

Mayo Clinic Announces Collaboration on New Progranulin Blood Test for Dementia

Mayo Clinic today announced that Mayo Medical Laboratories has signed an agreement with A&G Pharmaceutical, Inc. and will receive a non-exclusive license to certain patent rights and proprietary antibody reagents for the detection and measurement of progranulin in blood. This agreement will let Mayo Clinic offer the first commercial blood test to predict progranulin mutation status in patients suspected to have [frontotemporal dementia](#) [1] (FTD).

The blood test will be available in late 2012 for all Mayo Clinic patients and will be offered through Mayo Medical Laboratories to hospitals and clinics worldwide.

[FTD](#) [2] accounts for at least 5 to 10 percent of dementia cases. It is common among patients with early-onset dementia. FTD affects the brain's frontal lobe, which regulates behavior, movement, mood and language. Most FTD patients are diagnosed when they show changes in personality, loss of memory and ability to use language.

In 2006, researchers at Mayo Clinic published research in *Nature* that found the mutation of the progranulin gene (PGRN) causes a reduction of the protein progranulin in the brain. Along with other changes, this leads to neuronal death and atrophy of the frontal lobes of the brain, ultimately leading to dementia. Genetic testing is available to find the mutation, but it is costly. In 2009, Mayo Clinic researcher Rosa Rademakers, Ph.D., and colleagues discovered that FTD patients with PGRN mutations showed a reduction in blood progranulin levels compared to controls and FTD patients without PGRN mutations. Based on these findings and using A&G's proprietary antibody reagents, Mayo researchers developed an easy-to-use, cost-effective blood test for measuring the level of progranulin.

"The progranulin blood test provides an inexpensive tool to identify progranulin mutation carriers in patients with early-onset dementia or asymptomatic relatives of FTD patients," says [Alicia Algeciras-Schimnich, Ph.D.](#) [3], assistant professor of Laboratory Medicine and Pathology at the College of Medicine, Mayo Clinic.

Dr. Ginette Serrero, CEO of A&G Pharmaceutical, states, "A&G has pioneered and patented research investigating expression of progranulin in breast cancer and lung cancer. Research has shown that breast cancer patients have an elevated level of progranulin when compared to healthy individuals. We are delighted that our clinical studies with breast cancer patients and development of progranulin antibodies and assays also will help FTD patients."

About Progranulin

Progranulin, an 88 kDa cysteine-rich glycoprotein growth and survival factor, is also called GP88, PC cell-derived growth factor (PCDGF), Granulin Precursor, Granulin-Epithelin Precursor (GEP), Epithelin Precursor, Proepithelin (PEPI) or Acrogranin.

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<http://www.mdtmag.com/news/2012/03/mayo-clinic-announces-collaboration-new-progranulin-blood-test-dementia>

Links:

[1] <http://www.mayoclinic.org/frontotemporal-dementia/>

[2] <http://www.mayoclinic.com/health/frontotemporal-dementia/DS00874>

[3] <http://www.mayoclinic.org/bio/12221660.html>