

# BAI BEACON

The Newsletter from Family and Community Services  
Banner Alzheimer's Institute  
www.banneralz.org • (602) 239-6900  
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Banner Alzheimer's Institute

## Working Towards a World without Alzheimer's

Over 5,400 physicians and researchers participated in the recent International Conference on Alzheimer's disease (ICAD) in Chicago. In five action-packed days attendees were enlightened and encouraged by the progress being made in the fight against Alzheimer's disease (AD). Early detection continues to emerge as an important theme for both the diagnosis and treatment of AD. Advances in biomarkers using blood, spinal fluid and brain imaging were presented. It is hoped that biomarkers will one day provide physicians with an accurate and reliable way to make the diagnosis of AD.

There is remarkable progress using Positron Emission Tomography (PET) scans to identify deposits of beta amyloid plaque, one of the hallmark features of AD. New "tracers" allow physicians/researchers to see these abnormal deposits even before clinical symptoms of AD appear. This is very helpful as previously, plaques could only be seen by performing a biopsy or an autopsy. PET scans provide minimal risk to the patient and provide essential information as new medications and other therapies are tested for effectiveness.

As focus continues on quantification of beta amyloid, so does the advancement of potential therapeutic agents to eradicate this abnormal protein. There are numerous agents in various stages of development and testing. One such agent, an immunotherapy called Bapineuzamab, received much attention and an exciting large Phase III trial is currently enrolling volunteers. Another anti-amyloid agent currently enrolling volunteers in a large Phase III trial is compound known as a "gamma-secretase inhibitor" which is thought to help prevent the formation of amyloid.

A number of other hopeful treatments were outlined including the use of intravenous immunoglobulin (IVIg). Individuals with mild to moderate AD, enrolled in a Phase II trial over 9-months showed both cognitive and overall global improvement. A Phase III trial will be launched within months. Dimebon, a medication originally developed in Russia as an antihistamine, is also demonstrating improvement in people with mild to moderate AD. This medication may improve the function of the mitochondria, which is the central energy source of cells. A Phase III study is currently enrolling volunteers. Finally an agent targeting neurofibrillary tangles, also known as tau, was presented. Agents aimed at tau are another part of the puzzle as the tau pathology of AD causes death of brain cells.

With rapid discoveries being made in biomarkers, imaging and therapeutics, there is growing optimism that effective treatments are on the horizon. Of equal importance is the hope that disease modifying medications will be most effective before individuals develop the symptoms of AD. Therefore, discussions of prevention trials are well underway. BAI is actively engaged in a variety of clinical trials, including some mentioned above, in order to accomplish our mission of *ending Alzheimer's disease without losing a generation*. For more information, call 602-239-6900.

## What are the phases of a clinical trials?

Clinical trials are conducted in phases and help scientists answer different questions:

In **Phase I trials**, researchers test an experimental drug / treatment in a small group of people (20-80) for the first time to evaluate its safety, determine a safe dosage range, and identify side effects.

In **Phase II trials**, the experimental study drug/ treatment is given to a larger group of people (100-300) to see if it is effective and evaluate safety.

In **Phase III trials**, the study drug is given to large groups of people (1,000-3,000) to confirm its effectiveness, monitor side effects, compare it to commonly used treatments, and collect information that will allow the experimental drug or treatment to be used safely.

In **Phase IV trials**, post marketing studies delineate additional information including the drug's risks, side effects, benefits, contraindications and optimal use.



## “Ask the Expert”

By Dr. Roy Yaari

Dear Dr. Yaari:

I have recently been diagnosed with Alzheimer’s disease and seem to be doing well on Aricept. I have read a bit about clinical trials for AD but don’t know how I would go about getting one of these new medications. Where should I begin and what should I expect?

Signed:  
Hopeful for more treatment

I am sorry to hear about your recent diagnosis of Alzheimer’s disease. At the same time, I am pleased that you are on appropriate therapy (Aricept) and you are looking into volunteering for a clinical trial. Clinical trials are studies that determine whether new drugs are beneficial and safe; and are necessary for approval by the US Food and Drug Administration.

Before participating in a clinical trial, volunteers are “screened” to see if they meet eligibility requirements for a study. If a volunteer meets all criteria for eligibility, they are then enrolled into the study and are “randomized” to receive study drug or placebo.

Neither the participant nor the physician/research team have knowledge about who receives the study medication or placebo. This is referred to as a “double-blind placebo-controlled study” and is required for scientific integrity.

Participants are followed very closely for the duration of the study. Most AD studies range from 6 to 18 months and participants are monitored for possible side effects and benefits. These additional tests include those measuring memory and thinking as well as caregiver interviews, blood tests, and/or ECGs. Some studies may also include brain imaging or spinal taps. There is no charges for participants and some studies may have some limited compensation.

There are many centers in the greater Phoenix area that are actively enrolling patients into clinical trials for AD, including the BAI. The website, [www.clinicaltrials.gov](http://www.clinicaltrials.gov), has a listing of what is available to you locally. Your participation in a clinical trial is a great contribution in putting an end to AD.

Thank you!  
*Roy Yaari, Associate Director of Memory Disorders Clinic*

## Our Mission

*To end Alzheimer’s disease without losing a generation, to set a new standard of care for patients and their families, and to forge a model of collaboration in biomedical research.*

## Alzheimer’s Research Registry

The Arizona Alzheimer’s Consortium created the Alzheimer’s Research Registry as a database to pair people ages 50+ who are willing to participate in AD research with studies that match their interests. Studies are available for both people with and without memory problems.

Since the Registry was launched in March 2007, over 1,700 people have been enrolled. The process begins with a brief survey being completed by volunteers. If volunteers qualify, a more extensive questionnaire is completed asking about family and medical history. The volunteers also answer questions about memory, thinking and daily function. The Registry team notifies volunteers about new studies and participation is completely voluntary. Some of the studies do not involve treatment, rather monitor memory and thinking over time and may include brain imaging. Other studies will study medication or vaccine treatment aimed at preventing or slowing the progression of AD. For more information, contact the Alzheimer’s Registry at 602-239-6500.

## Beacon Bits



### November 8 Research Conference

Invitations for the 2<sup>nd</sup> Annual *Progress in the Fight Against Alzheimer’s Disease* conference available!

Join us on Saturday, November 8 for this conference held at the Arizona Grand Resort in Phoenix.

**Registration fee** is \$25 per person. If you did not already receive an invitation in the mail, please call to request one. This year’s conference will feature dynamic presentations on understanding Alzheimer’s, genetics & AD, imaging techniques, therapeutic trends, portraits of caregiving and more! Syndicated columnist Dear Abby will provide our featured keynote. For more information or brochures call 602-239-6866 and speak with Mary Helen Martinez. Hope to see you there!

### Upcoming BAI Explorers outing!

Tuesday, November 11 from 12 p.m. to 1:30 p.m.  
Lunchtime Theatre at the Herberger

The Herberger Theater Center is proud to showcase the work of young, emerging theater companies in their Lunch Time Theater. Join us in the Performance Outreach Theater for a one-act play lasting 30-45 minutes. Includes a box lunch so you can dine while you watch! **Registration fee:** \$12.50 per person (to be confirmed), includes show and box lunch. To register, please call 602-239-6850.