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## New imaging agents for AB-amyloid plaques and tangles

Tech ID: 23320 / UC Case 2012-664-0

### BRIEF DESCRIPTION

Researchers at the University of California, Irvine have synthesized new chemical entities that selectively bind to regions in the brain that accumulate A $\beta$ -amyloid plaques.

### FULL DESCRIPTION

Alzheimer's disease is a neurodegenerative disease characterized by A $\beta$ -amyloid senile plaques present in the cortex and hippocampus regions of the brain. Two compounds currently have been used in human studies to image A $\beta$ -amyloid for diagnosis and treatment of Alzheimer's disease. Both compounds, however, have disadvantages. One compound images amyloid plaques and tangles but the quality of images is poor. The second compound can image only the amyloid plaques.

Researchers at the University of California, Irvine have synthesized new chemical entities that selectively bind to regions in the brain that accumulate A $\beta$ -amyloid plaques. These entities can be radiolabeled and, therefore, used as imaging agents for diagnosis and treatment of diseases that involve formation of beta-amyloid. They also offer greater sensitivity and accuracy than the imaging agents currently in use in human studies and have the potential to label both plaques and tangles.

### SUGGESTED USES

For early diagnosis, treatment management, and development of new therapies for Alzheimer's disease, and other forms of dementia and related disorders that involve formation of beta-amyloid.

### ADVANTAGES

The new chemical entities allow imaging plaques and tangles with much greater sensitivity and accuracy than compounds currently in use.

### PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,180,212	11/10/2015	2012-664

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### OTHER INFORMATION

#### CATEGORIZED AS

- » **Imaging**
  - » Medical
- » **Materials & Chemicals**
  - » Chemicals
- » **Medical**
  - » Diagnostics
  - » Disease: Central Nervous System
  - » Imaging
  - » New Chemical Entities, Drug Leads
  - » Screening

#### RELATED CASES

2012-664-0

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