

## Cochrane

Search Name: Risk Factors July

Last Saved: 15/07/2016 02:32:11.311

Description:

| ID | Search |
|----|--------|
|----|--------|

|    |                                                         |
|----|---------------------------------------------------------|
| #1 | MeSH descriptor: [Tuberous Sclerosis] explode all trees |
|----|---------------------------------------------------------|

|    |                                                               |
|----|---------------------------------------------------------------|
| #2 | tubero* near/1 sclerosis (Word variations have been searched) |
|----|---------------------------------------------------------------|

|    |                                                                             |
|----|-----------------------------------------------------------------------------|
| #3 | MeSH descriptor: [Child Development Disorders, Pervasive] explode all trees |
|----|-----------------------------------------------------------------------------|

|    |                                                                                                                                                                                 |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #4 | (development* next disorder*) or "developmental status" or (disintegrative next disorder*) or pervasive or autism or autistic or asperger* (Word variations have been searched) |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                |
|----|------------------------------------------------|
| #5 | MeSH descriptor: [Risk Factors] this term only |
|----|------------------------------------------------|

|    |                                        |
|----|----------------------------------------|
| #6 | MeSH descriptor: [Risk] this term only |
|----|----------------------------------------|

|    |                                            |
|----|--------------------------------------------|
| #7 | MeSH descriptor: [Genotype] this term only |
|----|--------------------------------------------|

|    |                                             |
|----|---------------------------------------------|
| #8 | MeSH descriptor: [Phenotype] this term only |
|----|---------------------------------------------|

|    |                                            |
|----|--------------------------------------------|
| #9 | MeSH descriptor: [Epilepsy] this term only |
|----|--------------------------------------------|

|     |                                               |
|-----|-----------------------------------------------|
| #10 | MeSH descriptor: [Astrocytoma] this term only |
|-----|-----------------------------------------------|

|     |                                                              |
|-----|--------------------------------------------------------------|
| #11 | MeSH descriptor: [Magnetic Resonance Imaging] this term only |
|-----|--------------------------------------------------------------|

|     |                                                                        |
|-----|------------------------------------------------------------------------|
| #12 | MeSH descriptor: [Diffusion Magnetic Resonance Imaging] this term only |
|-----|------------------------------------------------------------------------|

|     |                                                          |
|-----|----------------------------------------------------------|
| #13 | MeSH descriptor: [Electroencephalography] this term only |
|-----|----------------------------------------------------------|

|     |                                                                |
|-----|----------------------------------------------------------------|
| #14 | MeSH descriptor: [TOR Serine-Threonine Kinases] this term only |
|-----|----------------------------------------------------------------|

|     |                                                         |
|-----|---------------------------------------------------------|
| #15 | MeSH descriptor: [Socioeconomic Factors] this term only |
|-----|---------------------------------------------------------|

|     |                                                                     |
|-----|---------------------------------------------------------------------|
| #16 | MeSH descriptor: [Prenatal Exposure Delayed Effects] this term only |
|-----|---------------------------------------------------------------------|

#17 MeSH descriptor: [Pregnancy Outcome] this term only

#18 (prognostic next factor\*) or risk\* or electrophysiologic\* or electro-physiologic\* or (electro next physiologic\*) or epileps\* or epileptic or seizure\* or interictal or inter-ictal or (inter next ictal) or electroencephalogra\* or electro-encephalogra\* or (electro next encephalogra\*) or (infant\* next spasm\*) or astrocytoma or gene or genes or genetic\* or genotyp\* or phenotyp\* or mutation\* or tuber or (white next matter) or SEN\* or SEGAs or (subependymal next nodule\*) or gender or famil\* or MRI\* or neuroimaging or neuro-imaging or (neuro next imaging) or (magnetic next resonance next imaging) or (image next analys\*) or socioeconomic\* or socio-economic\* or (socio next economic\*) or (prenatal\* near/3 expos\*) or (pregnanc\* near/3 outcome\*) or (target near/3 rapamycin) or serine-threonine or (serine next threonine) or (mtor near/3 protein\*) (Word variations have been searched)

#19 gestation\* or embryo\* or prenatal\* or neonat\* or newborn\* or infan\* or toddler\* or child\* or preschooler\* or pre-schooler\* or adolescen\* or paediatric\* or pediatric\* (Word variations have been searched)

#20 MeSH descriptor: [Child] explode all trees

#21 MeSH descriptor: [Infant] explode all trees

#22 MeSH descriptor: [Adolescent] explode all trees

#23 (#1 or #2) and (#3 or #4) and (#5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18) and (#19 or #20 or #21 or #22)

## PubMed

(tuberous sclerosis) AND ("asperger syndrome" OR autism OR "autistic disorder" OR "autism spectrum" OR childhood disintegrative disorder\* OR disintegrative disorder\* OR pervasive OR "pervasive developmental disorder not otherwise specified" OR child development\* disorder\* OR development\* disorder\* OR "developmental status") AND ("diffusion magnetic resonance imaging" OR "diffusion MRI" OR "diffusion tensor imaging" OR "diffusion weighted imaging" OR electrophysiologic\* OR electroencephalography OR epilepsy OR epileptic OR family OR family's OR

familial OR "family history" OR "functional neuroimaging" OR gene OR genes OR genetic\* OR genotyp\* OR "gene mutation" OR "genotype phenotype" OR "genotype phenotype correlation" OR gender OR " image analysis" OR interictal OR inter-ictal OR "magnetic resonance imagining" OR neuroimaging OR "nuclear magnetic resonance imaging" OR "perfusion weighted imaging" OR "prenatal exposure delayed effects" OR "pregnancy outcome" OR prognostic factor\* OR risk OR risk factor\* OR seizure OR "social class" OR socioeconomic factor\* OR "TOR Serine-Threonine Kinases" OR tuberous OR tuber OR "white matter") AND (embryo\* OR prenatal\* OR neonat\* OR infan\* OR toddler\* OR child\* OR preschooler\* OR pre-schooler\* OR adolescen\* OR paediatric\* OR pediatric\*) AND (NOTNLM OR publisher[sb] OR inprocess[sb] OR pubmednotmedline[sb] OR indatareview[sb] OR pubstatusaheadofprint)

Database(s): **Ovid MEDLINE(R)** 1946 to July Week 1 2016

Search Strategy:

| #  | Searches                                                                                                                                                                                                                                                                                                             | Results | Annotations |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------|
| 1  | Tuberous Sclerosis/                                                                                                                                                                                                                                                                                                  | 5306    |             |
| 2  | child development disorders, pervasive/ or autism spectrum disorder/ or autistic disorder/ or asperger syndrome/ or ((development* adj disorder*) or (developmental adj status)).tw,kf.                                                                                                                              | 30305   |             |
| 3  | risk/ or risk factors/                                                                                                                                                                                                                                                                                               | 755586  |             |
| 4  | genotype/ or phenotype/                                                                                                                                                                                                                                                                                              | 341039  |             |
| 5  | Epilepsy/                                                                                                                                                                                                                                                                                                            | 67110   |             |
| 6  | Astrocytoma/                                                                                                                                                                                                                                                                                                         | 13762   |             |
| 7  | (gene*1 or genetic* or genotyp* or electrophysiologic* or epilepsy or epileptic or seizure* or interictal or inter-ictal or (infant* adj spasm*) or tuber* or (white adj matter) or SEN* or (subependymal adj nodule*) or SEGA* or (subependymal adj giant adj cell adj astrocytoma*) or gender or famil*).tw,kf,hw. | 5422834 |             |
| 8  | magnetic resonance imaging/ or diffusion magnetic resonance imaging/                                                                                                                                                                                                                                                 | 333706  |             |
| 9  | neuroimaging.tw,kf,hw.                                                                                                                                                                                                                                                                                               | 33866   |             |
| 10 | Electroencephalography/                                                                                                                                                                                                                                                                                              | 129262  |             |
| 11 | (risk*1 or (prognostic adj factor*1)).tw,kf,hw.                                                                                                                                                                                                                                                                      | 1843859 |             |
| 12 | TOR Serine-Threonine Kinases/                                                                                                                                                                                                                                                                                        | 13226   |             |
| 13 | ge.fs.                                                                                                                                                                                                                                                                                                               | 2848736 |             |
| 14 | Socioeconomic Factors/                                                                                                                                                                                                                                                                                               | 129055  |             |
| 15 | prenatal exposure delayed effects/                                                                                                                                                                                                                                                                                   | 23334   |             |
| 16 | pregnancy outcome/                                                                                                                                                                                                                                                                                                   | 41708   |             |
| 17 | (gestation* or embryo* or prenatal* or neonat* or newborn* or infan* or toddler* or child* or preschooler* or pre-schooler* or adolescen* or paediatric* or pediatric*).tw,kf,hw.                                                                                                                                    | 3990572 |             |
| 18 | 1 and 2 and (3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 14 or 15 or 16) and 17                                                                                                                                                                                                                             | 113     |             |
| 19 | 1 and 2 and 13 and 17                                                                                                                                                                                                                                                                                                | 40      |             |
| 20 | 18 or 19                                                                                                                                                                                                                                                                                                             | 113     |             |

1. **Autism spectrum disorder in tuberous sclerosis complex: searching for risk markers.**

Vignoli A; La Briola F; Peron A; Turner K; Vannicola C; Sacconi M; Magnaghi E; Scornavacca GF; Canevini MP.

*Orphanet Journal Of Rare Diseases*. 10:154, 2015.

[Journal Article. Research Support, Non-U.S. Gov't]

UI: 26631248

**BACKGROUND:** Neuropsychiatric **disorders** are present in up to 90% of patients with **Tuberous Sclerosis Complex (TSC)**, and represent an important issue for **families**. Autism Spectrum **Disorder (ASD)** is the most common neurobehavioral disease, affecting up to 61% of patients. The aims of this study were: 1) to assess the prevalence of ASD in a TSC population; 2) to describe the severity of ASD; 3) to identify potential **risk factors** associated with the **development** of ASD in TSC patients.

**METHODS:** We selected 42 individuals over age 4 years with a definite diagnosis of TSC and followed at a TSC clinic in Northern Italy. We collected and reported clinical and **genetic** data, as well as cognitive level, for each of them. We administered the Social Communication Questionnaire (SCQ) as a reliable screening tool for ASD, and performed comparisons between the average scores and each clinical and **genetic** feature.

**RESULTS:** Seventeen out of 42 patients (40.5%) had a score at the SCQ suggestive of ASD (>15 points). When calculated for each cognitive level category, the average SCQ score tended to be progressively higher in patients with a worse cognitive level, and the number of pathological SCQ scores increased with worsening of intellectual disability. With respect to ASD severity, the scores were equally distributed, indicating that the degree of

View Saved

Save Remove Combine with: AND OR

Save All Create RSS View Saved

Edit Limits

To search Open Access content on Ovid, go to [Basic Search](#).

## Results Tools