

Study of Toddlers with Autism & Regression (STAR)

What is the study about?

This study aims to identify and increase our understanding of young children with autism who have had a loss (regression) in language and/or social communication skills. Research has shown that some people with autism have abnormalities in their cells that fight off infection (immune system), and when these cells are overactive they can cause injury to other cells in the body (overactive immune system). Research has also shown that some people with autism have an increase in the production of oxygen molecules that can damage cells and impair their function (oxidative stress). We want to see if regression in children with autism is related to signs of an overactive immune system and/or oxidative stress, and we will compare toddlers with autism and regression to toddlers with autism and no history of regression.

Who can participate?

- Young children aged 18-36 months
- Must have a loss of language and/or social communication skills in the past 6 months
- The skills must have been present for at least 1 month prior to the loss and lost for at least 1 month
- Your child will be assessed and must meet criteria for autism to participate in the study

What are examples of skills my child may have lost?

- Had 2 words or more, used daily and spontaneously, other than “mama” or “dada”
- Responded to name when called
- Smiled in response to others smiling at him/her
- Pointed at an interesting object
- Had eye contact when interacting
- Waved “bye bye” on their own when someone left
- Showed things by extending their arm

What does the study involve?

If you are interested, you will be contacted by the research coordinator for a telephone interview to see if your child can be in the study. If your child is eligible, you will be invited for an assessment at the Autism Treatment Network site which will include a review of your child’s medical history and development, as well as some tests to observe your child’s social communication skills as well as thinking and problem solving abilities. Routine medical tests including blood and urine tests will be completed to screen for a metabolic disorder (abnormalities in chemical reactions within the cells of the body). The blood will also be tested for signs of an overactive immune system and oxidative stress. Results of the research testing will only be reported to you if a medical disorder is suspected and further testing is needed.

What are the risks and benefits of participating?

Your child will receive thorough medical testing through clinical blood and urine testing that will be screened for possible metabolic and inflammatory disorders that may contribute to your child’s developmental problems. In addition, your child will receive an assessment of early learning. We will require an additional 1 teaspoon of blood to help us understand if an overactive immune system or oxidative stress is related to regression in children with autism.

Please feel free to contact **Melanie Fenwick** at **416 925 5141 x 2527** for more information.

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