Neurocognitive Impairment in Diverse Resource Limited Settings: The International Neurological Study ACTG A5199 and The International Neurocognitive Normative Study ACTG A5271

ABSTRACT

While neurocognitive impairment in HIV remains prevalent despite potent antiretroviral therapy (ART), there is a lack of infrastructure conducting neurological research in resource limited settings (RLS), including normative data needed for clinical interpretation. ACTG 5271, the International Neurocognitive Normative Study provided training of clinical site personnel and collected normative comparison data. Here we provide methods of neurocognitive impairment in diverse RLS settings for clinicians and researchers conducting neurological and neuropsychological assessments.

INTRODUCTION

METHODS

Subjects

5199 HIV+ ART

• Antiretroviral naive
• CD4+ < 300 cells/mm³
• ≤ 860 subjects enrolled

5271 HIV- Normative

• HIV- within 30 days
• Presenting to VCT
• ≥ 2400 subjects enrolled

Stratified by

• Site, age (<35, ≥35+)
• Education (≤10, >10)

RESULTS

Neurocognitive Impairment

Baseline ART Naive

• Reduced odds of NCI by 12% for every 24 weeks (p<.0001) on ART

• No treatment differences

CONCLUSIONS

• First multinational RLS study of NCI
• Provides a much needed resource for clinicians and researchers conducting neurological and neuropsychological assessments in diverse RLS.