## Hematopoietic Stem Cells Discussion Questions

| 1.  | What is hematopoiesis?  |
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| 2.  | What are hematopoietic progenitor cells (HPCs)?               |
| 3.  | What is an autologous HPC transplant?                         |
| 4.  | What are reasons to undergo an autologous HPC transplant?     |
| 5.  | What is an allogeneic HPC transplant?                         |
| 6.  | What are reasons to undergo an allogeneic HPC transplant?     |
| 7.  | Why can allogeneic transplants lead to Graft-vs-Host Disease? |
| 8.  | What are the symptoms of acute GVHD?                          |
| 9.  | What are the symptoms of chronic GVHD?                        |
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| 10. | What is an umbilical cord blood (HPC-C)?                      |
| 11. | What are the henefits and risks of HPC-C?                     |

| 12 | 2. What is a bone marrow HPC-M?  |
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| 13 | 3. What are the benefits and risks of HPC-M?                               |
| 14 | I. What is peripheral blood stem cells collected by apheresis (HPC-A)?     |
| 15 | i. What are the benefits and risks of HPC-A?                               |
| 16 | 6. What are the requirements/testing that must be performed on HPC donors? |
| 17 | 7. What testing is performed on the HPC product?                           |
| 18 | 3. What is the amount of CD34+ cells required in an HPC product?           |
| 19 | ). How would you prepare HPCs for long term storage?                       |
| 20 | ). How is an HPC product infused?  |
| 21 | . What are the symptoms of DMSO toxicity?                                  |

| 22. | Why is it unnecessary to match donor and recipient's blood types?   |
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| 23. | What is a major ABO mismatch?   |
| 24. | What are the potential complications of a major ABO mismatch?   |
| 25. | If a patient has not converted yet to their donor blood type after a major ABO mismatch, what blood type should be given to the patient for a red cell transfusion? |
| 26. | What is a minor ABO mismatch?   |
| 27. | What are the potential complications of a minor ABO mismatch?   |
| 28. | If a patient has not converted yet to their donor blood type after a minor ABO mismatch, what blood type should be given to the patient for a red cell transfusion? |
| 29. | What is a bidirectional ABO mismatch?   |
| 30. | What are the potential complications of a bidirectional ABO mismatch?   |

| 31. | If a patient has not converted yet to their donor blood type after a bidirectional ABO mismatch, what blood type should be given to the patient for a red cell transfusion? |
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| 32. | When does a major Rh mismatch occur?  |
| 33. | What are the potential complications of a major Rh mismatch?  |
| 34. | When does a minor Rh mismatch occur?  |
| 35. | What are the potential complications of a minor Rh mismatch?  |
| 36. | What is Passenger Lymphocyte Syndrome (PLS)?  |
| 37. | What causes immune mediated platelet refractoriness?  |
| 38. | What causes non-immune platelet refractoriness?   |
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