Fifth meeting on the EADC-ADNI Harmonization of Protocols for Hippocampal Segmentation

AAN, New Orleans, Tuesday, April 24, 2012

Participants:

Giovanni B. Frisoni, IRCCS S. Giovanni di Dio - Fatebenefratelli, BS, Italy

Clifford R. Jack - Mayo Clinic, Rochester, MN, USA

Liana Apostolova - UCLA, CA, USA

Lisa Silbert - Oregon Health & Science University School of Medicine

Craig Watson – Detroit, MI, USA

Diane Stephenson - C-PATH

Chahin Pachai - Bioclinica

Joyce Suhy - Synarc

Susan Behling-BMS

Chi-Ming Lee - Astrazeneca

Gerald Novak - JNJ

Peng Py Yu - Lilly

Joyce Suhy, Synarc

Maria Carrillo - Alzheimer's Association, Chicago, IL

Meredith McNeil - Alzheimer's Association, Chicago, IL

Remote participants:

Marina Boccardi, Martina Bocchetta, Gabriele Corbetta - IRCCS S. Giovanni di Dio -

Fatebenefratelli, BS, Italy

Simon Duchesne - Laval University, Québec City, Canada

Timothy Brown - Johns Hopkins University, USA

Andy Simmons - (AddNeuroMed), London, UK

Mirjam Geerlings - SMART-MEDEA STUDY, Utrecht, the Netherlands

The presented slides are available at www hippocampal-protocol net

Dominik Wolf - University Medical Center Mainz, Germany

Gunnar Krueger - Siemens

Bruno Dubois – Salpêtrière University. Hospital, Paris

Neil Buckholtz - National Institute on Aging - NIH

Dr. Frisoni describes the outlines of the project, the participants, the next steps and the work done so far

Dr. Boccardi shows the Delphi results regarding the landmarks and the segmentation modalities. New data regarding the check for any differences in tracings made on different image orientation, and on spatial overlapping among tracers have been reported. Dr. Frisoni described the Publication Policy and ask people to send suggestions about it. The Publication Policy can be downloaded at: http://www.hippocampal-protocol.net/SOPs/LINK_PAGE/Publication_Policy_V3-2.pdf

The presented stides are available at www.imppocampar protocol.net.	

Ouestions/comments from the audience:

Q=question from audience

A=answer by GB Frisoni, CR Jack, and M Boccardi

Q: Will the hippocampal masks be available for the public?

A: Yes, but only at the end of the project. From now till then, beta-users will be accepted based on ad hoc cooperation agreements.

Q: Will the mask be included in atlases for automated segmentation algorithms?

A: Yes, this is a case that may qualify them as beta-users.

Q: Will the segmentation of CSF pools be tricky for automated segmentation algorithms?

A: Automated algorithms might be able to separate CSF pools from hippocampus, but it depends on sequences, WM/GM contrast and other technical modalities.

Q: Have you found any relationship between CSF pools and disease severity?

A: We did not investigate this issue.

Q: How much training is necessary for the naïve tracers to learn the Harmonized Protocol?

A: It will take the same time as any other segmentation protocol, but due to the different aim of our project (i.e. to achieve a very high ICC) the standard might be higher, thus it may take somewhat longer. A threshold for qualification still needs to be defined. The Harmonized Protocol will include very detailed information for it to be self explanatory. Qualification may take anywhere between 20 and 40 hours' work from a naïve tracer.

Q: Which is the set for the training for the other tracers?

A: Masks traced by the 5 best naïve tracers.