

PHIP Family Meeting Chung-Jansen Syndrome

September 25, 2021



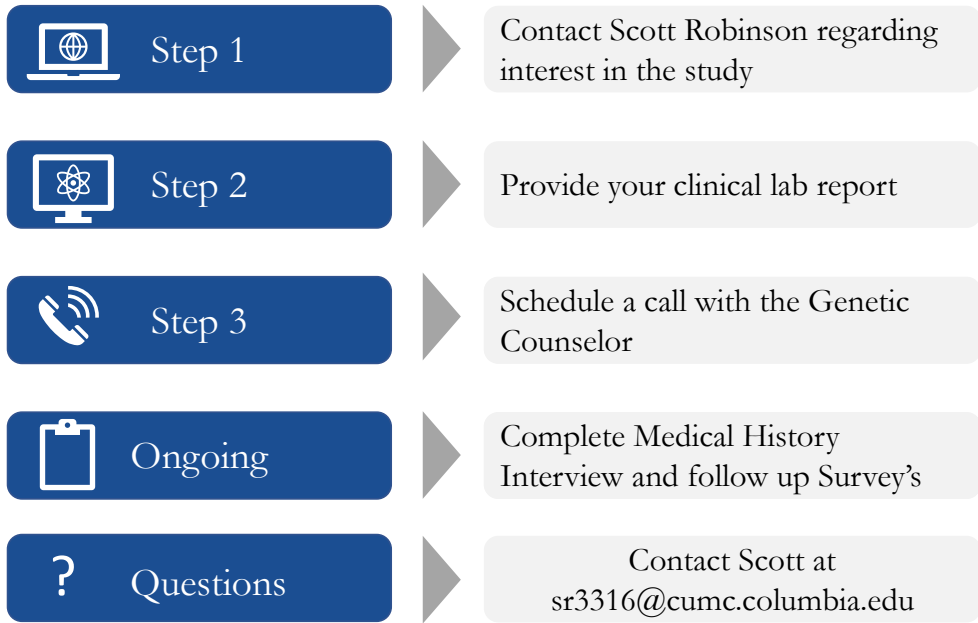
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PHIP Natural History Study



PHIP Confirmed Testing Reports

Nonsense	
c.532C>T	p.R178*
c.855 T>A	p.Y285*
c.1192G>T	p.Glu398*
c.2216G>A	p.Trp739*
c.2902C>T	p.Arg968*
c.3595delG	p.Val1199*

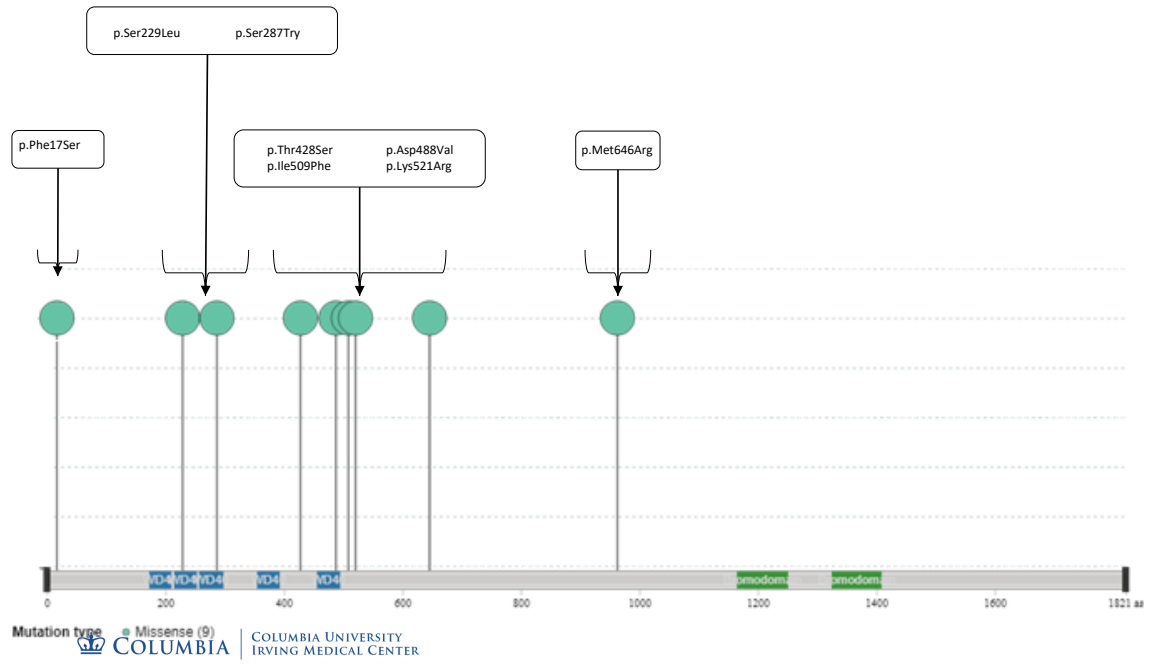
Splice
c.439+5G>T
c.822+2T>C
c.1390-1G>T
c.2319+1delG
c.3782+3_3782+6delAAGT

Microdeletions and Exon Deletions	
arr[GRCh37] 6q14.1(79098359_79910 342)x1	812Kb deletion involves PHIP
deletion exons 25-40	

Frameshifts	
c.428dupC	p.Pro144Thrfs*19
c.540_541insA	p.(Gly181ArgfsTer12)
c.598_599delACinsT	p.(Thr200LeufsTer8)
c.779delT	p.(L260Wfs*48)
c.2744_2747del	p.(Lys915SerfsTer15)
c.3161delT	p.(Leu1054Ter)
c.3216_3227del12	p.(Phe1072_Ile1076delinsLeu)
c.3628_3631delAAAC	p.Gln1211Aspfs*13
c.4579delT	p.(Ser1524LeufsTer22)
c.1050dupT	p.Gly351Trpfs*16

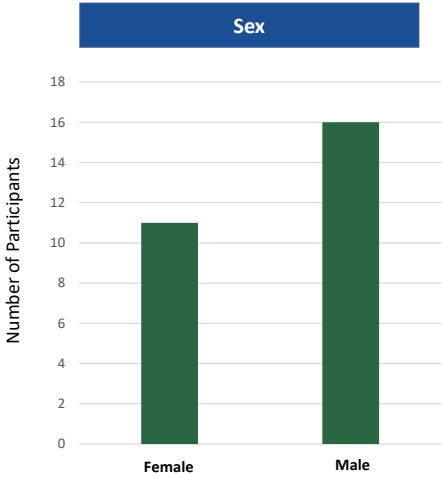
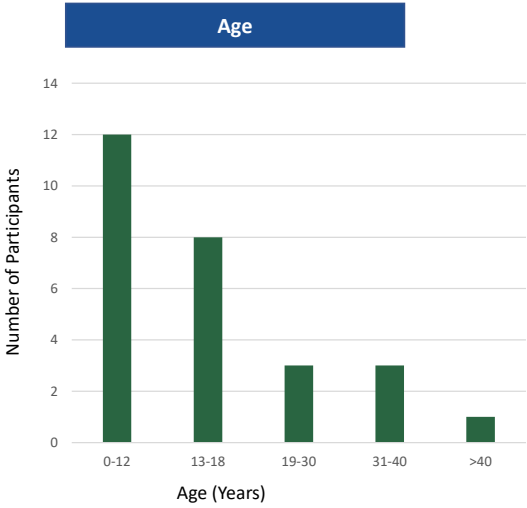
Missense	
c.50T>C	p.Phe17Ser
c.686C>T	p.Ser229Leu
c.860C>A	p.Ser287Tyr
c.1283 C>G	p.Thr428Ser
c.1463A>T	p.Asp488Val
c.1525 A>T	p.Ile509Phe
c.1562A>G	p.Lys521Arg
c.1937T>G	p.Met646Arg
c.2888 A>G	p.Glu963Gly

PHIP Mutation Diagram



Study Demographics

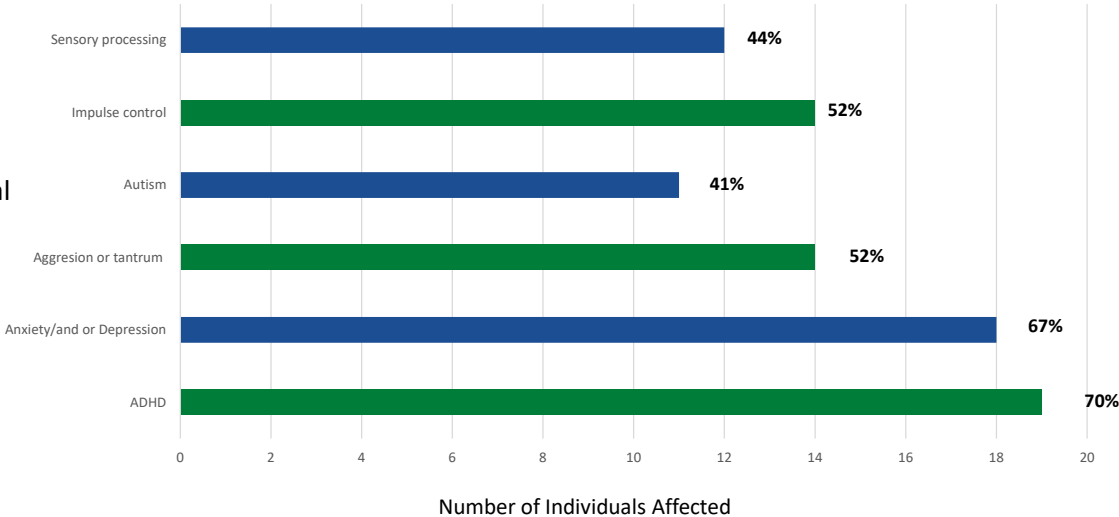
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PHIP Behavioral Diagnoses

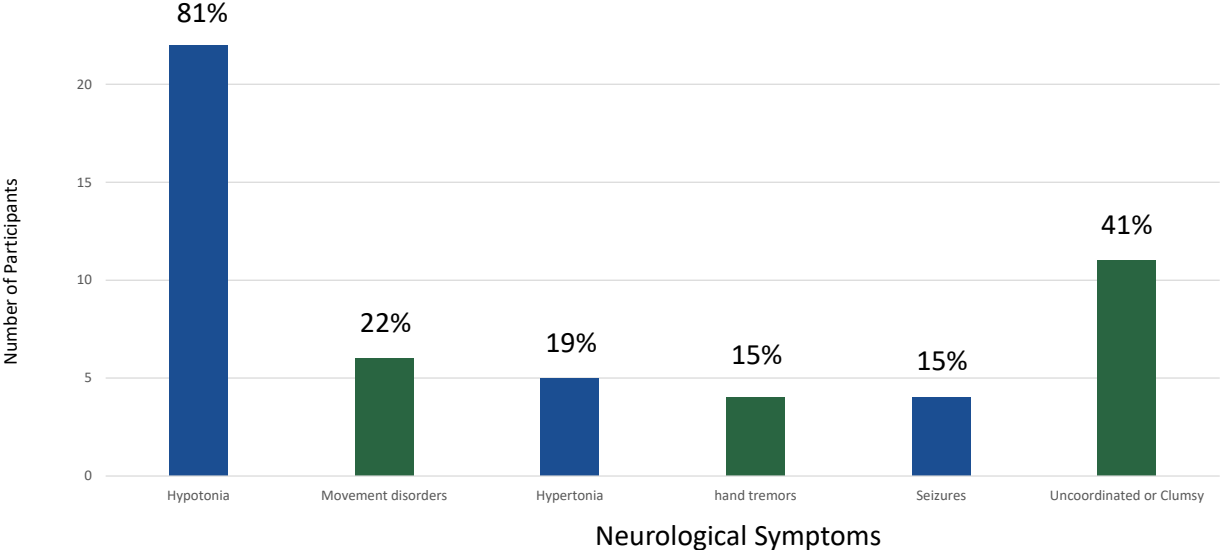
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Types of Behavioral Diagnoses



PHIP Neurological Symptoms

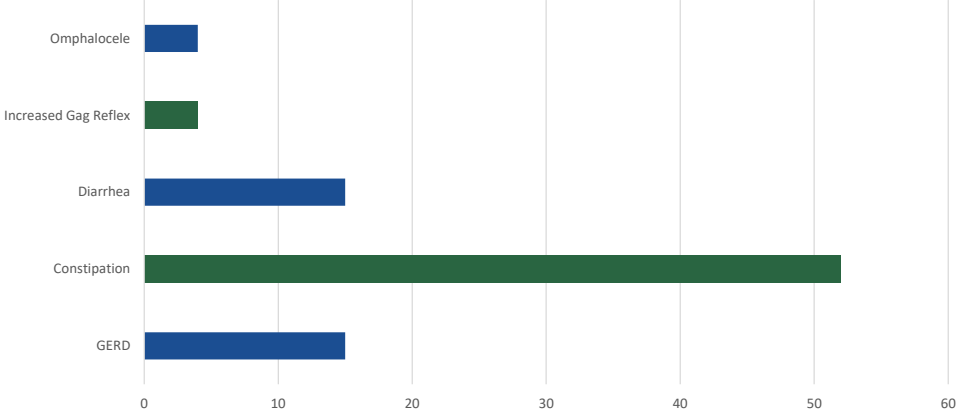
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PHIP GI Symptoms

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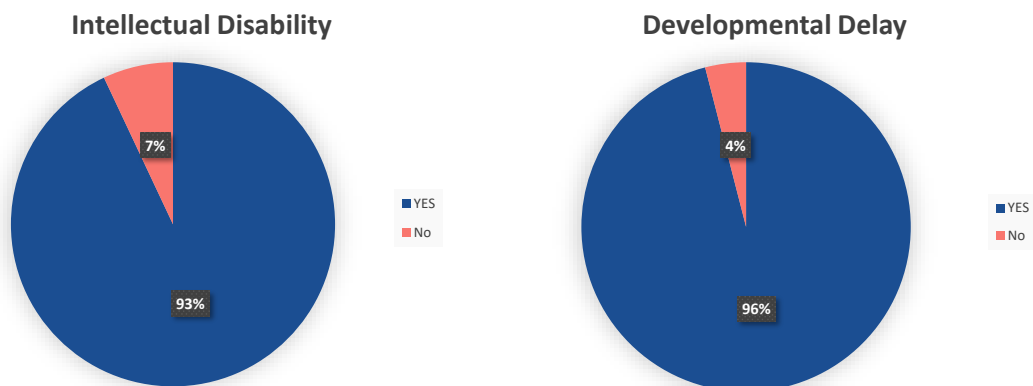
Types of GI Diagnoses



% of Individuals with each GI Symptom

PHIP Types of Neurocognitive Diagnosis

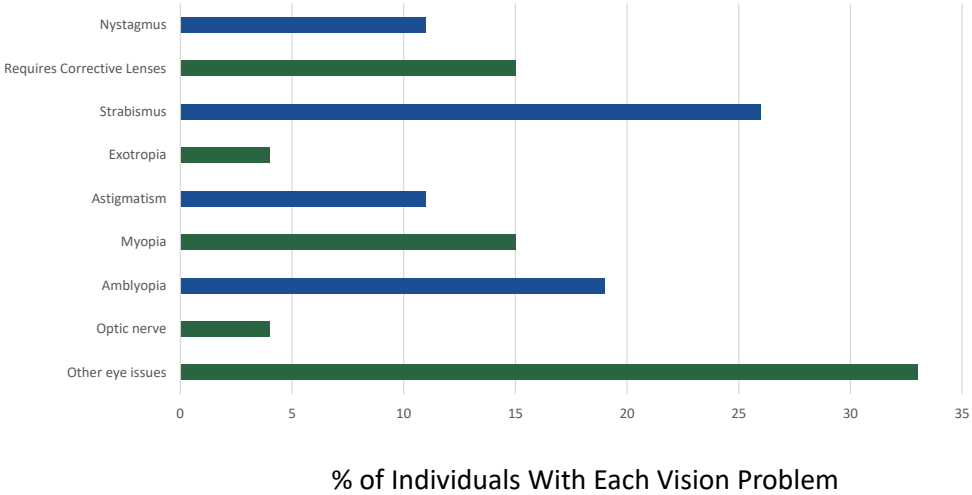
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PHIP Vision Problems

Vision Problems

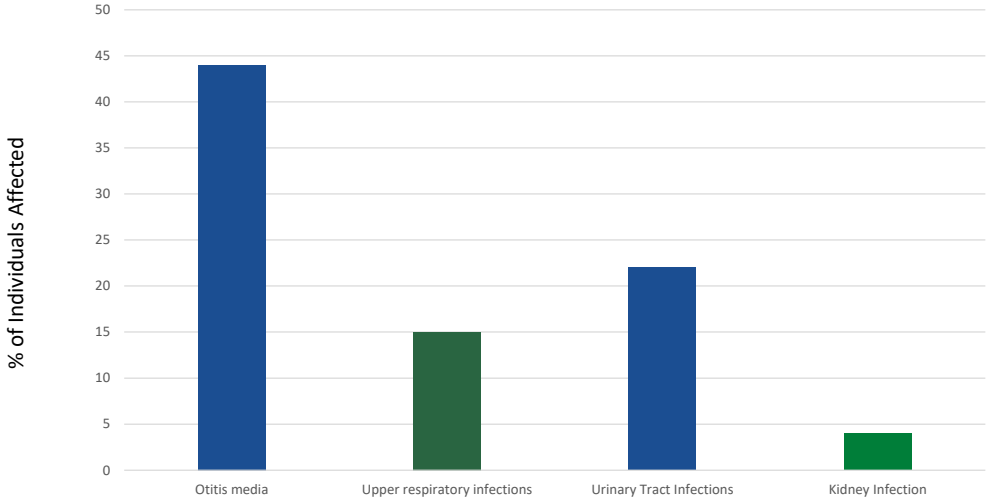
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Other eye issues include:
Convergence issues,
keratoconus, depth
perception issues, eye
tracking issues, scratched
eye, and unknown issues

PHIP Infection History

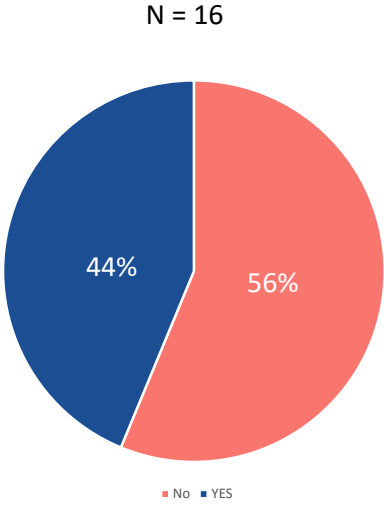
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PHIP Sex Related Symptoms

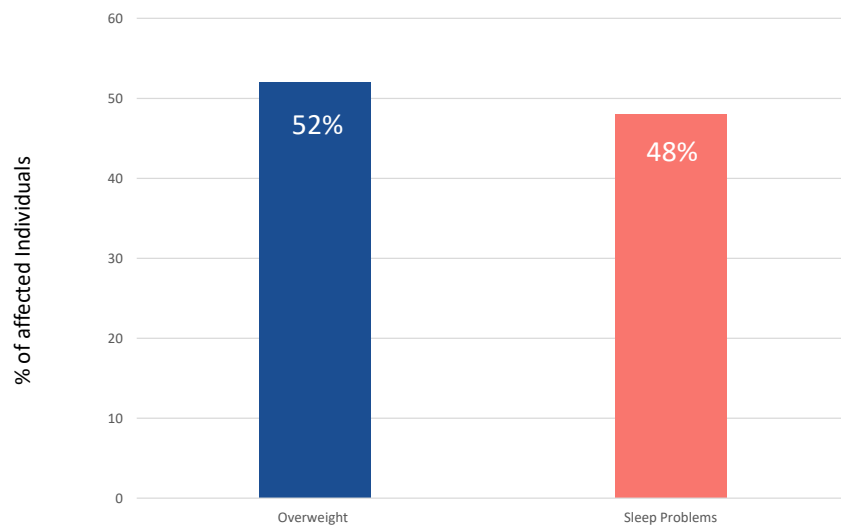
Percentage of Males with Undescended Testicles

Of the 16 males in the study, 7 had undescended testicles with 5 requiring surgical correction



Additional PHIP Symptoms

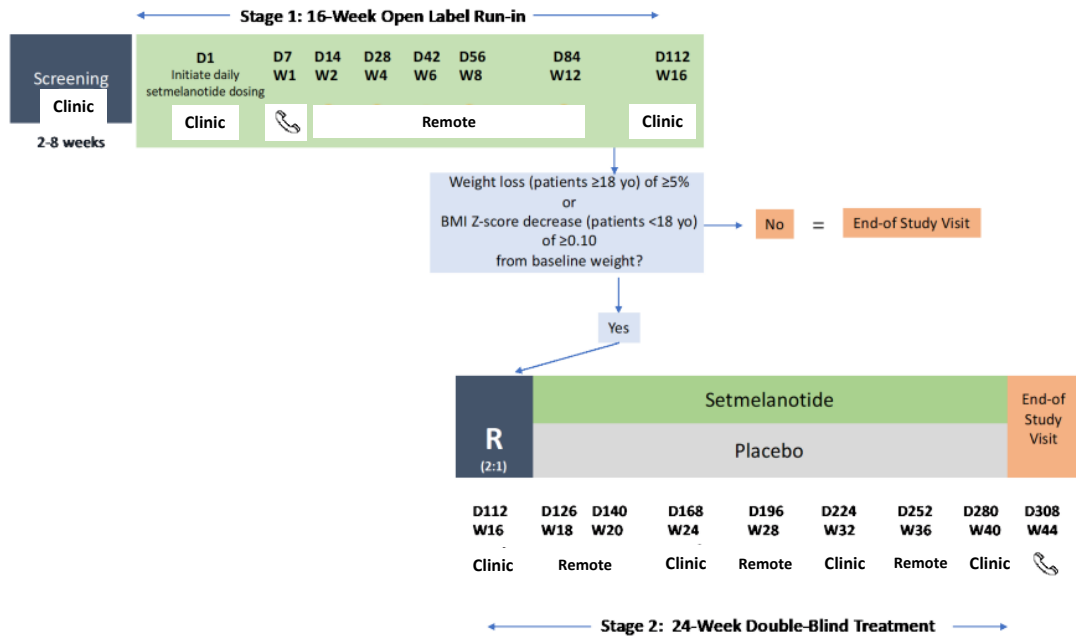
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Study of Setmelanotide in
Patients with Specific Gene Defects in the Melanocortin-4 Receptor Pathway

- Ages 6 to 65 years old
- The goal of the study is to enroll approximately 30 patients with each gene into the study. (PHIP).
- Daily injectable study medication called Setmelanotide.
- There will be no cost to you for taking part in this study. All expenses are paid for.
- Clinical trial may last up to a 14 months.
- Patients who complete the second stage of the study successfully will have an option to join an extension study.

Study Visits



Questions

- Weakness/fatigue/muscle pain/myopathy?
- Cardiac issues?
- Metabolic problems/endocrine problems (fasting)/nutrition
- Obesity/diabetes: Utility of metformin
- Growth/puberty
- Regression?
- Behavioral issues (depression, outbursts, ADHD): be careful of medications that cause weight gain

Clinical Care Guidelines

- Needed and need to be evidence based

PHIP: What you can do

- 1 Contact Scott Robinson to confirm enrollment at sr3316@cumc.columbia.edu
- 2 Additional medical history questionnaires to come
- 3 Send MRI and EEG reports to sr3316@cumc.columbia.edu
- 4 Complete updated Vineland III reports