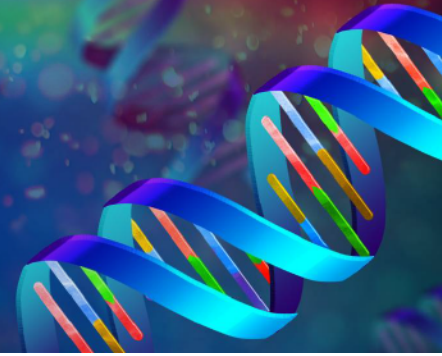


Advancing Therapies for Genetic Disorders

Leaders in Patient Recruitment, Biospecimen Collection and Laboratory Services












Wider Reach, Stronger Studies

Our extensive network of engaged patients assures you of access to hard-to-reach populations affected by genetic disorders. We strategically recruit the most eligible participants and increase study retention by taking biospecimen and data collection directly to the patient's home. As a fully integrated services solution, you can expect streamlined logistics that allow you to focus on advancing the next therapy instead.

- Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC)
- Cystic Fibrosis (CF)
- Down Syndrome (Trisomy 21)
- Duchenne Muscular Dystrophy (DMD)
- Glucose-6-phosphate-dehydrogenase (G6PD)
- Hereditary Hemorrhagic Telangiectasia (HHT)
- Hunter's Syndrome (MPS II)
- Huntington's Disease (HD)
- Myotonic Dystrophy
- Spinal Muscular Atrophy

Our Top Features

-  Custom Study Design
-  I/E Criteria
-  Recallable Study Participants
-  Access to 70,000+ Patients
-  Medical Record-Verified Eligibility
-  Longitudinal & Event-Based Biospecimen & Data Collection
-  Fresh Biospecimen, Less Degradation
-  Lab Services
-  Data & Surveys

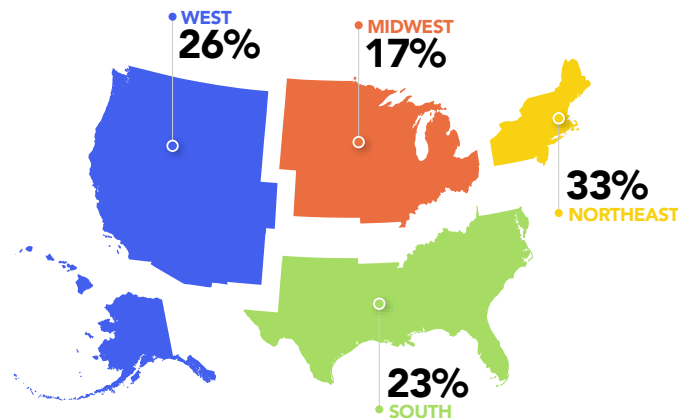
Sanguine's Expertise in Genetic & Rare Diseases

>800

Patient Members

>25

Studies Completed



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Sanguine Services



Sample Type

- | | |
|---|---|
| <ul style="list-style-type: none">▪ Whole Blood | <ul style="list-style-type: none">▪ PBMCs (+ Derivatives) |
| <ul style="list-style-type: none">▪ Serum | <ul style="list-style-type: none">▪ Hair |
| <ul style="list-style-type: none">▪ Plasma | <ul style="list-style-type: none">▪ Stool |
| <ul style="list-style-type: none">▪ Urine (Ex: Lupus nephritis) | <ul style="list-style-type: none">▪ Semen |
| <ul style="list-style-type: none">▪ Skin Taping (ex: Atopic dermatitis) | <ul style="list-style-type: none">▪ Nails |
| <ul style="list-style-type: none">▪ DNA/RNA | <ul style="list-style-type: none">▪ Buffy Coat |



Lab Services

- PBMC isolation



I/E Criteria

- "Treatment naive (eg: no disease-modifying therapies)"
- Identify specific mutations and genotypes
- Enzyme deficiency
- Familial history



Lab Testing

- | | |
|---|---|
| <ul style="list-style-type: none">▪ Disease Confirmation | <ul style="list-style-type: none">▪ BUN |
| <ul style="list-style-type: none">▪ Covid-19 (PCR) | <ul style="list-style-type: none">▪ Urinalysis |
| <ul style="list-style-type: none">▪ Sickle Cell | <ul style="list-style-type: none">▪ Thyroid Stimulating Hormone |
| <ul style="list-style-type: none">▪ HIV/HPV/Hepatitis/Herpes Etc. | <ul style="list-style-type: none">▪ Lipid Panel |
| <ul style="list-style-type: none">▪ BioMarker Quantification | <ul style="list-style-type: none">▪ LDH |
| <ul style="list-style-type: none">▪ CBC, Platelett, & Diff | <ul style="list-style-type: none">▪ Genetic Analysis |
| <ul style="list-style-type: none">▪ CRP | <ul style="list-style-type: none">▪ HLA Typing |
| <ul style="list-style-type: none">▪ Cal-Protecin | <ul style="list-style-type: none">▪ dsDNA |
| <ul style="list-style-type: none">▪ ANA | <ul style="list-style-type: none">▪ RNA Vial Load Qaunitification |
| <ul style="list-style-type: none">▪ Cytokine Panel | <ul style="list-style-type: none">▪ HBV Genotyping |



Study Design

- Single Timepoint - Huntingtons
- Ability to consent and enroll pediatric patients
- Connect with hard to reach patients / rare disease patients
- Access to patients via patient advocacy groups and non-profit organizations