

DATA SHARING AGREEMENT

This Data Sharing Agreement (“Agreement”) is entered into as of the date of last signature below (“Effective Date”) by **Kyverna Therapeutics, Inc.**, a Delaware corporation, located at 5980 Horton Street, Ste 550, Emeryville, CA 94608 (“Sponsor”), and **UCHealth**, for and on behalf of its affiliated entities, having an address at 12401 E. 17th Avenue, Denver CO 80045 (“UCHealth”), and the **Regents of the University of Colorado**, a body corporate, for and on behalf of the University of Colorado Anschutz Medical Campus, a public institution of higher education created under the Constitution and laws of the State of Colorado (“**Covered Entities**”), with an address at 13001 E. 17th Pl., MS F497, Aurora, CO 80045, on behalf of Amanda Piquet, M.D. as the Principal Investigator (“Principal Investigator”). Sponsor and Covered Entities are hereinafter each individually referred to as a “Party” and collectively as the “Parties.”

WHEREAS, Covered Entities are willing to provide data to Sponsor for certain research involving the use of the data (as hereinafter defined) for the study entitled “Epidemiology, demographics, presentation, and treatment patterns of Stiff Person Syndrome in the University of Colorado Health Care System” (“**Study**”); and

WHEREAS Covered Entities have approved the use of the Data in Sponsor’s Study and has approved Sponsor’s analytical plan for the Study and it is understood that any use of the Data outside of the Study will require a separate application to Covered Entities with an analytical plan for a new study; and

WHEREAS, Sponsor and Covered Entities mutually agree to enter into this Agreement to comply with the requirements of the Covered Entities institutional policies and procedures (e.g. Institutional Review Board approval) for the transfer, handling, storage and management of data provided to Sponsor from Covered Entities to the extent that those policies and procedures apply and to comply with all applicable federal and state laws and regulations governing patient privacy and confidentiality of health information, including without limitation Section 514(e) of the Privacy Rule, 45 Code of Federal Regulations (“C.F.R.”) section 164.514(e), issued pursuant to the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”).

NOW, THEREFORE, in consideration of the foregoing and any other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Definitions

“Data” shall refer to all patient/subject data, analytic data, research data, scans and other data collected, developed or derived by Covered Entities in the assessment of patients with Stiff Person Syndrome. It includes all raw data and analyses generated. All Data sent to Sponsor shall be de-identified in accordance with the provisions of the federal Health Insurance Portability and Accountability Act of 1996, and the regulations promulgated thereunder, as amended from time to time (“HIPAA”).

2. Data Sharing

Covered Entities will not share identifiable patient/subject-level data with Sponsor. Although the Data are de-identified, Covered Entities and Sponsor will follow a secure file transfer protocol suitable to exchange PHI and limited datasets.

The Data shall have unique, non-discoverable study IDs for datasets; thus, it will not be possible to re-link the Data with other identifiable data maintained by either Party. Sponsor will make no attempt to identify an individual patient/subject by combining multiple variables from the Data.

Sponsor will use the Covered Entities Data only for the purposes of conducting the Study. Sponsor shall not share the Data outside of its own research team working on the Study. Nothing herein shall restrict Sponsor's right to use, share, publish, present, or otherwise disclose the Data from its own research as it sees fit.

Sponsor is not authorized to use or disclose the Data in a manner that would violate the Privacy Rule, 45 C.F.R. Part 164, Subpart E, if done by the Covered Entities.

Information Safeguards. Sponsor will adopt and use appropriate administrative, physical, and technical safeguards to preserve the integrity and confidentiality of the Data and to prevent its use or disclosure, other than as permitted by this Agreement or as required by Law.

3. Publication

3.1 The Sponsor shall appropriately attribute the provision of the Data in any resulting publications or oral presentations of the Data, in accordance with the acknowledgement(s) set out below. Named authors shall be determined in accordance with generally accepted standards of academic authorship.

Sponsor acknowledges that information contained in the Data was received through funding provided and any corresponding Grant number(s), supplied to Sponsor by the Covered Entities, will be used by Sponsor in reporting on the Data.

Before Sponsor submits a paper or abstract for publication or otherwise publicly discloses information regarding the Data, Sponsor shall ensure that the Covered Entities have at least thirty (30) days to review the proposed publication or disclosure and that the Covered Entities comments shall be acted upon in good faith.

All publications shall be submitted for publication within eighteen (18) months of the completion of the Study, failing which the Data shall be destroyed in accordance with section 6.4 (a).

4. Intellectual Property

4.1 Inventions. US patent law shall apply to any innovations, inventions or discoveries whether or not patentable, conceived or reduced to practice by a Party, whether solely or jointly, and arising during and in the course of the performance of the work carried out under this Agreement.

4.2 Background Information. It is expressly agreed that neither the Covered Entities nor Sponsor transfers by operation of this Agreement to the other party any right in or license to any patents, copyrights, or other proprietary right owned as of the commencement date of the Agreement or arising outside of the research conducted under this Agreement. Covered Entities retains ownership of the Data.

4.3 The terms of this section and subparts survive the termination, expiration, non-renewal, or rescission of this Agreement.

5. Compliance

The Parties agree to use Data and otherwise to perform this Agreement in compliance with all applicable laws, regulations, governmental policies, and policies of their respective Covered Entities, including without limitation those relating to human subjects. As appropriate, both parties shall comply with applicable laws and regulations, as amended from time to time, with the respect to the collection, use, storage and disclosure of any Data, including without limitation, HIPAA and its implementing regulations (45 C.F.R. Parts 160-164).

6. Term and Termination

6.1 Termination for Cause. In the event that a Party has breached a material term of this Agreement, the other Party shall be entitled to terminate the Agreement upon thirty (30) days written notice to the Party in breach and request return of all Data. Should the notified Party fail to cure or correct said breach within the said thirty (30) days or such longer period as the Parties may agree, the Agreement with the breaching Party may be terminated.

6.2 Termination for Convenience. This Agreement may be terminated by either Party giving to the other Party a minimum of ninety (90) days prior written notice.

6.3 Continuing Privacy Obligations. The obligation of each Party to protect the privacy of the patients/subjects whose Data is the subject of this Agreement is continuous and survives any termination, cancellation, expiration, or other conclusion of this Agreement or any other agreement between Parties.

6.4 Destruction and Return of Data.

a) Upon termination or expiration of this Agreement, or one year after publication of their results and or the completion of the research project period, Sponsor will destroy the Data and all copies of it. Sponsor will complete such destruction as promptly as possible after the effective date of the termination or expiration of this Agreement, and will, within such period, certify in writing to the Covered Entities that such destruction has been completed.

b) If destruction is not feasible, Sponsor will at the effective date of the termination or expiration of this Agreement: A) provide the Covered Entities with a written explanation why destruction is not feasible; and B) certify in writing to the Covered Entities that Sponsor will neither use nor disclose the Data for any purpose other than the purposes that make return or destruction of the Data infeasible. In addition to the foregoing, Sponsor will protect the confidentiality of the Data or any portion of the Data retained by Sponsor for so long as Sponsor retains such Data. The Data shall not be used for any other study, unless written approval of a new analytical plan for a new Study is given.

c) Continuing Privacy Obligations. Sponsor's obligation to protect the privacy of the Data is continuous and survives any termination, cancellation, expiration, or other conclusion of this Agreement with respect to any portion of the Data Sponsor maintains after such termination, cancellation, expiration or other conclusion of this Agreement.

7. Use of Name

Neither party shall use the names or trademarks of the other Party or of any of the other Party's affiliated entities in any advertising, publicity, endorsement, or promotion unless the other Party has provided prior written consent for the particular use contemplated.

8. Status of Parties

The Parties are independent contractors, and nothing in this Agreement shall be deemed or construed to create an employment, partnership, joint venture, or agency relationship between them. No Party shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on another Party, without the prior written authorization of the other Party.

9. Notices

All notices and other business communications between the parties related to this Agreement shall be in writing, sent by certified or guaranteed overnight mail, addressed as follows, which notice shall be effective upon receipt:

If to the Covered Entities:

Regents of the University of Colorado
Attention: Office of Regulatory Compliance
13001 E. 17th Pl., MS F497
Aurora, CO 80045
P: 303-724-1010
E: Reg.Compliance@cuanschutz.edu

UCHealth, for and on behalf of its affiliated entities
Attention: Laurie Blumberg-Romero, MA, CRA
7901 E. Lowry Blvd, Suite 350
Denver CO 80230
UCH-ResearchAdmin@uchealth.org

If to Sponsor:

Kyverna Legal
5980 Horton St, Suite 550,
Emeryville, CA 946089
Email: legal@kyvernatx.com

10. Warranty Disclaimer and Liability

NEITHER PARTY MAKES ANY REPRESENTATIONS OR WARRANTIES, EXPRESSED OR IMPLIED, REGARDING ITS PERFORMANCE UNDER THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO, THE MARKETABILITY, USE OR FITNESS FOR ANY PARTICULAR PURPOSE OF THE DATA DEVELOPED AND SUPPLIED UNDER THIS WORK, OR THAT SUCH DATA DO NOT INFRINGE UPON ANY THIRD PARTY

PROPERTY RIGHTS. FURTHER, NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR OTHER INDIRECT DAMAGES.

The Parties agree to be responsible for their own wrongdoing, negligence and/or reckless acts or omissions in the performance of their duties hereunder and shall be financially and legally responsible for all of their expenses, liabilities, and attorney fees resulting from or attributable to any such acts or omissions. Neither Party shall have an obligation to indemnify the other hereunder. The terms of this paragraph shall survive expiration of this Agreement.

11. No Assignment

Neither party may assign its rights hereunder to any third party without the prior written consent of the other party; provided, that a party may assign its rights without the prior written consent of the other party to any affiliate or other entity that controls, is controlled by or is under common control with such party. Any purported assignment in violation of this clause is void. Such written consent, if given, shall not in any manner relieve the assignor from liability for the performance of this Agreement by its assignee.

12. Binding Effect

This Agreement shall be binding upon and inure to the benefit of the parties, their heirs, legal representatives, successors and assigns.

13. Entire Agreement, waiver, amendment

This Agreement may not be amended, altered or modified except by written agreement signed by the Parties. No provision of this Agreement may be waived except by an agreement in writing signed by the waiving Parties. A waiver of any term or provision shall not be construed as a waiver of any other term or provision. This Agreement constitutes the final, complete and exclusive agreement between the parties with respect to its particular subject matter only (the sharing of de-identified data) and supersedes all past and contemporaneous agreements, promises, and understandings, whether oral or written, between the parties.

14. Counterparts

This Agreement may be executed in any number of counterparts which, when taken together, will constitute one original, and photocopy, facsimile, electronic or other copies shall have the same effect for all purposes as an ink-signed original. Each party hereto consents to be bound by photocopy or facsimile signatures of such party's representative hereto.

Regents of the University of Colorado

Kyverna Therapeutics, Inc.

By: _____

By: _____

Name: Christine Ahearn, JD

Name: _____

Title: Director, Regulatory Compliance

Title: _____

Date: _____

Date: _____

University of Colorado Health (UCHealth)

By: _____
Name: Laurie Blumberg-Romero, MA, CRA
Title: Vice President, Research Admin

Exhibit A

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Study Title:

Retrospective Descriptive Analysis of Health Resource Utilization in Patients Diagnosed with Stiff-Person Syndrome at the University of Colorado

1. Background and Rationale

Stiff person syndrome is rare, with an estimated prevalence of 1-2 cases per million and an annual incidence of 1 case per million.³ Classic SPS is the predominant phenotype. It accounts for approximately 70% of cases, typically presents between the ages of 20-50, and affects women 2-3 times more frequently than men.^{3,4} SPS and its spectrum of disorders are often associated with other autoimmune conditions, and timely diagnosis of SPS is challenging. In addition to being rare, it is considered a diagnosis of exclusion.² Time to diagnosis can range from 1 to 18 years, taking 6.2 years on average.^{2,5}

The pathophysiology of SPS is thought to involve reduced neurotransmission of gamma-aminobutyric acid (GABA) in the central nervous system through an immune-mediated process.^{2,6} Most individuals with SPS have circulating anti-glutamate decarboxylase (GAD) antibodies, which inhibit GABA synthesis in the central nervous system.⁶ This leads to reduced GABA concentration in the brain and subsequent loss of neural inhibition of the muscles, which results in excessive unintentional muscle contractions.^{2,6,7} Current research shows 70-85% of patients with SPS demonstrate high-titer serum antibodies against the isoform GAD65.⁴ As such, antibodies against GAD65 can aid in the diagnosis of SPS in addition to other antibodies associated with the disease such as antibodies against the GABA_A receptor (GABARAP) that have been found in 65-70% of patients with SPS.^{2,4}

Disease progression occurs insidiously. Rigidity and stiffness of trunk muscles occur due to co-contraction of thoracolumbar and abdominal musculature. These are the earliest symptoms, leading to the classic lumbar spine “hyperlordosis” appearance of SPS.⁵ Rigidity progresses from the trunk outward to involve proximal lower limb muscles, leading to development of a slow, wide gait. Eventually, total body stiffness develops.²

Muscle spasms, superimposed on muscle rigidity, are initially intermittent. They are commonly caused by startle, psychological factors, and passive or active range of motion of either affected or unaffected muscles.⁵ Spasms are painful and disabling,

can occur in bouts, and tend to last several minutes or until removal of the precipitating stimulus.⁵ Phobias and anxieties associated with spasm triggers may also become severe, and falls become a frequent concern.

SPS follows a variable course that can be difficult to predict. Phenotypic variations of stiff person syndrome may present and progress differently from one another, and cases where other disease is present often depend on prognosis and management of the underlying condition. Better understanding the paroxysmal autonomic dysfunction or incidence of sudden death, the onset of cerebellar- or brainstem-related symptoms and the relationship of disability at the time of diagnosis with outcomes is very important.⁴

At the University of Colorado Hospital we queried Health Data Compass, a linked dataset connecting electronic health records from the University of Colorado Hospital System with the Colorado All Payers Claim Database from 2012 through 2022 for all patients ≥ 18 -year-old with ICD-10 codes pertaining to Stiff Person Syndrome [G25.82] with subsequent record review for diagnostic confirmation. Records were reviewed for diagnostic confirmation. We calculated yearly and period prevalence and incidence rate based on observable person-time exposure of our cohort. We applied previously published Mayo Clinic and Johns Hopkins criteria for SPSPD and compared period prevalence based on each criterion and evaluated for agreement. The database population over the interval was 2,801,674 persons. Two hundred and seventy-three patients met the initial inclusion criteria using ICD-10 codes; 59 were confirmed to have SPSPD. The mean age was 49.7 years (SD=12.9), 59.3% were female, 59.3% were considered antibody positive. Estimated prevalence of SPSPD based on our UCH cohort was 2.11 (95% CI 1.57, 2.64) per 100,000 persons. Average yearly incidence was 0.35 per 100,000 person-years (95% CI 0.27, 0.46). Applying different clinical diagnostic criteria, the estimated prevalence ranged from 1.36 (95% CI 0.93, 1.79) to 1.82 (CI 1.32, 2.32) per 100,000 persons (Crane P, Sillau S, Dreher R, Fix R, Winters P, Van Coevering R, Engebretson E, Valdez B, Matthews E, Nair KV, Carlson AM, Piquet AL. A Population-Based Study of the Epidemiology of Stiff Person Syndrome in a Large Colorado-Based Health System. *Neurology*. Accepted, in press).

This study will retrospectively analyze HRU patterns in 59 patients diagnosed with SPS at the University of Colorado, aiming to identify resource consumption patterns and associated costs to improve future care strategies. As a descriptive study, there

will be no hypothesis testing, and the focus will solely be on providing a detailed analysis of healthcare utilization trends.

2. Study Objectives

Primary Objective:

To describe healthcare resource utilization in patients diagnosed with SPS, focusing on hospital admissions, emergency room (ER) visits, outpatient consultations, and medication use.

Secondary Objectives:

1. To outline the patterns of resource utilization in this specific patient cohort.
2. To report the clinical and demographic factors associated with healthcare resource utilization.
3. To describe the costs associated with healthcare services for patients with SPS.

3. Study Design

Study Type: This is a descriptive study with no hypothesis testing. The study is designed to characterize the healthcare burden in SPS patients but not to statistically test relationships or infer causality.

Time Period: 2012-2022.

Population:

At the University of Colorado Hospital, Health Data Compass, a linked dataset connecting electronic health records (EHR) from the University of Colorado Hospital System with the Colorado All Payers Claims Database. This dataset included health records for all patients aged ≥ 18 years from 2012 through 2022.

- The database covered a total population of 2,801,674 persons during this period.
- Using ICD-10 codes for Stiff-Person Syndrome (G25.82), 273 patients initially met the inclusion criteria.
- After record review for diagnostic confirmation, 59 patients were confirmed to have Stiff-Person Syndrome (SPS) and will be included in the final cohort for this study.

Data Source:

Health Data Compass (University of Colorado Hospital System + Colorado All Payers Claims Database) for patient records from 2012-2022.

Index Date:

The index date for each patient will be defined as the date of their first diagnosis of Stiff-Person Syndrome, identified by ICD-10 code G25.82 and confirmed by the review of patient's medical record.

4. Study Population:

Inclusion Criteria:

1. Patients diagnosed with Stiff-Person Syndrome at the University of Colorado from 2012 to 2022.
2. Complete medical data available during the study period.
3. First diagnosis of SPS (index date) during the defined study period.

Exclusion Criteria:

1. Patients with incomplete medical or claims data.
2. Individuals who received healthcare services for their Stiff Person Syndrome diagnosis outside of the University of Colorado system during the study period.

5. Data Collection and Variables:

Data Collection Methods:

Data will be extracted from Health Data Compass, focusing on 59 confirmed SPS patients.

Variables to be Collected:

1. Demographics: Age, gender, insurance type, and socioeconomic status.

2. Clinical Data:

- Diagnosis codes specific to SPS (ICD-10 G25.82) and comorbidities.
- Treatments and interventions specific to SPS management, including IVIg therapy and other immunotherapies, muscle relaxants, benzodiazepines, Botox procedures, and other non-pharmacologic treatments including physical therapy and mental health services.

3. HRU Metrics:

- Number of hospital admissions related to SPS or its complications.
- Length of stay per hospital admission.
- Number of ER visits.
- Number of outpatient visits, any infusion visits (internal or external to the University of Colorado) including neurology consultations and specialized care.
- Medication use and adherence patterns for managing SPS as applicable.
- Use of ancillary services (e.g., physical therapy, psychiatric care).

6. Data Analysis

Descriptive Statistics:

Summary statistics will be used to describe demographics and clinical characteristics of the 59 SPS patients, and patterns of HRU will be analyzed (e.g., number of ER visits, hospital admissions).

No hypothesis testing will be conducted in this study. The data analysis will focus solely on descriptive statistics to provide insights into healthcare utilization trends in this population.

7. Ethical Considerations

Approval:

The Colorado Multiple Institutional Review Board approved this study as exempt for secondary data use (COMIRB, #22-1727). Our institutional ethical standards committee waived informed consent given the retrospective design

Informed Consent:

Since this is a retrospective study using de-identified data, individual informed consent is not required. Privacy and data confidentiality will be maintained in accordance with HIPAA and other applicable regulations.

8. Limitations:

- Small sample size (59 patients) may limit the generalizability of findings.
- Data accuracy may be influenced by incomplete medical records or coding errors.
- Limited ability to assess the impact of interventions on HRU due to the study's descriptive nature and lack of hypothesis testing.

9. Timeline:

Protocol Development: October 2024

Data Collection and Extraction: 6 months

Data Analysis: 1-3 month

10. Funding and Conflicts of Interest:

Funding Source:

Kyverna Therapeutics

11. Publication Intent

Publication Plan:

Upon completion of the study, the findings will be prepared for submission to peer-reviewed journals specializing in neurology, healthcare resource management, or rare diseases. The aim is to disseminate results to the scientific community to enhance understanding of HRU patterns in SPS and inform healthcare providers about the resource needs of this patient population.

Conference Presentation:

Study findings will also be considered for presentation at relevant conferences, such as the American Academy of Neurology (AAN) Annual Meeting or the International Congress on Rare Diseases, The Academy of Managed Care Pharmacy or The Professional Society for Health Economics and Outcomes Research.