to organizations serving lesbian and gay communities, including an $8,500 donation to CRIA.

Navratilova serves as corporate spokesperson for the Rainbow Endowment, a non-profit organization that distributes funds raised by users of the Rainbow Card, an internationally accepted Visa card supporting the lesbian and gay communities.

According to Navratilova, "Initial cardholder support of the Rainbow Card has been tremendous. All of us working on the Rainbow Card program are grateful for the opportunity to give back to our community in such a significant way."

Other beneficiaries include the AIDS Information Network, the National Breast Cancer Coalition, and the National Lesbian & Gay Health Association.

The card has no annual fee, offers a low introductory rate of 5.9%, free cards for "chosen family" members and the option for domestic partners to apply jointly for increased credit.

Anyone interested in obtaining a Rainbow Card can call 1-800-99 RAINBOW.

THE BIG TAG SALE benefit was started three years ago by a group of friends who joined together in an effort to raise money for AIDS care and research. Last year's sale generated a total of $12,500 to benefit CRIA and the East End AIDS Hospice.

The goal of this year's sale, to be held on July 6th, is to raise $50,000. To meet this goal, they need donations of saleable objects, including furniture, accessories, books, clothes, artwork and anything else that might be of interest. To find out how to drop off a donation, or to arrange to have a large donation picked up, please call (212) 633-1288.

YES, I want to help CRIA test promising experimental drugs for AIDS. Enclosed is my contribution of:

☐ $35*  ☐ $50  ☐ $100  ☐ $250  ☐ $500  ☐ OTHER

* Your gift of $35 or more entitles you to receive our quarterly newsletter, CRIA Update

☐ I'd like to host a benefit for CRIA. Please contact me at (daytime phone).

☐ I'd like to volunteer with CRIA. Please contact me at (daytime phone).

CREDIT CARD INFORMATION:

☐ VISA  ☐ MASTERCARD

CARD NO.

SIGNATURE

EXP DATE

IN HONOR/REMEMBER OF:

Donations to CRIA are tax deductible to the full extent allowed by law. Your contribution can be doubled if you are employed by a company with a matching gifts program. A copy of our audited financial statement may be obtained by writing to the Department of State, Charities Registration, Albany, NY 12231, or to CRIA, 275 Seventh Avenue, 20th Floor, New York, NY 10001 (212) 924-5934.
ACKNOWLEDGING OUR FRIENDS...

GENEROUS CONTRIBUTORS

The following persons, corporations and organizations made major donations between December 15th, 1995 and April 30th, 1996 to support CRIA's search for effective AIDS treatments.

Robert John Balavender
Barry Binkowitz, M.D.
Barton Brown
Michael Callen
Steven Chaplick
Steven E. Dubel
Mark James Gunther
Gunther Helfrich
Sheila Karmiol

Kenny Kneitel
Jane Ellen Ochoa
Ilka Tanya Payan
Michael J. Raglin
John T. Sanzar
Emm Schmeller
Mitchell Sommers
Robert Sparta
Tony Vacancellos

Thoughtful donations in memory of the following
remind us of what is at stake in the fight against AIDS

Robert F. Goldrich
Agnes Gund & Daniel Shapiro
Jane K. Gunther
Andrew Jaraovic
The J.M. Kaplan Fund
Alex Katz
Diane & Jerome Kern

Michael Kulp
Jonathan Lasker
Roy Lichtenstein
Richard Manetta
Angela Mariani
Marcia & Richard Mishaan
Jack Pierson
Rainbow Endowment
David Reed
Alexis Rockman
Sydney R. Rosenau Foundation
Royal S. Marks Foundation
Sean Scully
Richard Serra
Michael Soren
Stadtlander Drug Company
Richard Swenson
H. van Ameringen Foundation
Gregory B. Williams

Generous gifts, which will support CRIA's vital
research programs, have been made in honor of

Winston Layne
Bobby Welde
J. Daniel Stricker

COMMUNITY RESEARCH INITIATIVE ON AIDS

275 Seventh Avenue, 20th Floor, New York, NY 10001
Phone: (212) 924-3934, FAX: (212) 924-3936

Return Postage
Address Correction Requested

NON-PROFIT ORG.
U.S. POSTAGE PAID
New York, NY
Permit No. 4732