Simons Searchlight Registry Update CSNK2A1 (OCNDS)

Data in these four graphs are from the medical history phone interviews collected in Simons Searchlight from 56 participants with CSNK2A1 (Okur-Chung Neurodevelopmental Syndrome).

August 2023

Ages in Years

Developmental and Behavioral Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADHD</td>
<td>10</td>
</tr>
<tr>
<td>Anxiety</td>
<td>9</td>
</tr>
<tr>
<td>Autism</td>
<td>14</td>
</tr>
<tr>
<td>Intellectual Disability/Developmental Delay</td>
<td>51</td>
</tr>
<tr>
<td>Language Delay/Impairment</td>
<td>56</td>
</tr>
</tbody>
</table>

Neurological Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tic Disorder</td>
<td>3</td>
</tr>
<tr>
<td>Small Head Size</td>
<td>13</td>
</tr>
<tr>
<td>Seizures</td>
<td>14</td>
</tr>
<tr>
<td>Movement Disorder</td>
<td>11</td>
</tr>
<tr>
<td>Low Muscle Tone</td>
<td>41</td>
</tr>
<tr>
<td>Large Head Size</td>
<td>1</td>
</tr>
<tr>
<td>High Muscle Tone</td>
<td>2</td>
</tr>
<tr>
<td>Cortical Visual Impairment</td>
<td>2</td>
</tr>
<tr>
<td>Coordination Problems</td>
<td>6</td>
</tr>
<tr>
<td>Cerebral Palsy</td>
<td>2</td>
</tr>
</tbody>
</table>

Gastrointestinal Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celiac Disease</td>
<td>32</td>
</tr>
<tr>
<td>Constipation</td>
<td>4</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>12</td>
</tr>
<tr>
<td>GERD</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
</tbody>
</table>

NOTES: Graphs show counts of individuals in each category. Individual participants may appear in more than one category if they report multiple conditions.

How to participate?

The information in this report is made possible by the active participation of the CSNK2A1 community! Progress for individuals in your community with CSNK2A1 is shown below - log in to your simonssearchlight.org dashboard today to check for new surveys and tasks. Your data could hold the clues geneticists need to find answers.

**STEP 1**
Sign up online

109

**STEP 2**
Provide your genetic lab report

87

**STEP 3**
Share your important medical history

68

**STEP 4**
Fill out surveys

78

**STEP 5**
Provide a blood sample if you are interested

22

**STEP 6**
Update us every year

Log in to see next steps
Information Spotlight: Deeper Dive into Development

We use a standardized measure called the Vineland Adaptive Behavior Scales (Vineland-3) to measure each person’s development in communication, self-care, social skills, and in younger children, motor skills.

We can learn how skills develop over time by looking at growth charts. The sample graph on the next page is an example growth chart, and the graphs afterwards show real Vineland-3 data from your community.

When we plot everyone together, we can see what people can do at younger and older ages. This is one snapshot in time. The more people fill out their Vineland over time, the more we can estimate what true longitudinal growth looks like for everyone in your community.

41 CSNK2A1 participants contributed Vineland-3 data to this report

Scan the QR code below or use the following link (bit.ly/Searchlight_Vineland_Graph) for a video from Dr. LeeAnne Green Snyder, Clinical Research Scientist for Simons Searchlight, on how to read the Vineland Adaptive Behavior Scales growth charts.

We will continue to collect Vineland data every year. Over time, we will have a better understanding of how individuals with CSNK2A1 change as they get older.

Kindly note that these charts are from self-reported online research surveys and errors are possible. The skills shown are only estimates and may not apply to everyone. Remember that everyone develops at their own pace, and individual perspectives and responses may vary. Please let us know if you have any questions.
Sample graph:
Developmental Levels in Speech at Younger and Older Ages

Expressive Language Development
(number of individuals)

![Graph showing developmental levels in speech at different ages.]

- Each blue dot represents a person.
- The trend line shows typical development in expressive language skills.
- Typical milestone at 2 years old: Phrase Speech.
- The dots are placed at the level at which they are expressing themselves.
- A percentage of individuals are likely to be using language at age 4 and older.

What does this mean as my child gets older?

- Along the bottom is the actual age of the person.
- The dots are placed at the level at which they are expressing themselves.
- A percentage of individuals are likely to be using language at age 4 and older.
Developmental Levels in Speech at Younger and Older Ages in CSNK2A1

Expressive Language Development (41 individuals)

What does this mean as my child gets older?

Along the bottom is the actual age of the person.

The dots are placed at the level at which they express themselves.

89% of individuals are likely to be using language at age 4 and older.
Developmental Levels in Self Care at Younger and Older Ages in CSNK2A1

Self Care Skills Development (41 individuals)

What does this mean as my child gets older? Along the bottom is the actual age of the person. The dots are placed at the level at which they can do things for themselves. 83% of individuals are likely to be feeding themselves at age 4 and older.
Developmental Levels in Social Skills at Younger and Older Ages in CSNK2A1

What does this mean as my child gets older?

Along the bottom is the actual age of the person. The dots are placed at the level of their social behavior. 74% of individuals are likely to be making eye contact at age 4 and older.
Developmental Levels in Motor Skills at Younger and Older Ages in CSNK2A1

Motor Skills Development (40 individuals)

What does this mean as my child gets older?

Along the bottom is the actual age of the person.

The dots are placed at the level of their motor skills.

94% of individuals are likely to be walking at age 4 and older.