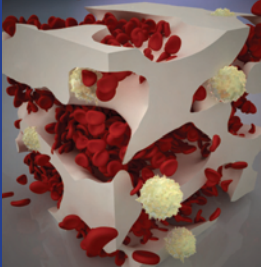


Normal Blood Cell Production

Normal bone marrow is like a factory that produces healthy red cells, white cells and platelets.



- Normal marrow is crowded with good cells
- Chemical signals tell the marrow to produce more red cells, white cells, or platelets as you need them



Normal hematocrits are:

- 36-46% for women
- 40-52% for men

Normal hemoglobin is:

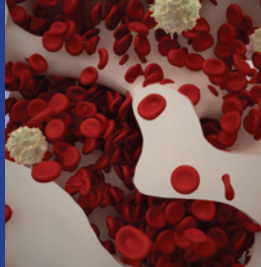
- 12-16 g/dL for women
- 14-18g/dL for men

Normal WBC is:

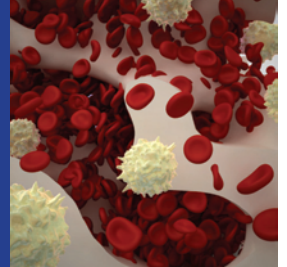
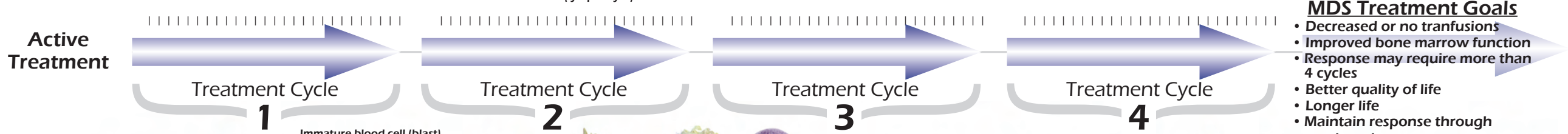
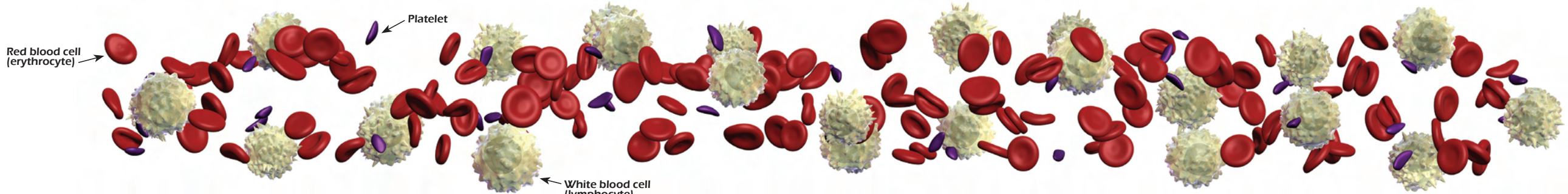
- 3,200 - 10,000

Normal platelets are:

- 150,000-400,000



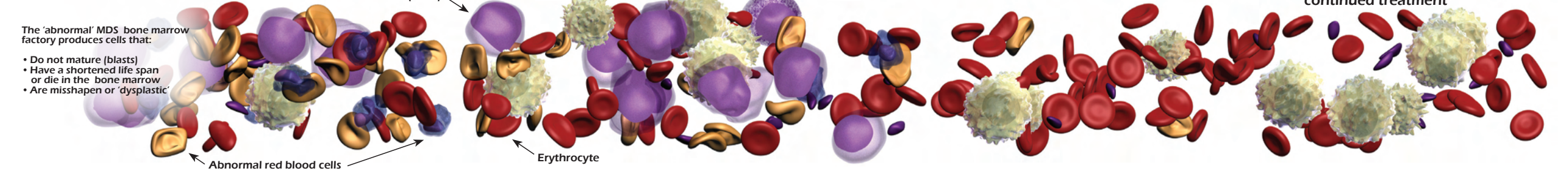
Red cells live and function for 120 days

- MDS Treatment Goals**
- Decreased or no transfusions
 - Improved bone marrow function
 - Response may require more than 4 cycles
 - Better quality of life
 - Longer life
 - Maintain response through continued treatment

The 'abnormal' MDS bone marrow factory produces cells that:

- Do not mature (blasts)
- Have a shortened life span or die in the bone marrow
- Are misshapen or 'dysplastic'



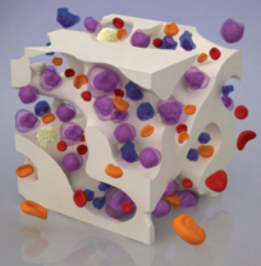
Immature blood cell (blast)

Abnormal red blood cells

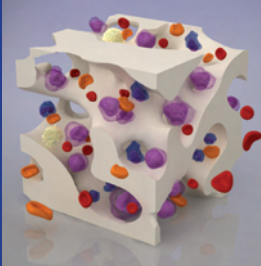
Erythrocyte

Low blood cell counts are responsible for the symptoms MDS patients experience:

- Fatigue due to anemia (low RBC count)
- Infection (low WBC count)
- Bleeding (low platelet count)




- Treatment destroys cells in the bone marrow (normal and abnormal)
- This makes room for more new healthy cells
- When treatment begins:
 - A drop in counts frequently occurs
 - It should be managed by your physician



If you respond to treatment your bone marrow will:

- Look more like normal marrow
- Produce many more healthy, mature cells
- Cell counts will rise



Every patient responds differently to treatment

At least 4 treatment cycles are necessary

Some patients may require more than 4 cycles



Abnormal Blood Cell Production in MDS

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