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HEALTH CARE AGENCY

PUBLIC HEALTH EPIDEMIOLOGY & ASSESSMENT

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Clinical Trials for treatment of West Nile Virus Neuroinvasive Disease

Human West Nile Virus (WNV) infections have been reported in Orange County this summer beginning in early July. Cases continue to be reported throughout California, and as of 8/26/05, there have been eight WNV-related fatalities in the state this year. Currently, there is no FDA-approved treatment for WNV infection, and mortality from West Nile encephalitis is about 9% in the United States (U.S.). There are three randomized, placebo-controlled trials for the treatment of West Nile Neuroinvasive Disease (WNND) underway in the U.S. These three products have had success in treatment of patients with WNV infection in animal models, anecdotal cases, and un-blinded drug trials. The Orange County Health Care Agency (OCHCA) does not endorse any specific product or clinical trial but is providing you this information to assist you in the management of your patients and to improve enrollment in clinical trials that might lead to effective treatment options for patients with WNND. Prior laboratory confirmation is NOT necessary for initial enrollment of patients in these clinical trials. **Please see attached table for contact information for these trials.**

To our knowledge, there are only two sites in Orange County (University of California, Irvine Medical Center, and Hoag Hospital) that have obtained IRB approval to enroll patients in one of the above clinical trials. If you have applied for IRB approval for one of these studies at your hospital or are interested in doing so, please let us know and we would be happy to include your site enrollment contact information in future updates. Site reimbursement is available from all three studies for enrolled patients.

WNV testing (serum IgM and IgG) is recommended for patients with the following:

- aseptic meningitis (consider enterovirus for individuals <18 years of age)
- encephalitis
- acute flaccid paralysis
- febrile illness compatible with West Nile Fever (WNF: fever, headache, rash, lymphadenopathy, and/or myalgia) and lasting at least 7 days.

Acute and convalescent serology may be needed and, in some cases, confirmatory testing should be done by plaque reduction neutralization test (PRNT) to rule out cross-reactivity with other flaviviruses. Serology may be negative early in the course of disease (especially within the first week after onset of symptoms in WNF patients), therefore repeat serology in 3-5 days may be helpful if there is a strong clinical suspicion. Polymerase chain reaction (PCR) of cerebrospinal fluid (CSF) for enterovirus is helpful to rule out this more common virus in patients with aseptic meningitis and/or encephalitis. WNV testing of possible cases is available through Orange County (OC) Epidemiology (714-834-8180) and some commercial laboratories. Making the diagnosis of WNV infection can spare the patient unnecessary treatment for other conditions in the differential.

West Nile infection, including WNF, WNND, and asymptomatic blood donors, is a reportable condition under California law. In addition, encephalitis and meningitis due to any cause are reportable conditions in California. Cases should be reported within one working day to OC Epidemiology (714-834-8180).

For more information, see: <http://www.ochealthinfo.com/epi/wnv/index.htm>, <http://www.westnile.ca.gov/>, and <http://www.cdc.gov/ncidod/dvbid/westnile/>.

Available randomized placebo-controlled studies for the treatment of WNND
(in alphabetical order)

	Interferon	IVIG (high anti-WNV antibody titer)	Oligomer (anti-sense)
Product	Interferon alpha-N3	Omr-IgG-am	AVI-4020 (3 rd generation anti-sense compound)
Study design	1:1 (treatment:placebo)	3:1:1 (WNV-IVIG: standard IVIG: placebo)	4:1 (treatment:placebo)
Contact information	<p><u>LOCAL CONTACT</u> Hoag Hospital Kay Malkasian, MD (949) 644-1943</p> <p><u>New York Hospital Queens</u> James Rahal, MD Phone: (718) 670-1525 Email: JJR9002@nyp.org</p> <p>Wehbeh Wehbeh, MD Phone: (718) 670-1525 Email: wew9004@nyp.org</p> <p><u>Website:</u> http://www.nyhq.org/posting/rahal.html</p>	<p><u>LOCAL CONTACT</u> University of California Irvine Medical Center Don Forthal, MD Bobi Keenan, RN Phone: (714) 456-7612</p> <p><u>NIH</u> Walla Dempsey Phone: (301) 496-7453 Email: wdempsey@niaid.nih.gov</p> <p><u>University of Alabama</u> Laura Riser, Clinical Administrator Phone: (205) 934-2424 Email: lriser@peds.uab.edu</p> <p>Penny Jester, Project Manager Phone: (205) 996-7800 Email: pjester@peds.uab.edu</p> <p><u>Website:</u> http://www.clinicaltrials.gov/show/NCT00068055</p>	<p>Phone: 503-227-0554 <u>WNV response team</u> Phone: 800-225-8101 Dr. Peter O’Hanley, Sr. Desiree Hollemon Email: DHollemon@avibio.com Janet Christensen <u>Website:</u> http://www.clinicaltrials.gov/ct/show/NCT00091845</p>