

**CAB Conference Call
February 25, 2010
12:00 EST
Meeting Minutes**

Participants:

Carrie	University of Colorado
Dahlia	University of Miami
Dorothy	University of Alabama
Erin	Harvard
Ginny	Boston Children's Hospital
Jennifer	University of Colorado
Julie	Westat
Lennie	St. Jude
Linda	St. Christopher's Hospital
Lori	FSTRF
Mariana	University of California
Marilyn	Bronx-Lebanon
Megan	Harvard
Miriam	Harvard
Renee	University of Illinois College of Medicine
Rosia	Westat
Samantha	Children's Diagnostic & Treatment Center
Sharan	University of Alabama
Sharon	University of California
Sherry	St. Jude

MEETING MINUTES

The group approved the minutes for January 28, 2010. There were no changes.

• **WELCOME NEW CAB MEMBERS**

The team welcomed **Megan** as the new Project Coordinator at Harvard. Megan told the group that **Julie** had her baby in February.

• **CROI POSTERS**

Two posters accepted by the Conference of Retrovirus and Opportunistic Infections (CROI) were discussed. **Renee** talked about "The Long-term Impact of HIV Disease Severity on Cognitive and Adaptive Functioning during Childhood and Adolescence." There were 461 AMP perinatally exposed kids on the study. The kids were 7-16 years old. 153 kids were HIV negative, and 233 kids were HIV positive and were healthy early in childhood. Also, 75 kids had a "Class C" diagnosis early in their life. This study looks at cognitive and adaptive skills, to see if each of the three groups functions similarly.

An intelligence test called WISC IV measured cognition. Kids answer questions directly on the WISC VI. A test called Adaptive Behavior Assessment System (ABAS) measures adaptive functioning. The ABAS asks parents to answer questions about their child's behavior. The ABAS looks at Conceptual, Social Functioning, and Practical skills. These skills include communication academic, interpersonal, social competency, independent living, and daily living skills like self-care.

The study did not find many differences in cognition and adaptive function for kids who were in their early school-age years. The group was then broken into kids who had AIDS-defining illnesses when they were young. This group is labeled "Class C" by the Centers for Disease Control. The kids with an AIDS-defining illness early on had more problems. For cognition, the Class C kids with AIDS-defining illnesses had much lower scores with speed-processing skills. The children respond to hearing and reading prompts. Speed-processing is tested using the WISC IV. For Adaptive Functioning, Class C children have more trouble adapting to their environment (Practical Adaptive skills). These kids also had trouble doing tasks on their own and knowing how to stay safe. This includes being able to clean, dress, and brush teeth.

Erin discussed the second poster, "Correlation of Markers of Vascular Dysfunction with Neurodevelopmental Outcomes in Children and Adolescents with Perinatally Acquired HIV Infection." Erin explained that people with HIV might develop diseases of the Central Nervous System. The brain risks being impaired by ARVs and HIV. Research suggests that brain impairment is a complex problem. Many things may affect brain function. This includes inflammation, blood coagulation and clotting, cell communication and migration. In this study, these processes are called "vascular dysfunction." This study examines biomarkers of vascular dysfunction.

There were 100 AMP subjects in this study. Blood samples were taken for nine biomarkers. The biomarkers relate to inflammation, cell migration, or cell communication. The biomarkers in the blood show what is going on in the body. Some of these can be higher if there is inflammation in the body, such as when trying to fight infection. Biomarkers are ways to tell us how the blood is working. They also tell us what the body might be doing to fight HIV.

This study also gave WISC-IV tests to the kids in the study. The results for verbal comprehension, processing speed, perceptual reasoning, and working memory were obtained. The participant's full-scale IQ was also obtained. Demographics, family background, and HIV traits were also studied to find the link between biomarkers and WISC scores. The results showed that the biomarkers of p-selectin and fibrinogen were consistent with the WISC IV scores and the full-scale IQ. As p-selectin and fibrinogen increase, the WISC IV scores decrease by a significant amount for all four WISC scores. Children with higher peak viral loads had lower WISC scores. There was no connection between the seven other biomarkers and the WISC scores.

- **OTHER ITEMS**

NOTE: the next CAB call will be on Thursday, March 25, 2010 at 12:00 pm EST