

## **APPENDIX A**

### **SCD Diagnosis & Management Training Program**

This Appendix is attached to and made a part of the Memorandum of Understanding between ASH and Cairo University. This training program was created and submitted by Cairo University and approved by the ASH IMC in December 2023.

- Week 1: Theoretical background
  - Genetics and pathophysiology of SCD
  - Clinical presentation of SCD
  - Acute and chronic complications of SCD
  - Diagnosis of SCD
  - Management of SCD
- Week 2: Outpatient clinic
  - Patient follow-up
  - Monitoring treatment compliance
  - Emergency management
  - Patient awareness
  - Family counseling
  - Prenatal and natal counseling
- Week 3: Laboratory
  - CBC follow-up and interpretation
  - Screening tools (sickling test)
  - Diagnostic tools (Alkaline Electrophoresis, HPLC and Capillary Electrophoresis Scheme)
  - Additional test
- Week 4: Inpatient Wards
  - Daily patient encounter
  - Indications of SCD patient hospitalization
  - Indications of blood transfusion
  - Drug choice
  - Staff discussion
- Week 5: Blood Bank
  - Blood donation and blood screening
  - Preparation of blood components
  - Cross-matching
  - Patient registry for repeat transfusions
- Week 6: Apheresis Unit
  - Indication of apheresis in SCD
  - Patient Preparation
  - Apheresis instrument adjustment and operation
  - Attending apheresis session
- Week 7: Inpatient Wards

- Daily patient encounter
  - Management of complications (pain crisis, acute chest syndrome, priapism, hemolytic crisis, Chelation therapy for chronic iron overload)
  - Participation in SCD trials
  - Staff discussion
- Week 8: Radio-diagnosis Department
  - Ultrasound
  - Transcranial Doppler
  - Bone imaging
  - T2\* MRI
- Week 9: Inpatient Wards
  - Daily patient encounter
  - Management of complications
  - Participation in SCD trials
  - Staff discussion
- Week 10: Intensive Care Unit
  - Indications of SCD patient admission
  - Management of SCD patients
  - Monitoring progression and improvement
- Week 11: Stem Cell Transplantation Unit
  - Indications of transplantation in SCD
  - Patient selection
  - Donor selection
  - Patient preparation
  - Monitoring of recovery
- Week 12: Inpatient Wards
  - Daily patient encounter
  - Management of complications
  - Participation in SCD trials
  - Staff discussion