Outline

- General situation of China-ADNI
- Enrolled sites and subjects
- Progress of the main cores
ADI-China

Scientist advisory board

Administration committee
PI: Prof. Kuncheng Li, CMU
CO-PI: Prof. Jun Wang, BJU
CO-PI: Prof. Hongzheng Wang, BUMC

Clinical core
Xiaoting Guan

MRI core
Kuncheng Li

PET core
Fang Li

Patholoy core
Cuidi Wang

Biomarker and Genetics Core
Jun Wang/Yan Zhang

Biostatistics and Informatics core
Li Wang

DATA Post process
Yong Fang
# China-ADNI research plan

<table>
<thead>
<tr>
<th>800–1000 subjects (80 sites)</th>
<th>Normal</th>
<th>Early MCI</th>
<th>Late MCI</th>
<th>Mild AD</th>
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</table>
Main Parameters of Study

➤ Neuropsychological Tests

➤ Biomarkers:
  
in Blood: Apo E polymorphism, amyloid40/42, tau
  
in CSF: Amyloid 40/42, tau

➤ MRI

➤ PET: FDG-PET, F18-AV45-PET
- 3 sites from other provinces joined to the cooperation study (Total 10 sites)
- 16 new subjects have enrolled in the research since Jul 2012
Neuropsychological Assessment

- Screen: MMSE, LM-I, LM-II, GDS, CDR
- Baseline: MoCA, BNT, Rey AVLT(30’ Delay), NPI, FAQ
- 6 month later: MMSE, CDR, MoCA, BNT, Rey AVLT(30’ Delay), NPI, FAQ
- 12 month later: MMSE, LM-I, LM-II, GDS, CDR, MoCA, BNT, Rey AVLT(30’ Delay), NPI, FAQ
Preliminary clinical data

- New subjects enrolled: 16
  - Controls = 6
  - EMCI = 4
  - LMCI = 1
  - AD = 5
## Preliminary biomarker study

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<th></th>
<th>ApoE</th>
<th>Aβ1-42 (pg/ml)</th>
<th>total tau (pg/ml)</th>
<th>p-tau (pg/ml)</th>
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<td>49</td>
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Preliminary MRI Study

- Establish standard protocol for MRI acquisition
- Develop and implement methods for quality control of MRI
- Improve the post-processing methods
- 16 cases were performed with baseline 3T MRI scan, and 11 cases underwent the 3 and 6 months follow-up scan
- 3D T1 volume (Voxel-based morphometry, Cortical thickness)
- Diffusion tensor imaging / Tractography (Tract-specific analysis, Tract-based spatial statistics)
- Resting state fMRI (Functional connectivity, Effective connectivity, Graph theory)
- Magnetic resonance spectroscopy
- Susceptibility weighted imaging
Cingulum, FA value

Corpus callosum, FA value

Fusiform gyrus, FA value

MPFC, FA value
Preliminary PET Study

- Imaging quality control with phantom
- Examination protocol was achieved according to the WW-ADNI
- 13 cases had undergone the baseline FDG-PET
- No AV-45-PET examination were performed until now
Many thanks to the support from WW-ADNI