FAQ for the CreatineInfo Registry and Natural History Study

1. What is a Patient Registry?

A patient registry is a collection of standardized information about a group of patients who share a condition and is used for a variety of purposes such as conducting natural history studies and supporting disease-specific patient care best practice developments.

2. What is a Natural History Study?

A natural history study is a study designed to track the course of a disease over time and includes people who have a specific medical condition or disease and those who are at risk of developing such. This method of research explores the disease in a comprehensive way and identifies demographic, genetic, environmental, and other variables that correlate with the disease and its outcomes. Natural history studies have many potential uses such as patient care best practice developments and clinical trial recruitment.

3. What is a Research Study Sponsor?

An individual, company, institution, or organization that takes responsibility for choosing appropriately trained and experienced researchers as well as the initiation, management, and/or financing of a clinical trial. The study sponsor ensures that the study is conducted in a reputable manner and upholds regulations as they apply to the study. ***The Association for Creatine Deficiencies (ACD) is the CreatineInfo Registry study sponsor.***

4. What is a Principal Investigator?

The Principal Investigator is the research group leader or person with the primary responsibility for the design and conduct of the research project or study.

5. What is an Institutional Review Board (IRB)?

Any board or other group formally designated by an institution or investigator to review, approve the initiation of, and conduct a periodic review of research involving human subjects. The primary purpose of such review is to assure the protection of the rights and welfare of human subjects. Also known as the Ethics Committee (EC).

6. What is the purpose of the CreatineInfo Patient Registry?

One of the most important purposes of the CreatineInfo Registry is to bring the CCDS community together and collect data that could be used to create therapeutics and improve the quality of life for patients. Some other goals of the CreatineInfo Registry are to:

- Conduct a prospectively-planned natural history study that will result in the most comprehensive understanding of CCDS and its progression over time
- Characterize and describe the CCDS population as a whole
- Assist the CCDS community with the development of recommendations for standards of care
- Assist researchers in studying the pathophysiology of CCDS
- Assist researchers in studying interventional outcomes
- Support the design of clinical trials for new treatments

7. I already participated in an ACD Patient Registry (before March 2021).

Is this a different registry?

Yes, this is a new registry.

Thank you for participating in the previous ACD Patient Registry. Your information cannot be transferred to the new registry, as this is another kind of study gathering different information.

The new CreatineInfo Registry is a **Natural History Study.** Natural History Studies are longitudinal studies that aim to fill research gaps by helping medical researchers better understand how diseases progress over time.

8. What types of data will be collected in the CreatineInfo Registry?

The data collected is uniform and includes but is not limited to:

- Socio-demographics
- Medical and diagnostics
- Treatment and disease progression
- Management of care
- Quality of life

9. How is the data collected?

Data is collected through a secure web-based system developed by the National Organization for Rare Disorders, Inc. (NORD®), an independent non-profit committed to the identification, treatment, and cure of all 7,000 rare diseases.

Study participants respond to questions grouped within a series of surveys developed per study standards and in collaboration with disease-specific experts.

10. Who is a study participant?

A study participant is an individual who takes part in a research study and whose information is collected for that research. Study participants may consent to enter and share their own personal data.

11. Who is a reporter/respondent?

A reporter/respondent is an individual who completes the surveys on behalf of the patient/study participant when they are unable to do so on their own behalf.

12. What is a legally authorized representative (LAR)?

An individual who is authorized under applicable law to consent, on behalf of a prospective subject, to the subject's participation in the clinical trial. The LAR may be a parent, grandparent, caregiver, or guardian who has the legal authority to grant consent on behalf of another who is eligible to participate in research. When a LAR acts on behalf of a study participant, they are considered to be the reporter/respondent in the research.

13. What is an Informed Consent?

The Office for Human Research Protections (OHRP) states that "the informed consent process is the critical communication link between the prospective human subject and an investigator beginning with the initial approach of an investigator to the potential subject (e.g. through a flyer, brochure, or any advertisement regarding the research study) and continuing until the completion of the research study. The informed consent process involves three key features: (1) disclosing to potential research subjects' information needed to make an informed decision; (2) facilitating the understanding of what has been disclosed; and (3) promoting the voluntariness of the decision about whether or not to participate in the research."1

Informed Consent FAQs: https://www.hhs.gov/ohrp/regulations-and-policy/guidance/faq/informed-consent/index.html
Accessed May 15, 2017.

14. Who can join the CreatineInfo Registry?

This registry is for all CCDS patients worldwide. Patients or caregivers with the following CCDS diagnoses can participate in this study:

1. Creatine Transporter Deficiency (CTD)
2. Guanidinoacetate Methyltransferase Deficiency (GAMT)
3. Arginine: Glycine Amidinotransferase Deficiency (AGAT)

15. Is there a cost to participate?

There is no cost to the patient to join this study. The ACD absorbs the cost of the registry for its members.

16.How long will this study last?

This registry will be open for at least five years with the option to renew registration. There is no date of termination or closure at this time.

17. Can data be collected worldwide?

The patient registry uses an online platform that allows participants to contribute data from **anywhere in the world**. Individuals from other countries who enter data into the registry should be aware that data and privacy laws are different in the U.S. from other countries. This U.S.-based registry will protect data and privacy according to U.S. requirements.

18. Where is the data stored?

The data is stored on NORD's registry platform system which adheres to industry standards regarding security protections.

19. Is the data protected?

Yes, the data is protected. The registry follows strict government guidelines to assure patient information is protected. The platform is served over HTTPS, which provides traffic encryptions. Communications between the registry platform application server and the database are also encrypted.

20. Who owns the data?

The identifiable and pseudonymized data is owned by the study sponsor, ACD.

ACD decides how and with whom to share pseudonymized data. A subset of the pseudonymized data collected across the NORD Registry Platform is available to NORD to support cross disease analysis and advocacy activities to members of the rare disease community as a whole.

21. How is the CreatineInfo Registry maintained?

The registry is maintained by NORD who hosts the registry on its cloud-based platform and provides oversight and ongoing support of the system. ACD provides the day-to-day management of their patient registry, including the development and adherence to the study procedures.

22. Who is ACD?

The ACD was established in 2012 by parents with children diagnosed with one of the Cerebral Creatine Deficiency Syndromes.

The ACD's mission is to provide patient, family, and public education, to advocate for early diagnoses, and to promote and fund medical research for treatments and cures for CCDS.

Learn more about the ACD at creatineinfo.org

23. Who is NORD – the National Organization for Rare Disorders?

NORD, a 501(c)(3) organization, is a patient advocacy organization dedicated to individuals with rare diseases and the organizations that serve them. NORD, along with its more than 300 patient organization members, is committed to the identification, treatment, and cure of rare disorders through programs of education, advocacy, research, and patient services.

Learn more about NORD at rarediseases.org