**Low-risk MDS Algorithm**

**Symptomatic Anaemia**
- EPO<500 PBRC < 2u/mo
- ESA +/- G-CSF
  - Response: 30-40% ESA alone
  - 40-60% ESA + G-CSF

**Symptomatic Neutropenia**
- Supportive Care: Antibiotics, G-CSF (2° prophylaxis)

**Symptomatic Thrombocytopenia**
- Supportive Care: Platelet transfusion for bleeding, Antifibrinolytics

**Hypomethylating Agents (HMA)**
- Response: 30-40%

**Lenalidomide**
- del5q MDS
- non-del5q MDS
- Supportive Care: G-CSF
- Platelet transfusion
- Anti-diarrheal treatments
- Other measures

**Immunosuppressive Therapy (IST)**
- Response: 30-60%
- HLA-DR15
- Hypoplastic bone marrow
- PNH clone
- Trisomy 8
- Age <60
- Limited transfusion burden

**Allogeneic Stem Cell Transplant**
- Response: 30-40% LTDFS

**Conclusion:** A therapeutic trial with an erythropoiesis-stimulating agent (ESA) with or without granulocyte colony-stimulating factor (G-CSF) should be considered for any patient with low-risk MDS who has an endogenous erythropoietin (EPO) level of less than 500 IU/L and is transfusion-dependent (requiring more than 2 units packed red blood cells per month). Other therapeutic options include immunosuppressive therapy, hypomethylating agents, allogeneic stem cell transplant (SCT), and investigational approaches.