Dr. A. Martin Lerner CFS Foundation **Press Release**

For Immediate Release

Contact:

Ann M. Cavanagh, Communications Director Dr. A Martin Lerner CFS Foundation +1 415.990.7150; anncavan@yahoo.com

Causal Relationship Identified Between Epstein Barr Virus and Chronic Fatigue Syndrome

BEVERLY HILLS, MI – September 23, 2010

News Facts

- Epstein Barr virus(EBV) causally involved in 81% of 106 consecutive Chronic Fatigue Syndrome(CFS) cases
- Diagnostic serologic panel available for physicians treating CFS patients; diffuse and restricted component of EBV Early Antigen indicate abortive non-permissive incomplete virus replication
- CFS is the result of a non-permissive herpesvirus infection; one or more of EBV, HCMV and/or HHV6
- Use of long term antiviral treatments improve <u>Energy Index Point Score</u>[®], key measurement tool for EBV CFS diagnosis and recovery, with sustained significant improvements to quality of life for patients

Background

A review titled "An update on the management of glandular fever (infectious mononucleosis) and its sequelae caused by Epstein-Barr virus (HHV-4): new and emerging treatment strategies" by Dr. A. Martin Lerner was published today by the journal *Virus Adaptation and Treatment*. Following the successful May release of Dr. Lerner's "Subset-directed Antiviral Treatment of 142 Herpesvirus Patients with Chronic Fatigue Syndrome" in *Virus Adaptation and Treatment*, the journal now publishes a deeper look at the "common thread" virus causing CFS...EBV.

His review is a culmination of over 20 years of EBV research. Dr. Lerner looked broadly at the virus make-up, and then narrowed to EBV patient demographics, EBV diagnostics, and EBV therapeutics and their efficacy.

Starting in 1987, 98 consecutive CFS patients were documented. 87% were women, with the mean age of 42.3 years. They were all previously well, healthy, nonsmokers. They were not obese, hyperlipidemic, hypertensive, alcoholic or psychiatric patients. These demographics are consistent in the CFS community at large.

Over the past 30+ years, diagnostics for CFS have evolved. Dr. Lerner identifies the most important as serum testing, 24-hour Holter Monitor(HM) testing, and clinical diagnostic assessment. It is universally accepted that the presence of serum IgM antibody to EBV viral capsid antigen indicates active EBV infection. It appears approximately 1 month after primary infection, and disappears within 6 months to a year. However, a more recent finding is that diffuse component of EBV early antigen indicate abortive nonpermissive incomplete virus replication. A defining characteristic of CFS patients is their inability to prevent nonpermissive EBV replication that leads to dysregulation of cellular metabolism.

Dr. Safedin (Sajo) Beqaj, Director of the Treatment Center for CFS laboratory and scientific advisor to Lerner's Foundation explains, "We have developed a diagnostic profile for CFS that contains several disease specific assays including EBV, CVM and HHV6. These assays are based on viral gene product expression that determines the stages of the viral infection in patients with CFS." He goes on to explain that "staging the viral infection in CFS patients is essential for the treatment of this disorder." So much so, that in recent studies using this diagnostic panel they were able to categorize subset classification patients with EBV, HCMV and HHV6

Causal Relationship Identified Between EBV and CFS - Page 2

herpes virus infection(s). Throughout each subset, patients sustained significant long-term benefit with directed, individualized pharmacokinetic administrations.

CFS patients universally suffer from palpitations, low blood pressure, high heart rates. However standard ECGs and stress tests were systematically coming back normal. The 24-hour HM was instituted, and heart related complications became evident. HM results ranged from abnormal oscillating T-wave flattening, abnormal oscillated t-wave inversions and tachycardia at rest. These abnormal HM's resulted in EBV CFS becoming recognized as a biomarker of CFS cardiac disease.

The clinical diagnosis is the final, and arguably most important, piece in the CFS diagnostic puzzle. The peer reviewed and substantiated Energy Index Point Score® (EIPS®) is a universal CFS gauge that assists physicians, and patients alike, in the diagnosis and monitoring of CFS over time. The EIPS is used internationally and translated into numerous languages.

The hypothesis of Dr. Lerner's own research, as well as many of his peers, has always been that CFS is the result of an abortive, non-permissive herpesvirus (EBV, HCMV and/or HHV6) infection. CFS patients continue EBV, HCMV, and/or HHV6 herpesvirus abortive multiplication, but fail to achieve viral latency which is necessary for recovery. This hypothesis has now been tested through numerous cohorts, administering valacyclovir for suspected EBV CFS subset and valganciclovir for suspected HCMV or HHV6 CFS subsets. Through a pharmacologic, pharmacokinetic, metabolic, distribution and excretion review of antivirals, as well as published cohorts, this EBV review again substantiates their success. The use of long term antiviral treatments provides drastic improvements to quality of life for CFS patients.

"This review was performed by request of the journal, *Virus Adaptation and Treatment*. They identified the need to review the old and new definitive relation of EBV and IM to EBV persistent infection, and to relate the remarkable safe efficacy of valacyclovir (Valtrex) when given so that the blood levels exceed that necessary to inhibit EBV multiplication through the entire day," says Dr. A. Martin Lerner. "The results are remarkable and return EBV CFS patients to normal lives. The therapeutic place of similar Valtrex treatment in IM and IM complications is emphasized repeatedly through my research."

About Dr. A. Martin Lerner

Dr. A. Martin Lerner founded the Treatment Center for Chronic Fatigue Syndrome (CFS) in Beverly Hills, Michigan. An Infectious Diseases specialist who was at one time plagued by CFS, he has committed the past 25 years to the diagnosis and treatment of CFS for patients around the world. In the past 50 years Dr. Lerner has written over 200 original articles spanning many areas of infectious diseases and virology.

About Dr. A. Martin Lerner CFS Foundation

The mission of this foundation is to advance research, treatment and dissemination of information leading to a better understanding of Chronic Fatigue Syndrome.

About Chronic Fatigue Syndrome (CFS)

Chronic Fatigue Syndrome, also called Chronic Fatigue and Immune Dysfunction Syndrome (CFIDS) or Myalgic Encephalomyelitis (ME), affects as many as 4 million people in the US alone, by CDC estimates, with a quarter disabled. It affects more Americans than AIDS, lung cancer and breast cancer combined. Research by the National Chronic Fatigue foundation found CFS sufferers average age of death to be as much as 20 years premature to the average American. It is a multi-symptom disease, affecting the cardiovascular, immune and central nervous system. The most publicized symptom of the disease is the crippling fatigue, with most patients bed-ridden for all but a few short minutes or hours per day. To the naked eye these patients may look healthy, due to the "invisible" nature of the symptoms, many times causing confusion regarding its legitimacy.

Keywords: Chronic Fatigue Syndrome, CFS, Chronic Fatigue and Immune Dysfunction Syndrome, CFIDS, Myalgic Encephalomyelitis, ME, Energy Index Point Score, EIPS, Dr. A Martin Lerner, Dr. A. Martin Lerner CFS Foundation, Treatment Center for CFS, Epstein Barr Virus, Infectious Mononucleosis, Glandular Fever, Valacyclovir, Valganciclovir, medical breakthrough