cancers, the methods of treatment, and mechanisms of drug action. Once the medical writer is familiar with the diagnosis, treatment, and mechanism, as it applies to the leukemias and MDS, it will be relatively easy to write about topics, such as inclusion/exclusion criteria, study endpoints, safety, and efficacy.

The RECIST criteria are generally not used in clinical trials for leukemia or MDS, though Blum et al. (28) have raised the potential utility of the RECIST criteria for monitoring lymph node dimensions in the context of leukemia. Information on parameters, such as endpoints, inclusion/exclusion criteria, that are needed in Clinical Study Protocols for the hematological cancers can easily be found at www.clinicaltrials.gov.

b. Hematopoietic stem cells give rise to the lymphoid lineage and myeloid lineage

Normal blood cells, as well as neoplastic blood cells, arise from a type of stem cell called the hematopoietic stem cell. Hematopoietic stem cells differentiate into pluripotent stem cells which, in turn, give rise to two lineages (29). The two lineages are the lymphoid lineage and the myeloid lineage. The lymphoid lineage includes T cells, NK cells, and B cells. The myeloid lineage includes red blood cells, megakaryocytes, macrophages, neutrophils, basophils, and eosinophils. Megakaryocytes are cells that manufacture platelets (30).

Moreover, the lymphoid lineage gives rise to lymphoid neoplasms, while the myeloid lineage produces myeloid neoplasms. Reviews of lymphoid neoplasms are available from Jaffe et al. (31) and Morton et al. (32,33) while reviews of myeloid neoplasm are provided by Vardiman et al. (34,35).

The term "blast cells" is used in publications on leukemia, and hence will be defined. Blast cells are immature precursors of either lymphocytes (lymphoblasts) or granulocytes (myeloblasts). Blast cells normally represent up to 5% of the cells in the bone marrow.

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