



Reflections: Price, Price, Price

By J.C. Brueckner, President

I recently participated in a conference that was attended by a number of representatives from U.S. life reinsurance companies. One of the sessions consisted of a panel of three people - two reinsurance providers and one retrocession outlet. The panel members were given several topics and asked to express their opinions on the subjects. For the most part, the group had a difference of opinion on each of

the topics and effectively debated the varying perspectives. But when it came to one topic, the ceding companies' declining approval rating of the reinsurance providers, the group was unanimous as to the cause of the decline: rising reinsurance prices.

The three panelists shared the opinion that the sole reason for the decline in satisfaction among ceding companies was the increase in reinsurance prices.

Frankly, I found this unity in identifying the cause of the demise as disturbing as the thought itself. To say that price alone is the cause of our problems is an easy out, and is diminishing the value of the reinsurance relationship and the services provided by reinsurers. It's easy to blame it all on price because that means that we, the reinsurance providers, do not have to admit to any wrong doing. We can say

Continued on page 7

Inside this issue:

(Please note: Click on the title to jump to a specific article.

Navigate the articles by clicking on the "continued on" text.)

HIV Drugs	4
HIV References	5
New Additions	6
Kuhl Earns ASA	6

HIV Positive—Insurable In The Near Future?

By Cindy Mitchell, FALU



HIV, or Human Immunodeficiency Virus, is a virus which affects the immune system. HIV prevents the CD4 T-cells, which help fight infection in the body, from working properly. A damaged immune system cannot protect the body against specific infections and cancers. All persons who harbor HIV do not develop AIDS. AIDS, or Acquired Immune Deficiency Syndrome, is the end result of HIV. A person with an HIV positive test is said to have advanced to AIDS when the CD4 count drops below 200 cells/mm³ OR if an AIDS-indicator illness exists. These illnesses are prevalent in the AIDS population since people

with normal functioning immune systems generally fight off these diseases. Such diseases include, but are not limited to, pneumocystis pneumonia, Kaposi's sarcoma and wasting syndrome.

Testing

There are many tests associated with the HIV virus. Usually, the first test that is completed is the ELISA (enzyme linked immunosorbent assay) test. This test can produce a false positive; therefore a confirmatory test called Western Blot is completed. These confirmatory tests are routinely done for insurance testing purposes. Keep in mind this is not an "AIDS" test. There is in fact no such thing. Producing a positive ELISA and Western Blot test simply means that

there are antibodies to HIV circulating in the blood, but there may not be a quantifiable amount. These antibodies are generally produced within 45 days after infection, so it is important to understand that one may not test positive immediately after being infected. If the Western Blot is negative or indeterminate, a person should be retested in several weeks, in case he/she is in the process of converting to HIV positivity.

The gold standard in measuring immune function with HIV individuals is called the plasma viral load (PVL) test. These tests detect the number of HIV copies in a milliliter of blood, therefore quantifying the AMOUNT of HIV repli-

Continued on page 2

HIV Testing (continued from page 1)

cating in the blood. A low viral load is between 200 to 500 copies, while a high viral load is typically considered 5,000 copies or more, depending on the type of test used. A low result indicates that the virus is not replicating as quickly and the risk for progression is low. However, a viral load that is undetectable does not mean one is cured. It may mean that the virus is below the threshold for detection for that specific test. When the PVL viral load test was originally introduced, 400 copies was the threshold for detection. Now, with new and improved technology, it can detect down to 50 copies. A new test is currently being studied that will be able to detect down to two copies. The viral load test is an important diagnostic tool used in measuring the effectiveness of treatment.

Another very important measure of disease is the CD4 cell count. CD4 cells, otherwise known as T- cells, are a type of white blood cell which helps fight infections. A normal CD4 level is between 500 and 1200 cells per cubic millimeter. Smokers tend to have higher counts than non-smokers and women tend to have higher counts than men. A person with AIDS has a CD4 count below 200. The goal for treatment is to keep the CD4 count as high as possible, since a de-

creased CD4 count is associated with an increase risk of developing opportunistic infections

Treatment

Treatments have advanced significantly over the past few years.* Currently, there are four FDA-approved antiretroviral medications used to treat HIV infection. The first is nucleoside analog reverse transcriptase inhibitors, or “nukes”. The second kind is non-nucleoside reverse transcriptase inhibitors. These two drugs work by blocking the HIV’s ability to copy a cell’s DNA. The third kind is protease inhibitors. They work by preventing infected cells from releasing HIV into the body. The fourth and newest approved medication is fusion inhibitors. They work by preventing the entry of HIV virus into the body’s healthy cells. A listing of examples is included in the chart below. These medications are used in combination to reduce the viral load in the body and stabilize the CD4 count. Formerly known as “HIV Cocktail”, this combination is now called Highly Active Antiretroviral Therapy, or HAART. Generally, at least 3 drugs are combined for the most effective treatment.

In spite of its effectiveness, there are drawbacks to HAART therapy. First of all, it is expensive. The average

yearly cost of anti-HIV therapy in the US is currently between \$10,000-15,000. It is difficult for the average American to afford therapy, let alone people in third world countries. Secondly, HAART therapy can be a burden. Several pills need to be taken multiple times a day at specific times. It can be cumbersome and lead people to skip a dose or stop taking them altogether. Thirdly, there are side effects. The drugs can damage the peripheral nervous system and gastrointestinal tract. Common symptoms include nausea, fatigue and diarrhea. Lastly, while combination therapy slows the progression of the disease, it is not a cure. HIV’s rapid mutation rate results in the development of strains that are resistant to therapy, so after years of combination therapy, patients begin to develop resistance to these drugs.

Vaccine

There are two types of vaccines currently being studied. Preventive vaccines are designed to prevent infection in HIV negative people. Researchers are also evaluating a therapeutic vaccine



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To read the unabridged article please see the September 2006 *On the Risk* vol.22 n.3 pgs. 46-50.

* For a full description of the treatments, see the unabridged article in the September 2006 *On the Risk* vol.22 n.3 pgs. 46-50

Continued on page 3



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HIV Testing (continued from page 2)

to treat people who already have the infection. Several years of research and animal testing are needed before the FDA will consider a vaccine for public use. As of April 2006, there were more than 30 preventive AIDS vaccine candidates in the early stages of human clinical trials in approximately two dozen countries around the world.

HIV vaccines currently being tested in humans are composed of man-made materials that CANNOT cause HIV infection. One will, however, test positive for HIV on the ELISA test since the vaccine triggers the body to produce antibodies against HIV. Therefore, volunteers participating in a vaccine trial WILL test positive on routine insurance testing.

Future of HIV

HIV treatment has come a long way and the future appears promising. In 1985, there were no treatment options available. In 1992, the

best medicines available only added 2.8 months extra life expectancy to the normal lifespan for someone diagnosed with AIDS. In 1995, HAART appeared with six therapies with two different drug classes. This new treatment reduced AIDS deaths by 80% and increased life expectancy by 4.1 years in 1997. Now, in 2006, there are 27 therapies with four drug classes and major advances have been made to understand how the virus works. While there is no concrete data stating what the current lifespan is for someone with HIV, it is no longer a death sentence.

Before HAART was introduced, only about half of those infected were expected to live for 10 years after diagnosis. Now studies indicate that people treated with HAART can almost ALL expect to live at least ten years after diagnosis, regardless of their age at infection. Another study indicates HAART can lengthen the lifespan by nearly fifteen years. Although firm evidence is not yet available, it is implied that many patients could live a virtually normal lifespan.

Will we be underwriting HIV positive individuals within my lifetime? I believe so. Even if a vaccine is not discovered, it may still be possible to offer substandard coverage to some individuals in the next few decades. Considering the major advancements that have been made over the past 20 years, there is a great likelihood that HIV will be handled in a similar manner as any other chronic disease. The favorable insurable HIV risk would include someone who is extremely compliant with his/her treatment regimen, has a negative viral load and a favorable CD4 count.

(Please see the table on page 4 for information on drugs treatments. References are on page 5.)

Continued on page 4

About the Author: Cindy Mitchell, FALU, FLMI, ACS is a Senior Underwriting Consultant for Generali USA. A graduate of Ohio University, Cindy has over 10 years underwriting experience with an emphasis on substandard cases. Cindy has been employed with Generali USA as a Senior Underwriter since November, 2005. She can be contacted at cmitchell@GeneraliUSA.com.



HIV Testing (continued from page 3)

Drugs Used in the Treatment of HIV Infection

Nonnucleoside Reverse Transcriptase Inhibitors (NNRTIs)

Brand Name	Generic Name	Manufacturer Name	Approval Date	Time to Approval
Rescriptor	delavirdine, DLV	Pfizer	4-Apr-97	8.7 months
Sustiva	efavirenz	Bristol Myers-Squibb	17-Sep-98	3.2 months
Viramune	nevirapine, BI-RG-587	Boehringer Ingelheim	21-Jun-96	3.9 months

Protease Inhibitors (PIs)

Brand Name	Generic Name	Manufacturer Name	Approval Date	Time to Approval
Agenerase	amprenavir	GlaxoSmithKline	15-Apr-99	6 months
Aptivus	tipranavir	Boehringer Ingelheim	22-Jun-05	6 months
Crixivan	indinavir, IDV, MK-639	Merck	13-Mar-96	1.4 months
Fortovase	saquinavir	Hoffmann-La Roche	7-Nov-97	5.9 months
Invirase	saquinavir mesylate, SQV	Hoffmann-La Roche	6-Dec-95	3.2 months
Kaletra	lopinavir and ritonavir	Abbott Laboratories	15-Sep-00	3.5 months
Lexiva	Fosamprenavir Calcium	GlaxoSmithKline	20-Oct-03	10 months
Norvir	ritonavir, ABT-538	Abbott Laboratories	1-Mar-96	2.3 months
Reyataz	atazanavir sulfate	Bristol-Myers Squibb	20-Jun-03	6 months
Viracept	nelfinavir mesylate, NFV	Agouron Pharmaceuticals	14-Mar-97	2.6 months

Fusion Inhibitors

Brand Name	Generic Name	Manufacturer Name	Approval Date	Time to Approval
Fuzeon	enfuvirtide, T-20	Hoffmann-La Roche & Trimeris	13-Mar-03	6 months

Source: FDA and Dept of Health and Human Services.

Continued on page 5



HIV Testing (continued from page 4)

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Jodi McDonald Joins Generali USA

Jodi McDonald joined Generali USA in November, 2006 as a Senior Underwriting Consultant.

Jodi brings 20 years of industry experience between her tenure with various direct

and reinsurance companies. Most recently, she worked for RGA Re as a Senior Underwriting Consultant.

Jodi has served on the editorial staff of *On the Risk* since 1999 as a contributing and associate editor, and she served as Editor in Chief in 2006. Jodi has a Bachelor of Arts degree in Management and French from Cen-

tral College in Pella, Iowa (1986), and an MBA from Drake University in Des Moines. She also has an FLMI designation. Jodi resides in Denver, Colorado with her husband.

Jodi can be reached at 816.412.3682 or e-mailed at: jmcdonald@GeneraliUSA.com



Mark Swanson Joins Generali USA

December, 2006 as Vice President – Marketing Actuary. Mark supports the marketing efforts of our sales staff by serving as an actuarial partner for clients. He will also be heading up our client mortality initiative – an emerging effort to leverage Generali USA’s internal mortal-

ity study capability in ways that directly benefit our clients. Mark has 14 years of experience in the reinsurance business. Most recently, he worked for Transamerica Reinsurance where he was Second Vice President, Pricing Leader. Mark has Bachelor of Arts degrees in Mathematics and Physics (1984, 1988), and is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. Mark

lives in Prairie Village, Kansas with his wife and two children. Above all he is looking forward to continuing Generali USA’s tradition of providing reinsurance clients with great service. You may contact him at 816.412.3742 or by e-mail at:

mswanson@GeneraliUSA.com



Bob Kuhl Earns ASA

Bob Kuhl, who is a Pricing Actuary at Generali USA, recently earned an ASA designation! Bob has been with Generali USA for 10 years and is a key member of our Actuarial Department. He is currently completing work towards his first FSA exam. Join us in congratulating Bob! Bob can be e-mailed at:

bkuhl@generaliusa.com

Reflections (continued from page 1)



that the results justified the increase in rates and wash our hands of any additional responsibility.

There is a lot more to the story than just the effect that price increases had on the buyer. Yes, the results did justify the increase in reinsurance rates, but as a group the reinsurers did a very poor job of communicating the reasons for the increases. We should have focused on providing data to our clients that supported the increases and spent more one-on-one time explaining the logic behind the move in rates. When possible, we should have communicated client specific information that would have given meaningful insight into mortality and the cost of carrying redundant reserves.

Another reason the reinsurance buyers' satisfaction level dropped was the impact of new treaty terms. Not only had reinsurance become more expensive, but treaty terms tightened as well. Again, reinsurers did a very poor job of communicating the logic behind the changes. We continued to struc-

ture our proposals as we always had, focusing on rates and capacity, and did not mention treaty language changes until after the offer had been accepted. This "surprise" during treaty preparation time was not well received and created much ill will on the part of the reinsurance decision maker. We should have been more up front by introducing the changes at the proposal stage. I believe the industry has since made great strides in this area and most reinsurance companies have expanded their offer letters to include key treaty provisions.

This brings us back to the panel discussion and the belief that "price" is the reason for all of the problems. There is a danger in focusing solely on price beyond not taking responsibility for our actions. If we, the reinsurers, make it all about price, then it will in fact be all about price. Reinsurance surveys all show that there are many factors that go into the decision to choose a reinsurer. Price certainly is one of the key criteria in selecting a reinsurer, but there are many other points of differentiation we could emphasize. But the easy answer is to say that price is the only thing that matters. The difficulty is that this attitude leads us down the path of driving the price down to try and secure business which is what led us down the path to the unprofitable

pricing levels in the late nineties.

Yes, we must provide a price that is acceptable to the buyer, but there are other things we can do to make us important to ceding companies: facultative underwriting, mortality management, product development support and industry knowledge, to name a few. Effectively communicating with our clients on a regular basis may be the most important service of all, and it costs very little to provide. But it does force us to take responsibility for something more than offering the lowest price.

In closing, I would like to ask the buyers of reinsurance to help us help ourselves. If you receive an offer that doesn't make sense, chances are, it doesn't. A leading contributor to the decline in the number of reinsurance companies has been overly aggressive pricing that produced poor results. Poor results have lead many companies to look to be purchased or to simply exit the market by closing their doors. If you want a healthy number of companies in the life reinsurance market, you must make rational buying decisions and question the sustainability of any low ball offer. In other words, make it more than just about price.

Generali USA Life Reassurance

Editorial Team

Name	E-Mail Address
J. C. Brueckner	jcbrueckner@generaliusa.com
Amy Cascone	acascone@generaliusa.com
David Gates	dgates@generaliusa.com
Gretchen Johnson	gjohnson@generaliusa.com

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