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

Thursday, May 3, 2012

Participants:

Giovanni B. Frisoni	(GBF)	– IRCCS S. Giovanni di Dio - Fatebenefratelli, BS, Italy
Marina Boccardi	(MB)	– IRCCS S. Giovanni di Dio - Fatebenefratelli, BS, Italy
Martina Bocchetta	(MBocch)	– IRCCS S. Giovanni di Dio - Fatebenefratelli, BS, Italy
Alberto Redolfi	(AR)	– IRCCS S. Giovanni di Dio - Fatebenefratelli, BS, Italy
Simon Duchesne	(SD)	– Laval University, Québec City, Canada
Clifford R. Jack	(CRJ)	– Mayo Clinic, Rochester, MN, USA
Lennart Thurfjell	(LT)	– GE

WORKING GROUP FOR ALGORITHMS QUALIFICATION

GBF proposed to set up an independent expert committee for the qualification of automated hippocampal segmentation algorithms. These will need to be qualified by regulatory authorities (FDA and EMA) as a medical device and as a marker to track disease progression. The expert group will provide a qualification opinion to algorithm developers regarding accuracy, standards, thresholds and it will be devoid of conflict of interests and under the auspice of an independent authority (Alzheimer's Association for instance).

LT and SD expressed some criticisms and proposed to focus on standardization, especially because there are some algorithms (NeuroQuant and Freesurfer) which have already received the certification as medical devices. The aim is to develop and get certification for a standard on hippocampal volumetry (the mentioned algorithms segmented the "whole brain").

CRJ and GBF decided to discuss with Maria Carrillo about this proposal for the AA Research Round table.

BENCHMARK SEGMENTATION UPDATE

MB updated the PMT about the ongoing work of the 5 Master Tracers, which are going to complete the benchmark segmentation by mid-May.

VISUALIZATION OF HIPPOCAMPAL SEGMENTATION WITH AUGMENTED REALITY

GBF, AR and SD discussed about the possibility to develop an eye-catching tool for communication purposes, and in particular to create 3D objects of probabilistic maps using augmented reality and immersive reality. Nicolas Robitaille will send specific files to AR who will work on them to create 3D movies which will show 3D hippocampal segmentation and overlapping areas between segmentations from different tracers.

The next TC is scheduled for Wednesday June, 6 2012 from 4 pm to 5 pm CET.