Haematopoiesis

The illustration of haematopoiesis as a 'solar system' model is based on the idea of a high plasticity of haematopoiesis and an intimate relationship between various types of progenitor cells.* Many progenitors share common transcription factors. The proximity of radial sectors of different cell lineages depicts how close the ontogeny of these lineages is. Gradual colour change reflects the potential of early and intermediate progenitors to follow different cells' fates.

**Haematopoietic stem cell**
A true stem cell that has a potential to self-renew and differentiate into any lineage of blood cells.

**Multipotent progenitor**
Can give rise to any blood cell lineage.

**Lymphoid-primed multipotent progenitor**
Early progenitor cell that primarily differentiates along the lymphoid lineage. However, the potential to take on myeloid fate is not lost.

**Common lymphoid progenitor**
The early progenitor committed to lymphoid lineage. Gives rise to precursors of T and B lymphocytes and natural killer cells. Lymphoid progenitors leave the bone marrow for maturation in the thymus and lymph nodes.

**Common myeloid progenitor**
The early progenitor capable of differentiating into any cell of a myeloid lineage, red blood cell or megakaryocyte.

**Granulocyte-monocyte progenitor**
This intermediate progenitor is committed to monocytic and granulocytic lineages.

**Megakaryocyte-erythroid progenitor**
Intermediate progenitor that can only differentiate into a red blood cell or megakaryocyte.

**Natural killer cell (NK-cell)**
A type of cytotoxic lymphocyte.

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