Who should get haploidentical HSCT – Indication of Haploidentical HSCT in current era

Allogeneic Haematopoietic Stem Cell Transplantation (HCT) is still one of the best options to cure certain haematological diseases such as acute leukaemia, aplastic anaemia and myelodysplastic syndrome. A suitable donor is determined by human leucocyte antigen (HLA) compatibility and physical fitness. HLA Matched donor-recipient confers the lowest risk of GVHD and graft rejection. HLA matched sibling donor is probably the best choice, but only 25-30% of patients have such siblings. Many patients have to look for alternative donors which consist of matched unrelated donors, cord blood units or haploidentical family donors. Each alternative donor has its own advantages and disadvantages. This topic is focusing on the evidences on haploidentical transplantation. Selecting a most appropriate haploidentical donor for eligible patients who do not have a matched sibling donor will be briefly discussed at the later part of this talk. Finally, a conclusion will be made on which patient should get haploidentical HCT based on the evidences presented.