



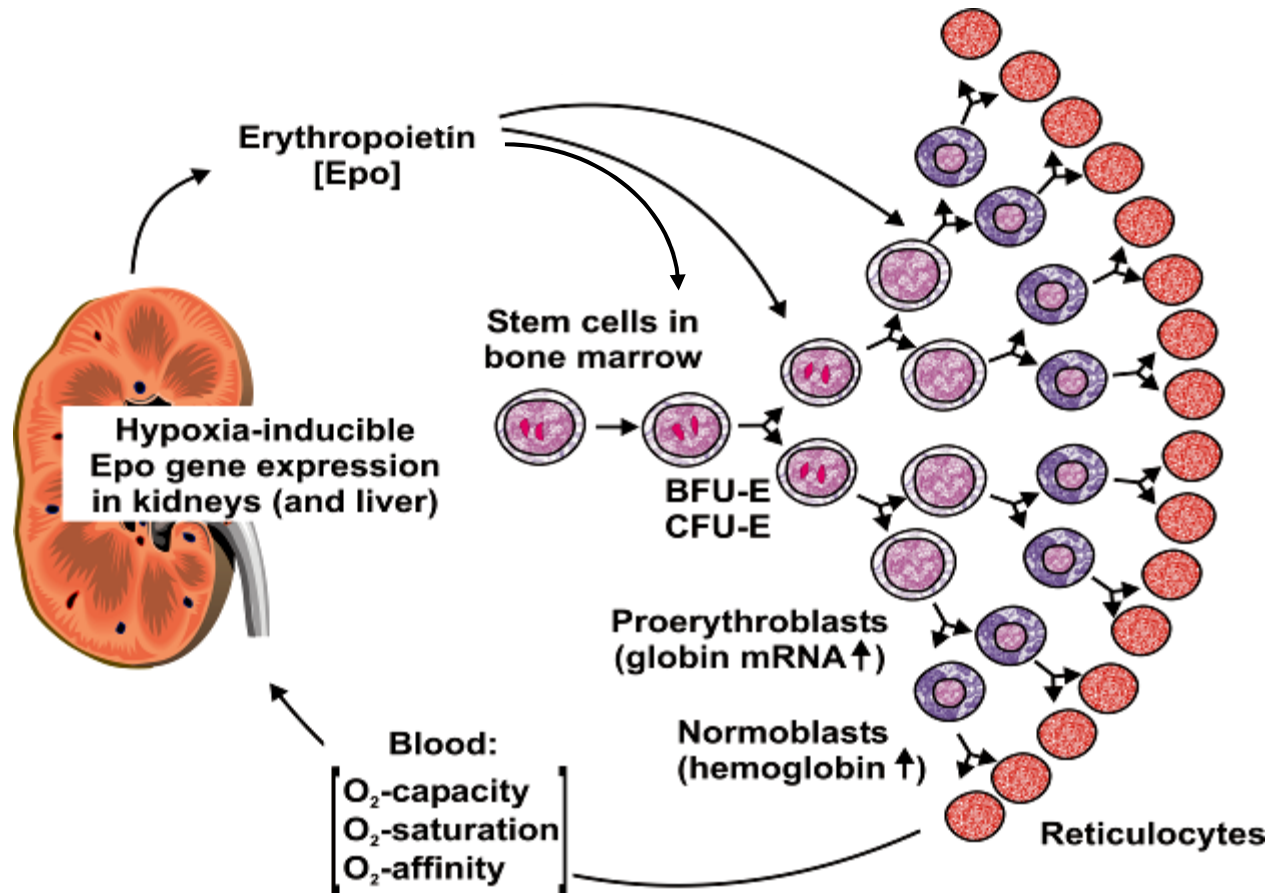
NEW DEVELOPMENTS IN ANAEMIA
**Erythrocyte survival, biology of erythropoiesis,
haemoglobin rise and decline**

Anatole Besarab

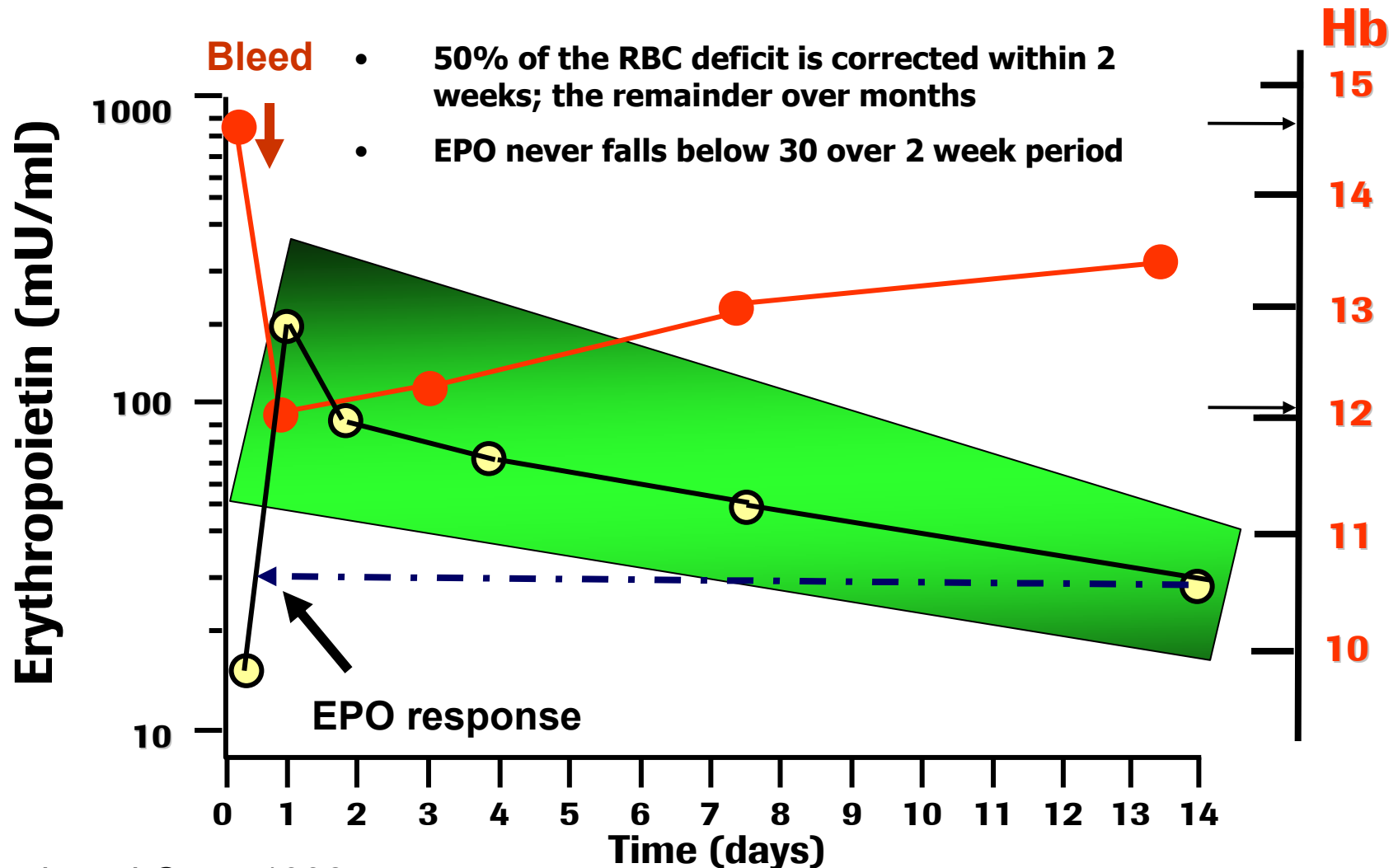
Henry Ford Health System, Detroit, Michigan, USA



Feedback Control Circuit of Erythropoiesis

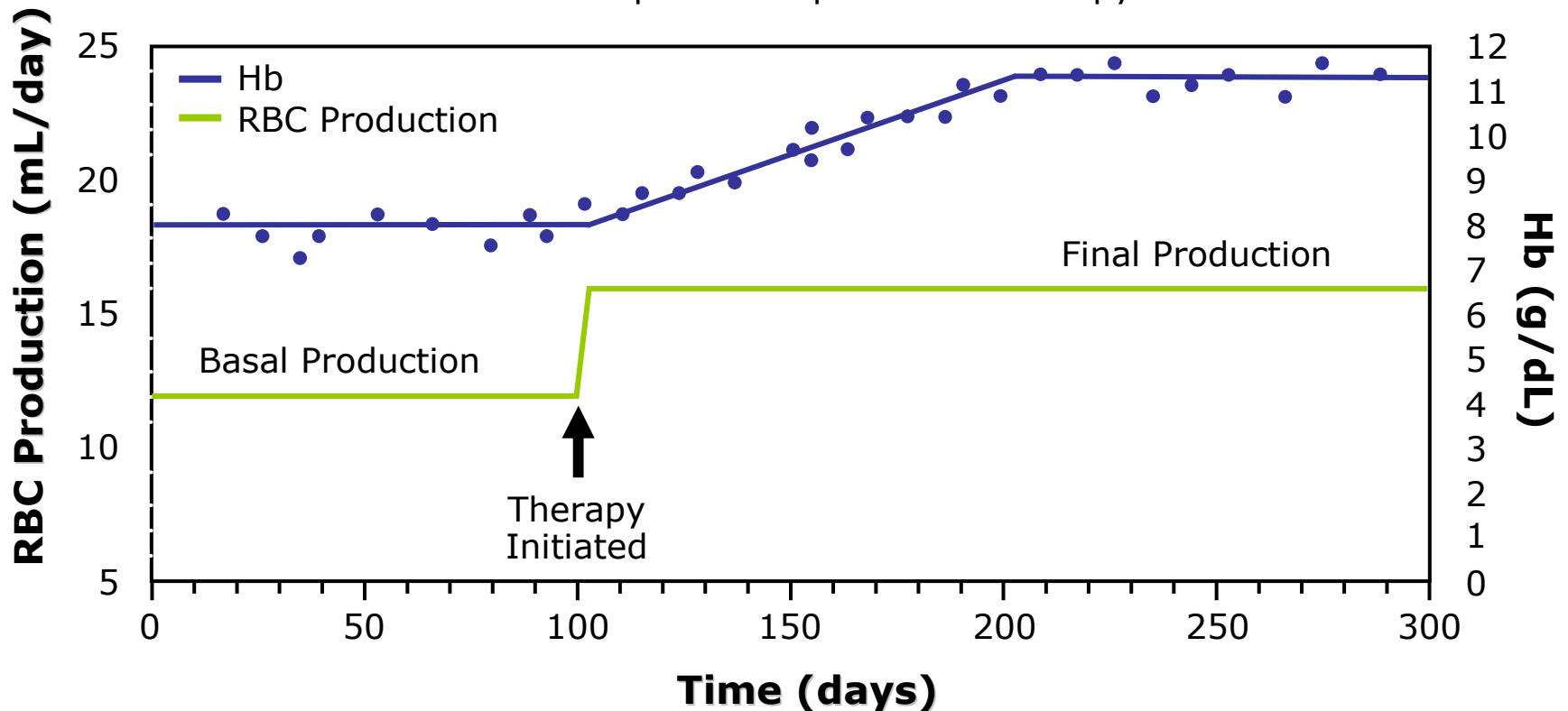


Epoetin Concentration-Time Profile Following 2-Unit Phlebotomy in Normal Male Volunteers shows feedback between EPO and HCT



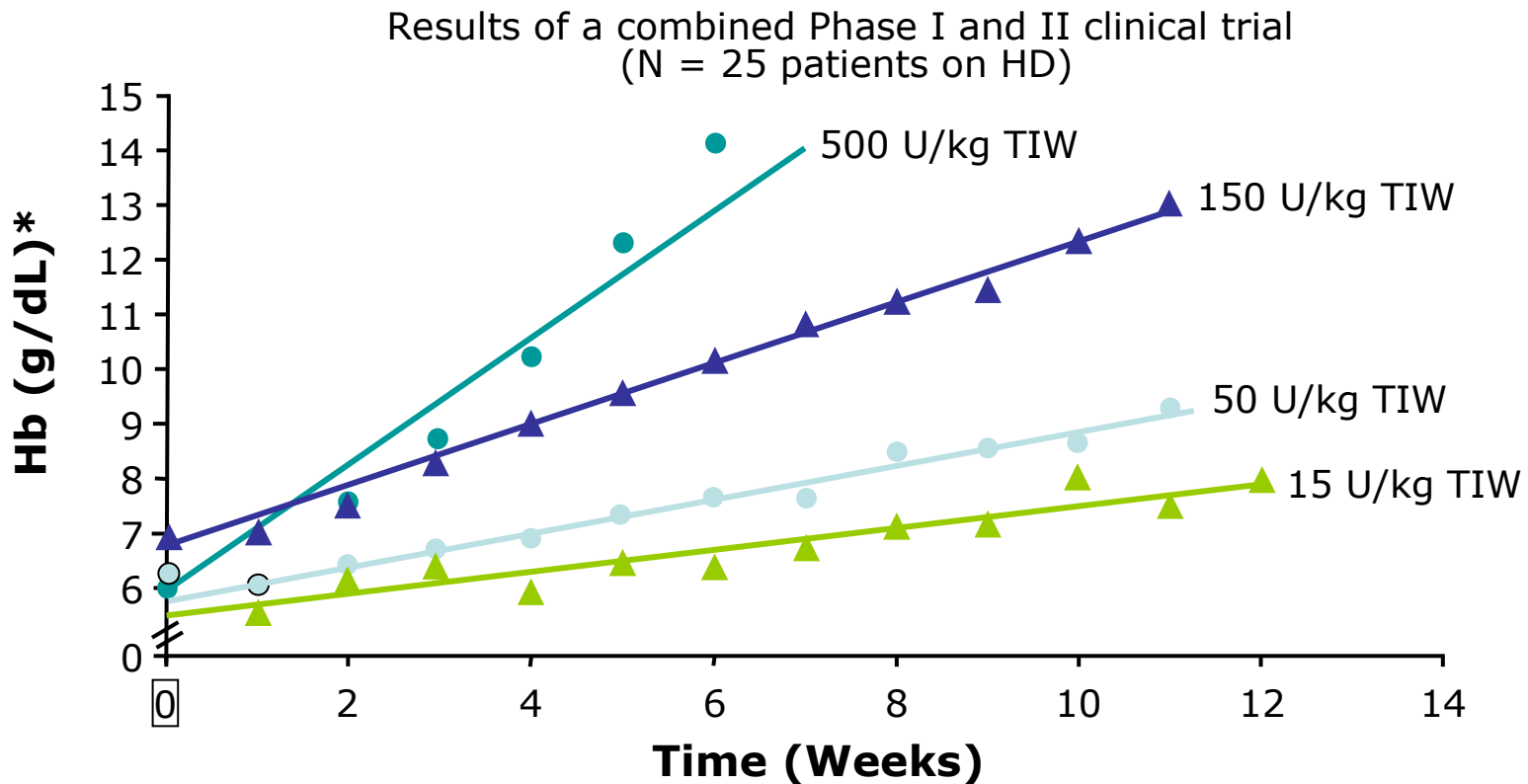
Epoetin Results in an Increase in RBC and Hb Levels

Model helps predict changes in RBC production and Hb in response to Epoetin alfa therapy.



Adapted from: Besarab A. In: Henrich WL, ed. *Principles and Practice of Dialysis*, 3rd ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2004:chap 32.

Hb Response to Epoetin is Dependent on the Dose and Patient



*Hb values calculated from reported Hct values.
Adapted from: Eschbach JW, et al. *N Engl J Med.* 1987;316:73-78.

Decline in Hb After Withholding Treatment

Long MIRCERA half-life does not affect Hb decline following dose interruption – pooled analysis of maintenance studies

