

Health & Science



New data on multiple sclerosis vaccine

Connective Therapeutics, Inc. (NASDAQ:CNCT) announced today that results from Phase I/II clinical testing of T-cell Receptor (TCR) peptide vaccines for the treatment of multiple sclerosis will be published in the October 1996 issue of the *Journal of Natural Medicine*.

The results from this pilot study indicated that patients who responded immunologically to TCR vaccines experienced stabilization of disease without side effects during one year of therapy.

The Phase I/II physician-sponsored study was conducted by a team of scientists led by Connective's collaborator, Arthur A. Vandenberg, Ph.D. of Neuroimmunology Research, Veterans Affairs Medical Center, Portland and Oregon Health Sciences University.

The double-blind, placebo-controlled trial involved 23 patients with

chronic, progressive multiple sclerosis who were treated for 12 months with a native or substituted version of a V beta 5.2 TCR peptide vaccine or placebo. Successful peptide vaccination boosted protective T-cells and lowered pathogenic T-cells thought to cause the disease.

"These promising early data support our decision to conduct additional studies in a larger population of progressive multiple sclerosis patients," said W. Scott Harkonen, M.D., senior vice president of Product Development and Operations at Connective. "We believe these clinical observations in multiple sclerosis generated by Dr. Vandenberg's group also serve as indications of the potential therapeutic value of TCR technology as a platform to develop vaccines for other autoimmune and connective tissue diseases."

In the Phase I/II study, all TCR peptide vaccine responders (6/6) were clinically improved or stable, while only 7 of 17 non-responders were improved or stable. There were no responders in the placebo group. The vaccines were well-tolerated, with no evidence of adverse events attributable to TCR peptide treatment.

Additional findings in the *Nature Medicine* report suggest that protective (regulatory) cells elicited by the vaccine not only inhibit their specific target pathogenic T-cells, but also inhibit "bystander" pathogenic T-cells in the area of inflammation in the nervous system.

This information implies that the target T-cells need only represent a fraction of the total pathogenic population for the vaccine to be effective — an important finding as

multiple sclerosis is believed to be caused by a heterogeneous (mixed) population of T-cells.

The publication of this data coincides with Connective's plans to submit an Investigational New Drug Application to conduct a Phase I/II study of native and substituted TCR V beta 5.2 peptide vaccines in progressive multiple sclerosis. The study will be a multicenter, double-blind, placebo-controlled trial which is expected to enroll 100 patients. Connective plans to compare the immunogenicity of the two vaccines against placebo.

Dr. Vandenberg commented, "We are excited about the potential of TCR vaccines as therapies for multiple sclerosis and look forward to participating in Connective's upcoming trial. Boosting the body's natural immunity with vaccines such as these may provide long-term clinical

benefit by arresting disease progression."

As with other vaccines, the TCR technology is being developed to help the body recognize and destroy pathogens. In the case of autoimmune diseases, the pathogens are believed to be T-cells. TCR vaccines are manufactured from the receptor portion of pathogenic T-cells and injected into the patient to elicit a heightened immune response against the T-cells thought to cause autoimmune disease.

Connective Therapeutics' TCR peptide vaccines are being designed to boost the naturally occurring control arm of the immune system believed to function inefficiently in immune-mediated diseases.

These vaccines are expected to elicit a "regulatory immune response" that can immunize against the activity of disease-causing im-

mune cells, possibly arresting the autoimmune disease process at its earliest stage.

Connective Therapeutics, Inc., headquartered in Palo Alto, California, is focused on the development of novel therapeutics for serious connective tissue disorders. The company has four products in development: gamma interferon for atopic dermatitis and keloids; betamethasone mousse for scalp psoriasis and other scalp dermatoses; ConXn(TM) (recombinant human relaxin H2) for scleroderma and other fibrotic indications; and TCR peptide vaccines for rheumatoid arthritis and multiple sclerosis.

This news release contains forward-looking statements that involve risks and uncertainties that could cause actual results or events to differ materially from those in such forward-looking statements.

Never too late to prevent heart disease

It's never too late to prevent heart disease, says a geriatrics expert in the DeBakey Heart Center at Baylor College of Medicine in Houston.

"Even if you are 70 years old, exercising and eating right can decrease your heart disease risk," said Dr. Robert Luchi, a professor of medicine and director of the Huffington Center on Aging at Baylor. "But the earlier in life you start, the better."

Heart disease is the leading cause of death of Americans and is more common in older people. The risk for heart failure increases dramatically after age 75.

Coronary artery diseases, such as atherosclerosis (artery blockage), often take up to 40 years or more to progress to a heart attack. And, like high blood pressure, heart disease is not necessarily a natural part of aging, Luchi said.

"It's not normal for blood pres-

sure to rise with age. But when it does, it's still treatable," he said. "By lowering blood pressure, you can reduce the risk of death from heart attack and stroke."

The key is making healthful lifestyle choices, such as eating low-salt, low-fat and low-cholesterol foods, not smoking, and watching your weight.

Among the best choices? Exercise. "Recent studies have shown that sedentary older adults who gradually add physical activity to their lifestyle can significantly improve cardiovascular performance," Luchi said. Walking, water aerobics, and dancing are good ways to improve blood circulation and make you feel good."

Medications like "clot-busting" Streptokinase and aspirin can help prevent blood clots that cause heart attacks. Studies have shown that postmenopausal women who take estrogen supplements seem to be pro-

ected against heart attacks.

According to Luchi, adults should annual check-up by age 65 and have a stress test before beginning and exercise program.

Luchi says it's important to know heart attack warning signs:

- Chest discomfort spreading to the neck, shoulders, and arms
- Sweating, nausea and shortness of breath
- Dizziness or fainting

In some older people, a heart attack can occur with few or no symptoms. "Heart attacks come in different forms--from no symptoms to severe pain," Luchi said.

If any symptoms appear, Luchi says don't ignore them. "Get evaluated early, even if you have mild pain," he said. "Heart attack treatment is best when given early. And remember, by making appropriate lifestyle changes, you can probably prevent another attack."

Shriners free screening clinic

The Portland Shriners Hospital for children will hold a free orthopedic and plastic surgery screening clinic on Saturday, Nov. 2 from 8 a.m. to 2 p.m. in the hospital's outpatient clinic, 3181 S. W. Sam Jackson Park Road. If accepted, children at Shriners Hospital are treated free of charge.

"Last year, when we offered this clinic we saw 112 children in six hours," said Phyllis Newton, Director of Community Outreach. "We were stunned that there were so many families who did not know about our free medical services."

Shriners Hospital accepts children up to age 18 who have bone, muscle or joint problems, or who have plastic surgery needs--such as for burn scars, cleft lip/palate and facial anomalies. Most patients at Shriners have congenital, life-long problems such as cerebral palsy, spina bifida, muscular

dystrophy or club foot. Other children suffer accidents and illnesses, such as losing a hand or leg. Other common conditions seen include scoliosis -- curvature of the spine - and congenital hip dislocation.

Because care at Shriners Hospital is free, there is always a waiting list of several hundred names. However, children seen at a screening clinic generally can begin their care within two months. (The hospital does not provide emergency services, such as for broken bones or acute burns.)

"We are especially interested in making sure we are reaching out to minority and low income families," Newton said. "We are making every effort to inform those communities that we are available to them by contacting community clinics, distributing flyers in English and Spanish, and working through all news media." A

Spanish interpreter will be at the clinic, and interpreters for other languages will be provided if requested in advance. Free return Tri-Met passes will be given to anyone who arrives by bus (#8 from downtown).

No appointments are needed to be seen at the Screening clinic. Hospital surgeons will be on hand to evaluate every child who arrives for care. Although the wait may be long at times, families will be entertained by Shrine clowns. Free refreshments will also be available to sustain those who are waiting. If, for some reason a child is not appropriate for care at Shriners Hospital, the family will be referred.

Generally, Shriners Hospital accepts all patients for care if treatment would benefit the child and if treatment at another facility would put a financial burden on the family.

For info call (503) 241-5090.

Breast cancer risk

Legacy Cancer Services offers free education program:

Breast Cancer & Hereditary... How at risk are you?

What does your mother's or sister's diagnosis of breast cancer mean for your health? What can you do to reduce your risk? What is the current status of genetic testing for breast cancer? Learn more about your risk

for breast cancer as Kathryn Murray, genetic counselor and Karen Greco, nurse practitioner discuss:

- Is all breast cancer genetic?
- Heredity and other risk factors
- Genetic testing
- Reducing your risk

"Breast Cancer & Heredity: How at risk are you?" will be held on Wednesday, October 23, 7-8:30 p.m.,

at Legacy Good Samaritan Hospital & Medical Center. Free parking is available. Although there is no charge to attend the program, preregistration is required. Contact Legacy Referral Services at (503) 335-3500 for more information or to register. This community health education program is sponsored by Legacy Cancer Services.

Flab is now the norm

For the first time, overweight people outnumber normal-size ones in the United States, according to the latest government statistics, released Tuesday.

The reasons are not entirely clear. Katherine Flegal of the National Center for Health Statistics in Hyattsville, Md., who outlined the data, said many small reductions in physical activity might be to blame.

She noted the development of the TV remote control, which keeps people planted on the couch all evening, and fear of crime, which gives them another reason to stay inside.

"It's just eating too much," contended Dr. Albert J. Stunkard of the University of Pennsylvania. "Physical activity hasn't increased enough to make up for it."

Whatever the reason, the latest government figures show just how fat the country has gotten.

Federal guidelines suggest that people should keep their body mass indexes under 25. Anything more than that is too much.

Body mass index, or BMI, is

quickly becoming the standard way of talking about obesity, since it is an easy way to compare the fatness of people of different heights. BMI is body weight in kilograms divided by height in meters squared. A woman 5-foot-4 who weighs 145 pounds has a BMI of 25.

The National Health and Nutrition Examination Survey, conducted on 30,000 people between 1991 and 1994, shows that 59 percent of American men and 49 percent of women have BMIs over 25. Ten years earlier, 51 percent of men and 41 percent of women were this heavy.

Flegal presented the figures at a meeting of the North American Association for the Study of Obesity.

"It's been clear for several years that Americans are getting fatter, and it's accelerating. That's troubling," said Dr. Tim Byers of the University of Colorado Health Sciences Center.

People in their 50s are the fattest. The survey found that 73 percent of men and 64 percent of women this age have BMIs over 25.

However, the survey also found overweight increasing among pre-

teen children, too.

Extreme obesity is also becoming more common. The survey found 2 percent of men and 4 percent of women have BMIs over 40 - double the rate a decade ago. A 5-foot-4 woman with a BMI of 40 weighs 230 pounds.

While a BMI of 25 is probably not particularly bad, experts say significant health problems begin to emerge when people's BMIs hit 27. That's 155 pounds for the 5-foot-4 woman.

Flegal noted, however, that some weight-related health ills do not appear to be rising with Americans' increasing weights. The survey shows that cholesterol levels are falling, and blood pressure appears to be holding steady or dropping slightly. On the other hand, the statistics suggest that diabetes, which is also closely related to weight, may be increasing.

While there is no universally accepted definition of obesity, some experts call it a BMI of 30 or more. This is 175 pounds for the 5-foot-4 woman.

Older Americans and the flu

Older Americans: You may not feel threatened by the flu. But you are. In an average year, the flu claims the lives of up to 20,000 Americans, 90 percent of whom are age 65 or older.

That is why this Adult Immunizations Awareness Week, I want to provide all older Americans with the information you need to save your health maybe even your life.

Here are the facts: Last year's shot will not protect you from this year's flu. Because the virus takes on a different form every year, you need to get a flu shot every year. And the ideal time to get yours is between October and mid-November. Let me be clear: The flu shot will not make you sick. And, if you are enrolled in Medicare Part B, you can get yours absolutely free.

Unfortunately, recent statistics show that only about 55 percent of Oregon's residents age 65 or older protect themselves by getting a flu shot each year. We can and must do better.

Remember, if you get the flu shot today, you can avoid getting sick tomorrow. So, get the flu shot - not the flu.

Sincerely, Donna Shalala

Thinks He's The One.

For some reason, we all think we're the one person who doesn't ever have to think about cholesterol. But the truth is, we all have to keep our hearts healthy. So we should all eat foods low in saturated fat, total fat, and cholesterol, be physically active, and watch our weight. We all can. We all should. Because every heart counts. Especially yours. For more information, call 1-800-575-WELL.

Every Heart Counts — Care About Cholesterol

National Cholesterol Education Program
National Heart, Lung, and Blood Institute, National Institutes of Health, U.S. Department of Health and Human Services