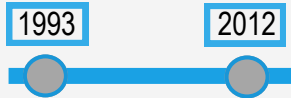


# OUTCOMES OF CHANGES IN TREATMENT AFTER TREATMENT FAILURE IN YOUTH LIVING WITH HIV

Most children with HIV are treated with combination antiretroviral therapy (cART). cART treatment failure can happen when the HIV medications are not controlling the virus well enough. We wanted to see how children who failed treatment were taken care of and how they responded to treatment.

## WHO PARTICIPATED



We looked at 2,373 youth living with HIV receiving cART. All youth were in the Pediatric AIDS Clinical Trials Group 219C study or in PHACS between 1993 and 2012.

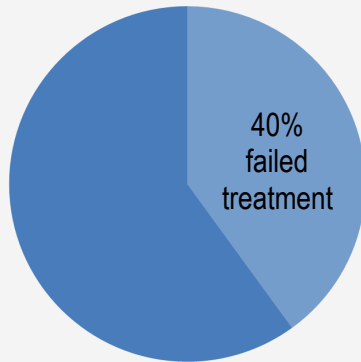
## WHAT WE DID



HIV medications can help to control HIV.

HIV viral load is the amount of HIV in the blood. CD4 cells are a type of cell that help protect the body from infection. When HIV medications work well, CD4 cells go up and viral load goes down. Treatment failure can happen when HIV medications are not controlling HIV. Youth who fail treatment may need new medications. We wanted to know how they responded to treatment, so we looked at the medications and management of youth who failed treatment.

## WHAT WE FOUND



About 40% of youth in the study failed cART. We found that of those youth who failed treatment:

- About 84% were kept on their first medication treatment when the medications no longer controlled their HIV;
- Most had treatment failure before the year 2007;
- One year after failing cART, youth who had changed to a new medication treatment were doing the best;
- Youth who stopped all ARVs had the largest drop in their CD4 cells. This means that these youth were the most at risk for worsening disease.

## WHAT WE LEARNED



We found that if youth fail cART, it is best to change to new medications. However, if they are not ready to change treatment or need to get better at taking their medications, then it is safe to temporarily continue their current treatment or change to simpler treatment as long as we watch them closely. This study gave us valuable information about youth whose medications are no longer controlling their HIV.