

The WIHS Woman



The Connie Wofsy Women's HIV Study

Updates on the WIHS from the May 2007 Executive Committee Meeting

by Nancy Hessol, Project Director

Our spring 2007 WIHS Executive Committee Meeting was held in Bethesda, Maryland and once again there was a lot of information presented to us. For my report I have written about highlights that were presented by WDMAC (our WIHS Data Management and Analytic Center). These provide a good summary of the many aspects of the WIHS.

This first image (Table 1) shows the number of women enrolled in the original (years 1994-1995) and new (years 2001-2002) cohorts, and also shows the number of women actively being followed as of 2006. For our San Francisco Bay Area site, 425 women were enrolled in the original cohort, 159 in the new cohort, and 349 are currently being seen for their semi-annual visits.

Table 1

	1994/95 Cohort at baseline (N=2623)	2001/02 Recruits at baseline (N=1143)	Current Cohort* (N=2279)
1994/95 recruits	2623	--	1322 (58.0)
2001/02 recruits	--	1143	957 (42.0)
HIV Serostatus			
Seronegative	569 (21.7)	406 (35.5)	671 (29.4)
Seropositive			
HAART-naive	2054 (78.3)	255 (22.3)	189 (8.2)
HAART-exp'd	--	482 (42.2)	1406 (61.7)
Seroconverter	--	--	13 (0.6)
Center			
Bronx	534 (20.4)	234 (20.5)	447 (19.6)
Brooklyn	396 (15.1)	213 (18.6)	442 (19.4)
Washington DC	396 (15.1)	170 (14.9)	335 (14.7)
Los Angeles	538 (20.5)	226 (19.8)	417 (18.3)
San Francisco	425 (16.2)	159 (13.9)	349 (15.3)
Chicago	334 (12.7)	141 (12.3)	289 (12.7)

3 +Current cohort = All participants seen at Visit 23 or 24 and not dead (94/95 and 01/02 cohorts) May 2007

The next image (Figure 1) shows that of the 3766 women enrolled in the WIHS, 2791 women are HIV-infected (seroprevalent) and 975 are HIV-uninfected (seronegative). Among the HIV-infected women, 715 had an AIDS diagnosis at enrollment into the WIHS, 717 have been diagnosed with AIDS after enrollment, and 1359 are AIDS-free. Among the HIV-uninfected women, 17 women became HIV-infected during the study (seroconverter) and 8 of these women have been diagnosed with

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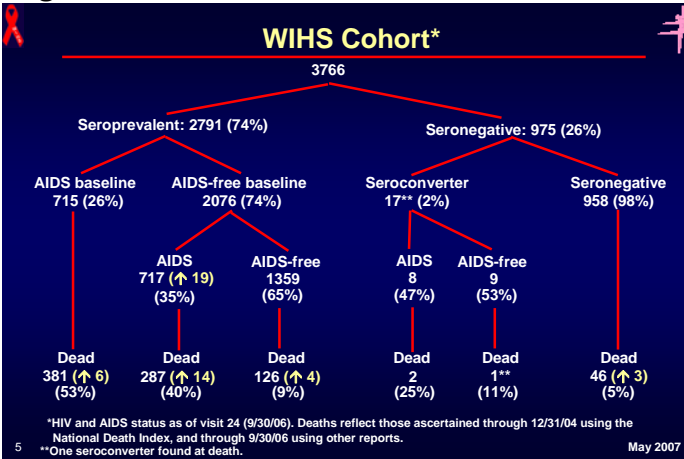
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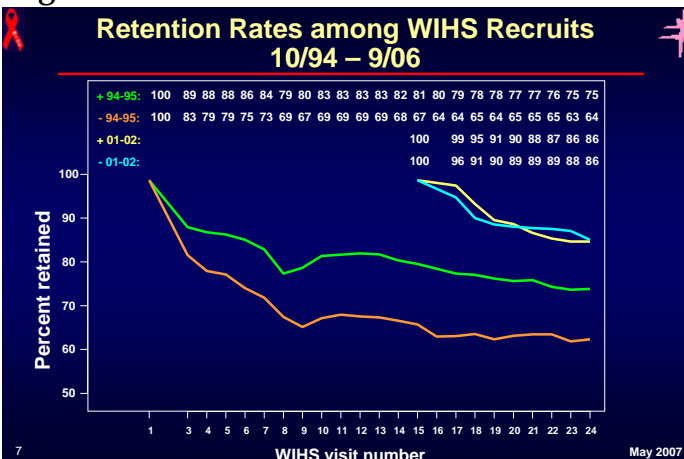
AIDS and 9 are AIDS-free. Unfortunately there have been many deaths among the WIHS women, most of these occurring among women with AIDS.

Figure 1



The image below (Figure 2) shows the percentage of women who come back for their follow-up visits (called retention rates). Retention rates for the HIV-infected women from the original cohort are shown in green, rates for the HIV-uninfected women from the original cohort are shown in orange, rates for the HIV-infected women from the new cohort are shown in yellow, and rates for the HIV-uninfected women from the new cohort are shown in blue.

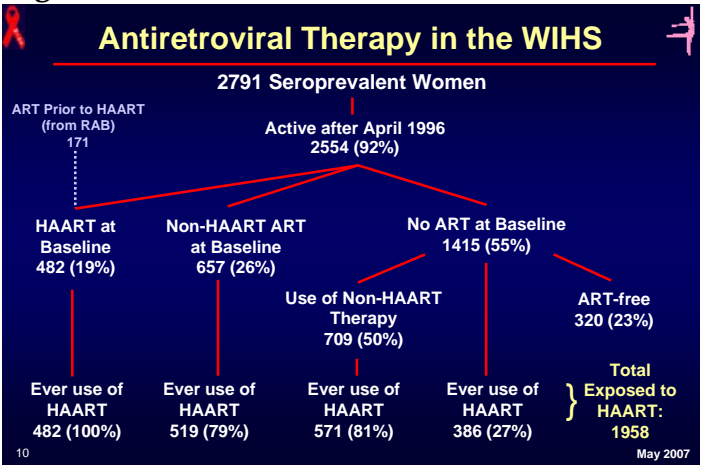
Figure 2



As of visit 24 (2006), retention rates for the original cohort were 75% for HIV-infected women and 64% for the HIV-uninfected women. Rates for the new cohort were 86% for both the HIV-infected and uninfected women.

In the WIHS, we are very interested in studying the use and effect of HIV treatment on the health of women. The following image (Figure 3) shows that among the 2791 HIV-infected women, 1958 have reported having take HAART (highly active antiretroviral therapy) medication – shown on the last row of this slide.

Figure 3

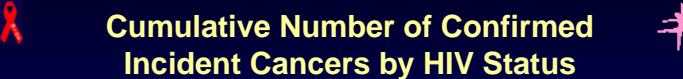


The image on the following page (Table 2) shows that there have been 122 new cancers occurring in the HIV-infected WIHS women and 15 cancers in the HIV-uninfected women since they enrolled in this study. Among the HIV-infected women, the most common cancer is non-Hodgkin’s lymphoma (33 cases), and among the HIV-uninfected women the most common cancer is breast cancer (5 cases).

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Table 2



Cumulative Number of Confirmed Incident Cancers by HIV Status

Overall, and most common cancers	HIV	
	+	-
All cancers	122	15
Non-Hodgkin's Lymphoma	33	0
Kaposi's Sarcoma	7	0
Cervical	7	0
All non-AIDS cancers	71	15
Lung	12	2
Breast	17	5

27 May 2007

These are just a few of the findings that were presented at the meeting. Please also see the other article in this newsletter by your National Community Advisory Board (NCAB) representative, Sheila Bryant, for her report on the May 2007 WIHS meeting. Thanks for taking the time to learn more about the WIHS and for participating in this amazing research study.



Sheila reports on WIHS Executive Committee (EC) Meeting in Maryland

Hello ladies, my name is Sheila Bryant and I am one of your San Francisco National Community Advisory Board (NCAB) representatives. I am also grateful to be the current Chairperson of the NCAB. Being the chairperson is so much work and I can say that I really enjoy this position.

Our first NCAB meeting of the year was held in Maryland on May 13, 2007. The meeting went from 9:15am – 4:00pm with the following NCAB sites present: **San Francisco, DC, Bronx, Brooklyn, and Los Angeles.** The NCAB minutes from our last meeting were read and approved by all members in attendance. We had a lot to discuss and had a very productive meeting. We talked about changing the schedule of our monthly conference calls to quarterly calls, we reviewed the NCAB by-laws, and we also talked about the effects of the NIH budget cuts. Our conference of choice this year will be held in Palm Springs, CA in November. Our abstract topic and round table discussion will focus on Women Affected & Infected with the HIV/AIDS Virus: to thrive and survive through experience, strength, and hope.

In addition to our NCAB meeting, we also had a woman named Diane Johnson, from the Minority Health Program, along with Patricia Knowling, from the HHS working group, come and speak to us. We discussed possibly having each WIHS site come together to do a project, such as a health fair. After the talk I attended my WIHS Liver and Hepatitis working group session, which I found to be very informative.

I personally would like to thank the WIHS for their patience and interest in our report and our lives. As Sidney Foster would say, “lets each one teach one.” So ladies this is one of the things on my agenda to do at our next CAB meeting. I really have come a long way as a result of being part of the WIHS. Thanks!

Sheila B.
Chairperson.

CAB CORNER



The CAB has spoken...

by Heneliaka L. Jones, CAB Liaison

For those of you who did not attend the fall 2006 CAB meeting, the attending participants proposed that each year we have a WIHS Woman of the Year. Subsequently, your CAB representatives and I have brought that idea into fruition. For the first time in the San Francisco WIHS CAB history, we will have a WIHS Woman of the Year! The CAB has spoken and we are listening.

At the April 2007 CAB meeting we continued our discussion of the WIHS Woman of the Year and came up with a list of personal attributes that our distinguished honoree should exhibit. The general consensus was that the chosen woman should be a study participant who has gone above and beyond the call of duty, not only a WIHS participant, but as a model citizen in her community...to a woman who's personal attributes inspires others; and who's commitment towards the fight against HIV/AIDS has not gone unnoticed. It was decided that a committee consisting of your CAB representatives and a WIHS staff member will make the final decision on who will be honored as WIHS Woman of the Year. The chosen woman will then be notified and then honored at our Holiday Luncheon. I thank all of the women in attendance at our CAB meeting for their wonderful insight and ideas.

Another topic that we discussed at this meeting was to complete a special WIHS Project. One of the suggestions was to adopt-a-family, and another suggestion was to donate clothing items to children in various countries in Africa who have been affected by the HIV/AIDS pandemic. Both suggestions were warmly wel-

comed and we hope to get started on at least one of them by the end of the year.

In addition to having a productive discussion, we also had a fun and heartfelt time. We enjoyed a wonderful Mexican Fiesta lunch and watched a movie screening of *Reflection Unseen*, which featured some of our WIHS participants.

The entire afternoon was a delight for all involved and we were able to get a lot accomplished. I enjoyed seeing new faces and encourage more participation among the WIHS participants. We hope to do more with the CAB in the future, but in order to maximize our efforts and needs, we need input from YOU! **CAB** stands for **Community Advisory Board**, you are our community and we hope to hear from YOU.

For our next CAB Luncheon, we hope to continue discussions on our WIHS Project. Also, we plan to bring back "Ask Dr. WIHS" where you ask the questions and we answer them. In the meantime, if you have any suggestions of projects that you would like the CAB to implement or if you know a dynamic WIHS woman that you would like to nominate for WIHS Woman of the Year, please contact me, Heneliaka L. Jones your CAB liaison, at 415.502.6284.



Maraviroc: A new drug to treat HIV infection

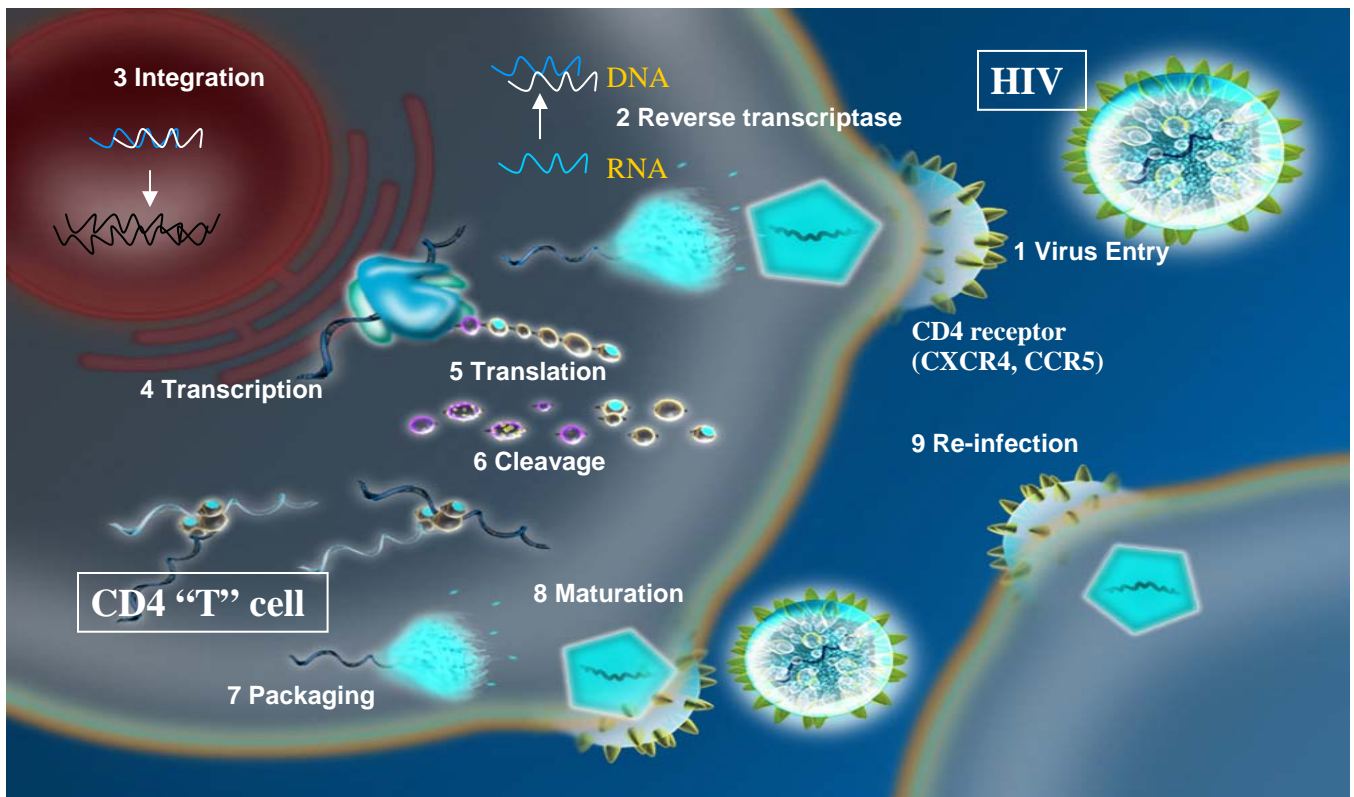
by Dr. Monica Gandhi

The Food and Drug Administration (FDA) has recently approved a new HIV drug – in a brand new class of HIV drugs – for marketing. Its name is Maraviroc and, to understand how it works, we have to spend a few minutes reviewing the HIV life cycle and how HIV infects human cells.

The HIV virus enters human “T” cells (important cells in the human immune system) by a gate called the CD4 cell receptor. However, two other receptors near the CD4 cell receptor help the virus gain entry into the human T cell: the CCR5 receptor and the CXCR4 receptor. Early on in the course of HIV infection, the CCR5 receptor is the more important of the two and CD4 and CCR5 together serve as a gate to let HIV into human cells.

HIV lifecycle (see figure below)

1. HIV virus enters the human T cell (CD4 cell) using the CD4 cell receptor (gate) and the CCR5 receptor
2. The virus “uncoats” (takes off its outer layer) and its genes are released into the cell. The virus doesn’t carry its genes around in DNA form, like we do, but in a form called RNA. The virus has to convert its RNA genetic material to DNA in order to “integrate” or knit its DNA into our DNA. The reverse transcriptase protein is an HIV protein that converts the HIV RNA into DNA form. The reverse transcriptase is a major current target for the drugs that we use to treat HIV infection (for instance, nucleoside reverse transcriptase inhibitors or “nucs” and non-nucleoside reverse transcriptase inhibitors or “non-nucs”)
3. The DNA from the virus now “integrates” into the human cell’s DNA (our DNA) in



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the nucleus of the CD4 cell. Integration is a new target being studied for HIV therapy and there are “Integrase inhibitors” currently in development which may come to market in the next couple of years

4. The virus DNA then comes out of the human DNA and is “transcribed” back into RNA form
5. The RNA of the virus is then “translated” or made into proteins which will eventually be put together into new virus particles
6. One big HIV protein needs to be cut into little pieces of protein to go into separate new viruses. The HIV “protease” is a scissor that cuts this big protein into little proteins to put into new HIV viruses being made by the cell. “Protease inhibitors” are currently available therapies on the market
7. The HIV proteins are now packaged into new HIV viruses which are going to go out and infect other T cells
8. The virus leaves the T cell and “matures” into a virus that is able to infect other human T cells. “Maturation inhibitors” are being studied as possible agents to treat HIV infection and may be out in the next 3-4 years.

Although the main drugs to treat HIV infection are currently drugs that work against reverse transcriptase and HIV protease, there is one drug available (called T20 or Fuzeon) that prevents HIV from entering cells to begin with. That drug can only be given by a skin injection and is usually given to people who have become resistant to other HIV medications. Maraviroc is a drug that blocks the CCR5 receptor, so it also serves to block an important gate for HIV entrance into the human cell. Maravi-

roc can be given in pill form (by mouth) and is the first drug to be approved by the FDA in its class. Although the drug is not out in the market yet, it probably will be soon.

Maraviroc has been studied in combination with other HIV drugs in two major clinical trials (called MOTIVATE-1 and MOTIVATE-2) in over 1000 HIV patients who have been on a number of other HIV drugs before (called “treatment-experienced patients”). Maraviroc showed a benefit in reducing HIV replication (reducing HIV viral load) in these patients when used in combination with other HIV medications. Specifically, Maraviroc decreased HIV viral loads to undetectable levels in 45% of participants after 24 weeks (6 months), compared with 23% of those who did not take Maraviroc.

More information about the drug are as follows:

Dose – This drug can be taken orally and the main dose is 300mg by mouth twice a day.

Main side effects – The drug may cause “postural hypotension” which is a condition where patients feel dizzy when they stand up from a sitting or lying position since the blood pressure drops in a standing position. However, this side effect is rare and really only seen at higher doses of the medication. There were some initial concerns about this class of drugs causing increased rates of the cancer lymphoma in patients, but this particular side effect has not been seen so far with Maraviroc. The drug may lead to liver inflammation; however that side effect was rare. Generally, the drug seems pretty safe, but we will continue to look hard for the first 5 years of its use for any side effects that did not show up in the clinical trials.

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Indications – This drug has only been studied in people who have been on a lot of HIV medications before (treatment-experienced patients) and not in people just starting HIV therapy for the first time. Therefore, it should only be used for those patients who have failed other therapies and are looking for a new option.



Poems of Mary Oliver

Wild Geese

You do not have to be good.
You do not have to walk on your knees
for a hundred miles through the desert repenting.
You only have to let the soft animal of your body
love what it loves.
Tell me about despair, yours, and I will tell you mine.
Meanwhile the world goes on.
Meanwhile the sun and the clear pebbles of the rain
are moving across the landscapes,
over the prairies and the deep trees,
the mountains and the rivers.
Meanwhile the wild geese, high in the clean blue air,
are heading home again.
Whoever you are, no matter how lonely,
the world offers itself to your imagination,
calls to you like the wild geese, harsh and exciting
over and over announcing your place
in the family of things.



The Journey

One day you finally knew
what you had to do, and began,
though the voices around you
kept shouting
their bad advice
though the whole house
began to tremble
and you felt the old tug
at your ankles.
"Mend my life!"
each voice cried.
But you didn't stop.
You knew what you had to do,
though the wind pried
with its stiff fingers
at the very foundations,
though their melancholy
was terrible.
It was already late
enough, and a wild night,
and the road full of fallen
branches and stones.
But little by little,
as you left their voices behind,
the stars began to burn
through the sheets of clouds,
and there was a new voice
which you slowly
recognized as your own,
that kept you company
as you strode deeper and deeper
into the world,
determined to do
the only thing you could do
determined to save
the only life you could save.

Summer Workouts

It is that time of year when the weather gets warmer and the days are longer. Summer is a great time to lose weight or get in shape. You can join a gym but that can be expensive. Dieting is a great way to begin your road to losing weight. Modifying your eating habits by taking in less fats and less calories. Future articles in the WIHS Newsletter will address some diet issues.

However, losing weight due to dieting is good but you need to exercise to lose those unwanted inches. Exercise is good for your overall health. Start out slowly and check with your doctor first to see if there are some health limitations. If you have been inactive for years, you can't run the Bay to Breakers after 2 weeks of training. Begin with a 10-minute period of light exercise or a brisk walk every day and gradually increase how hard you exercise and for how long. Physical exercise is important for maintaining physical fitness and can contribute positively to maintaining a healthy weight; building and maintaining healthy bone density, muscle strength, and joint mobility; promoting physiological well-being; reducing surgical risks; and strengthening the immune system.

How do I begin?

- **Choose something you like to do.** Make sure it suits you physically, too. For instance, swimming is easier on arthritic joints.
- **Get a partner.** Exercising with someone else can make it more fun.
- **Vary your routine.** You may be less likely to get bored or injured if you change your routine. Walk one day. Bicycle the next. Consider activities like dancing and lifting weights.
- **Choose a comfortable time of day.** Don't work out too soon after eating or when it's

too hot or cold outside. Wait until later in the day if you're too stiff in the morning.

- **Don't get discouraged.** It can take weeks or months before you notice some of the changes from exercise.
- **Forget "no pain, no gain."** While a little soreness is normal after you first start exercising, pain isn't. Stop if you hurt.
- **Make exercise fun.** Read, listen to music or watch TV while riding a stationary bicycle, for example. Find fun things to do, like taking a walk through the zoo. Go dancing. Learn how to play basketball.

Start every workout with a warm-up. That will make your muscles and joints more flexible. Spend 5 to 10 minutes doing some light calisthenics and stretching exercises, and perhaps brisk walking. Do the same thing when you're done working out--until your heart rate returns to normal. Pay attention to your body. Stop exercising if you feel very out of breath, dizzy, faint or nauseated, or have pain.

These are just a few pointers to help you design a plan and stick to it. The best exercise is the one that you know you will do. Walking is considered one of the best choices because it's easy and safe. Brisk walking can burn as many calories as running and is less likely to cause injuries. Walking doesn't require any training or special equipment, except for good shoes. Walking is an aerobic and weight-bearing exercise, so it is good for your heart and helps prevent osteoporosis. Enjoy the longer days and go for a walk with a friend.

