**Baseline Timeline: 2 weeks from an acute visit (e.g., 2 weeks after discharge from hospital) OR 2 weeks from ED or infusion center stay OR 2 weeks after patients deems self as baseline if crisis at home**

**3 months to transfusion**

|  |  |
| --- | --- |
| Visit |  |
| Visit Date | \_\_\_ \_\_\_ - \_\_\_ \_\_\_ \_\_\_ - \_\_\_ \_\_\_ \_\_\_ \_\_\_ (DD-MMM-YYYY) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Blood Typing** | | | | |
| Sample collected | Yes  No | | | |
| If No, Reason not done  *Do not complete the rest of this section* |  | | | |
| Collection Date | \_\_\_ \_\_\_ - \_\_\_ \_\_\_ \_\_\_ - \_\_\_ \_\_\_ \_\_\_ \_\_\_ (DD-MMM-YYYY) | | | |
| Collection Time | \_\_\_ \_\_\_: \_\_\_ \_\_\_ (24-hr clock) | | | |
| Accession Number |  | | | |
|  |  | | | |
| **Laboratory Test Name** | **Result** | | | |
| Antiglobulin Test, Direct | Positive  Negative | | | |
| Antiglobulin Test, Indirect | Normal  Abnormal | | | |
| ABO Blood Group | A+ | B+ | AB+ | O+ |
| A- | B- | AB- | O- |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Blood Gas** | | | | |
| Sample collected | Yes  No | | | |
| If No, Reason not done  *Do not complete the rest of this section* |  | | | |
| Collection Date: | \_\_\_ \_\_\_ - \_\_\_ \_\_\_ \_\_\_ - \_\_\_ \_\_\_ \_\_\_ \_\_\_ (DD-MMM-YYYY) | | | |
| Collection Time: | \_\_\_ \_\_\_ : \_\_\_ \_\_\_ (24-hr clock) | | | |
| Accession Number: | \_\_\_ | | | |
|  |  |  |  |  |
| **Laboratory Test Name** | **Result** | **Unit** | **Comparison to Reference Range** | **Clinically Significant** |
| Partial Pressure Oxygen |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Partial Pressure Carbon Dioxide | |  | | [Prepopulate or codelist] | Normal  Abnormal  Unknown | | Yes  No | |
| **Laboratory Test Name** | | **Result** | | **Unit** | **Comparison to Reference Range** | | **Clinically Significant** | |
| pH | |  | | [Prepopulate or codelist] | Normal  Abnormal  Unknown | | Yes  No | |
| **Hematology: Complete Blood Count** | | | | | | | | |
| **Laboratory Test Name** | **Result** | | **Unit** | | | **Comparison to Reference Range** | | **Clinically Significant** |
| \*Leukocytes |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Lymphocytes/Leukocytes |  | | % | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Lymphocytes |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Neutrophils/Leukocytes |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Neutrophils |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Monocytes |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Eosinophils |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Hematocrit |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Hemoglobin |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Platelets |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Ery. Mean Corpuscular HGB Concentration |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Erythrocytes |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Ery. Mean Corpuscular Volume |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |
| \*Reticulocytes |  | | [Prepopulate or codelist] | | | Normal  Abnormal  Unknown | | Yes  No |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Hematology: Hemoglobin Analysis** | | | | |
| \*Method of Test: | High performance liquid chromatography (HPLC)  Capillary zone electrophoresis (CZE)  Isoelectric focusing (IE)  Gel electrophoresis  Unknown | | | |
| Laboratory Test Name | Result | Unit |  |  |
| \*Hemoglobin A |  | \_\_\_% |  |  |
| \*Hemoglobin A2 |  | \_\_\_% |  |  |
| \*Hemoglobin C |  | \_\_\_% |  |  |
| \*Hemoglobin F |  | \_\_\_% |  |  |
| \*Hemoglobin S |  | \_\_\_% |  |  |
| \*Hemoglobin A, Genetic \*Modified Variant |  | \_\_\_% |  |  |
| \*Hemoglobin, Other |  | \_\_\_% |  |  |
| Specify Other Hemoglobin\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Coagulation** | | | | |
| **Laboratory Test Name** | **Result** | **Unit** | **Comparison to Reference Range** | **Clinically Significant** |
| \*Prothrombin Time |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| \*Activated Partial Thromboplastin Time |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Antithrombin Antigen |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| \*Prothrombin Intl. Normalized Ratio |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Fibrinogen |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| \*D-Dimer |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Factor V Leiden |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Factor XIV Activity |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Protein S, Free |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Coagulation** | | | | | | | | | |
| **Laboratory Test Name** | | **Result** | | | **Unit** | | **Comparison to Reference Range** | | **Clinically Significant** |
| Activated Protein C Resistance | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Methylene Tetrahydrofolate Reductase | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Dilute Russell's Viper Venom Time Ratio | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Lupus Anticoagulant Sensitive APTT | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Plasminogen | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Thrombin Time | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| **Chemistry: Metabolic Panel** | | | | | | | | | |
| **Laboratory Test Name** | | | **Result** | | | **Unit** | | **Comparison to Reference Range** | **Clinically Significant** |
| Sodium | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Potassium | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Chloride | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Bicarbonate | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Magnesium | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Phosphate | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Calcium | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Calcium, Ionized | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Anion Gap | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Urea Nitrogen | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Creatinine | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Glucose | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Urate | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| BUN/Creatinine | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| **Chemistry: Renal** | | | | | | | | | |
| Comparison to Reference Range | Clinically Significant | | |
| Creatinine Clearance (24-hr) | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| Glomerular Filtration Rate, Estimated (Cockcroft-Gault Formula) | | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | Yes  No |
| **Chemistry: Liver Function** | | | | | | | | | |
| **Laboratory Test Name** | | **Result** | | | **Unit** | | **Comparison to Reference Range** | | **Clinically Significant** |
| Albumin | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Protein | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Aspartate Aminotransferase | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Alanine Aminotransferase | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Bilirubin | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Direct Bilirubin | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |
| Alkaline Phosphatase | |  | | | [Prepopulate or codelist] | | Normal  Abnormal  Unknown | | Yes  No |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemistry: Cardiac** | | | | |
| **Laboratory Test Name** | **Result** | **Unit** | **Comparison to Reference Range** | **Clinically Significant** |
| Troponin I |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Troponin T |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Creatine Kinase |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Creatine Kinase MB |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemistry: Inflammation** | | | | |
| **Laboratory Test Name** | **Result** | **Unit** | **Comparison to Reference Range** | **Clinically Significant** |
| \*C Reactive Protein |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |

| **Chemistry: Lipid Panel** | | | | |
| --- | --- | --- | --- | --- |
| Laboratory Test Name | Result | Unit | Comparison to Reference Range | Clinically Significant |
| Cholesterol |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| LDL Cholesterol |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| HDL Cholesterol |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| VLDL Cholesterol |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Triglycerides |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Lipoprotein-a |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Apolipoprotein A1 |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Apolipoprotein B |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Apolipoprotein E |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Chemistry: Nutrition** | | | | |
| Laboratory Test Name | Result | Unit | Comparison to Reference Range | Clinically Significant |
| Vitamin B12 |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Homocysteine |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Folate (Erythrocytes) |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Methylmalonic Acid |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |

| **Miscellaneous** | | | | |
| --- | --- | --- | --- | --- |
| Laboratory Test Name | Result | Unit | Comparison to Reference Range | Clinically Significant |
| Lactate Dehydrogenase |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Lactate |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Iron |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Transferrin Saturation |  | % | Normal  Abnormal  Unknown | Yes  No |
| 25-Hydroxyvitamin D |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Choriogonadotropin Beta |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Total Iron Binding Capacity |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Ferritin |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Soluble Transferrin Receptor |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Fructosamine |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Occult Blood |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Ammonia |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  . No |
| Amylase |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Brain Natriuretic Peptide |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |

| **Urinalysis** | | | | | |
| --- | --- | --- | --- | --- | --- |
| Laboratory Test Name | | Result | Unit | Comparison to Reference Range | Clinically Significant |
| Protein | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Glucose | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Occult Blood | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| RBC Casts | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| WBC Casts | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Albumin/Creatinine | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Specific Gravity | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Hemoglobin | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Protein/Creatinine | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Creatinine | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Choriogonadotropin Beta | |  | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| **Microbiology** | | | | | |
| Microbiology Test Name | Result | | Unit | Comparison to Reference Range | Clinically Significant |
| Parvovirus B19 IgG Antibody |  | | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Parvovirus B19 IgM Antibody |  | | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| Parvovirus DNA |  | | [Prepopulate or codelist] | Normal  Abnormal  Unknown | Yes  No |
| SARS-CoV-2 RNA | Positive  Negative | |  |  |  |
| SARS-CoV-2 IgG Antibody | Positive  Negative | |  |  |  |
| \*HIV-1 Antigen |  | |  |  |  |
| \*Hepatitis A Virus Antibody |  | |  |  |  |
| \*Hepatitis B Virus Surface Antigen |  | |  |  |  |
| \*Hepatitis B Virus Core Antibody |  | |  |  |  |
| \*Hepatitis B Virus Surface Antibody |  | |  |  |  |
| \*Hepatitis B Virus Antibody |  | |  |  |  |
| \*Hepatitis C Virus Antibody |  | |  |  |  |

## 

## **Hemoglobulin Level**

Autoimmune laboratory Test

**Instructions:**

**Baseline Timeline: 2 weeks from an acute visit (e.g., 2 weeks after discharge from hospital) OR 2 weeks from ED or infusion center stay OR 2 weeks after patients deems self as baseline if crisis at home**

**3 months to transfusion**

The items with astericks (\*) are Core and should be collected on all genetic studies in sickle cell disease assessing acute painful episodes. The others are Supplemental and should be collected based on study design.

Visit: Visit name or number can be pre-populated based on protocol visit schedule. A separate form could allow for unscheduled or contingent visits and allow for capture the visit type and/or reason for the visit.

Visit Date: A “visit” need not occur on a single date. Visit start/end is determined by the protocol schedule of assessments, which may include a visit window. Suppose a visit has a window of +/- one day, and the subject was inpatient for all three days. The form would need to collect a start and end date for the visit. All of the assessments that follow below would have their own collection date/times as they could occur any time during that three-day visit period.

Sample Collected Y/N: For planned panels/assessments, it’s important to capture whether the sample was collected and if not, the reason why it was not collected. For unplanned or supplemental assessments, the “reason not done” can be updated to something like “reason collected.”