

**VALIDATION VS CURRENT PROTOCOLS  
ASSESSMENT OF SOURCES OF VARIANCE  
TRAINING SET DEVELOPMENT**

20 naïve tracers

**Local Protocol**

ADNI scans: 2 x 5 Scheltens's atrophy scores  
x 2 sides x 2 magnet strengths (1.5-3T)

**QUALIFICATION**

**Harmonized Protocol**

ADNI scans: 2 x 5 Scheltens's atrophy score x  
2 sides x 2 magnet strength (1.5-3T)  
Total per rater: 40 hippos

Assessment of variance due to rater and center

Best 5 naïve tracers

**Harmonized Protocol**

ADNI scans: 2 sides x 5 Scheltens's atrophy scores x 3  
time points (bl-1y-2y) x 3 scanners (+ retracing @ bl)  
x 2 magnet strengths (1.5-3T)  
Total per rater: 240 hippos

Assessment of variance due to side, trace-retrace,  
atrophy, time, scanner, rater

**TRAINING SET**

**GOLD STANDARD**

5 master tracers

**Training**

ADNI scans: 10 at 1.5T x 2 sides x 7 SUs  
x 2 tracing rounds  
Total per rater: 40 hippos

**Harmonized Protocol**

ADNI scans: 2 x 5 Scheltens's atrophy  
score x 2 sides  
x 2 magnet strengths (1.5-3T)  
Total per rater: 40 hippos

**REFERENCE PROBABILISTIC  
MASKS  
with 95% C.I.**

**VALIDATION VS PATHOLOGY**

1 tracer

**QUALIFICATION**

**Harmonized Protocol:**

Pathological datasets:  
Mayo Clinic and NYU  
Total: about 40 hippos

Assessment of agreement with  
volume on pathology or ex vivo MRI  
and correlation with neuronal density