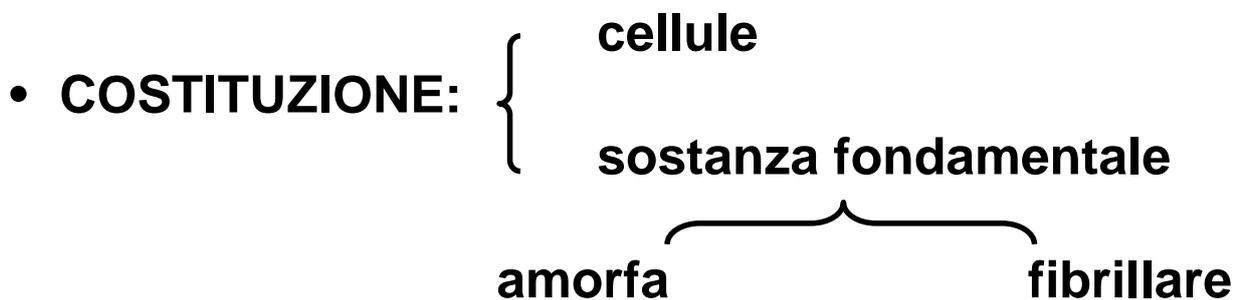


Caratteristiche generali dei connettivi

- **FUNZIONI:** connessione, sostegno, protezione, difesa, trofica
- **VASCOLARIZZAZIONE**
- **ORIGINE:** da mesenchima



TESSUTI CONNETTIVI in senso lato *classificazione*

- **T. connettivo propriamente detto**
- **T. connettivo a costituzione cellulare**
- **T. cartilagineo**
- **T. osseo**
- **Sangue**

IL SANGUE

Funzioni

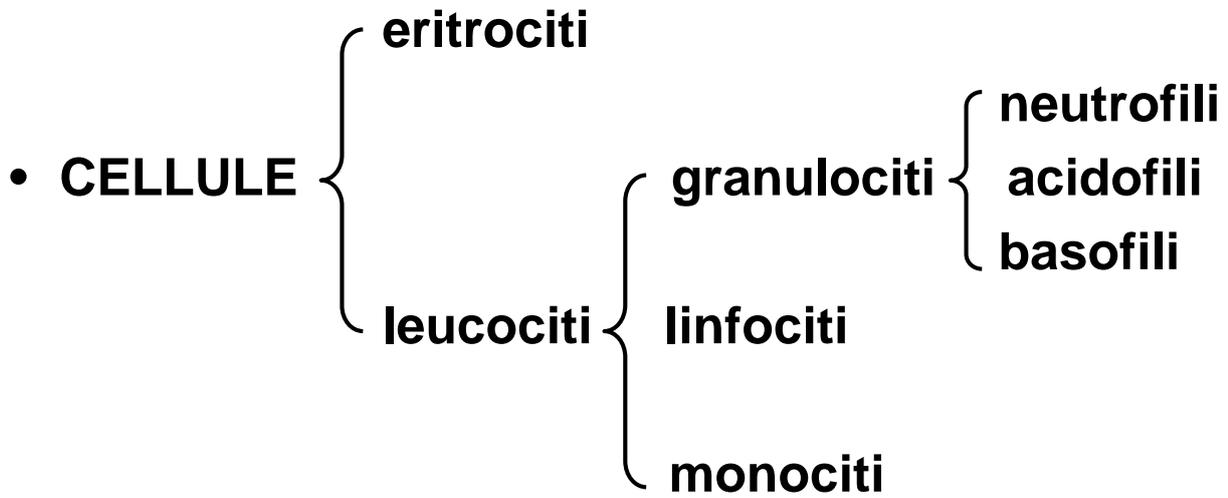
- **Trofica**
- **Connessione a distanza**
- **Meccanica**
- **Termoregolazione**
- **Difesa**

CARATTERISTICHE PECULIARI

- **la sostanza intercellulare è liquida (plasma)**
- **la sostanza intercellulare non viene prodotta dalle cellule del tessuto stesso**
- **le cellule originano nel tessuto emopoietico e concludono il loro ciclo vitale in organi emocateretici (es:milza)**

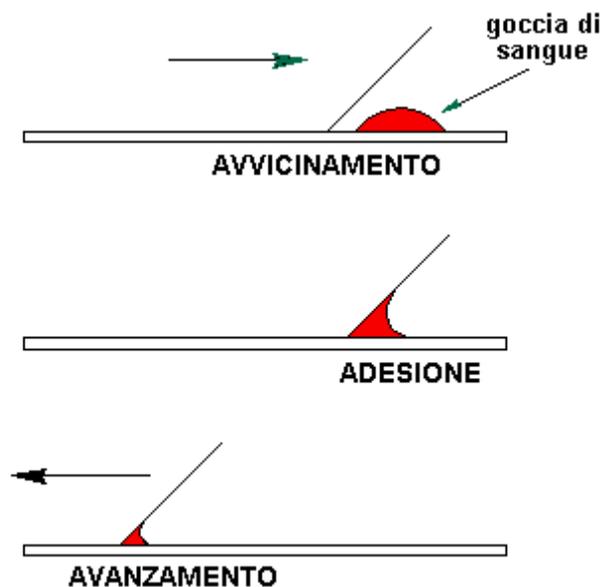
COSTITUZIONE

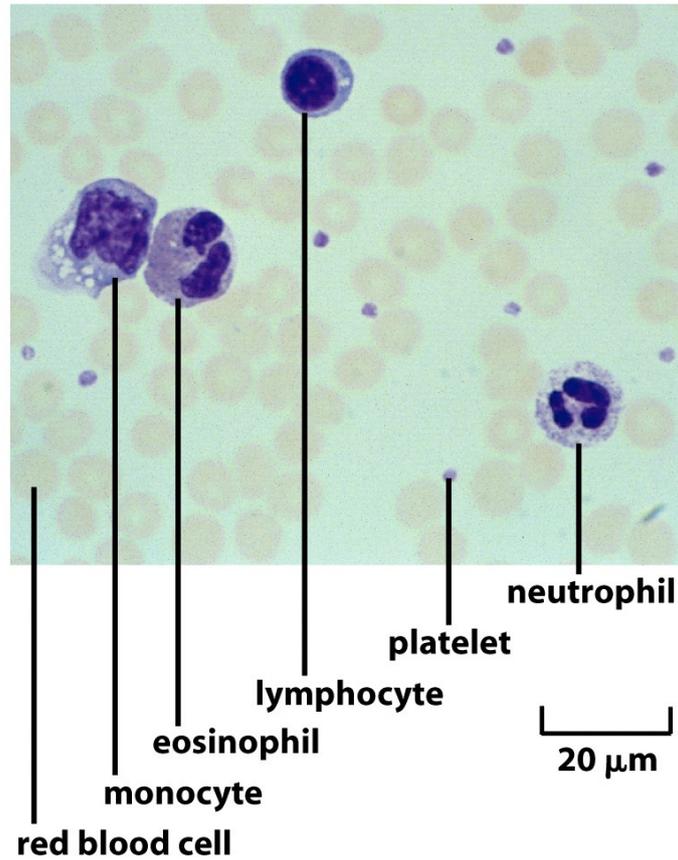
- PLASMA



PIASTRINE = elementi corpuscolati

STRISCIO DI SANGUE





Granulociti

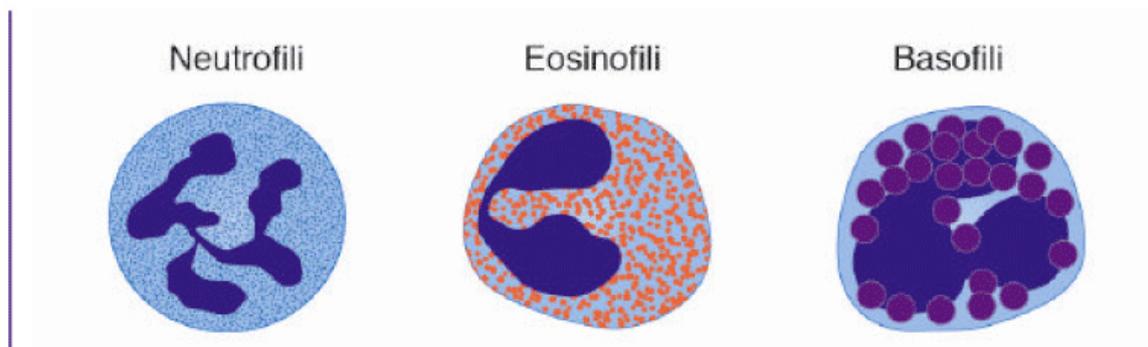


Figura 9.7 Le tre classi di granulociti. Ognuno dei tipi cellulari possiede funzioni differenti, che si rispecchiano nei tipi diversi di granuli secretori e lisosomi che esso contiene nel proprio citoplasma.

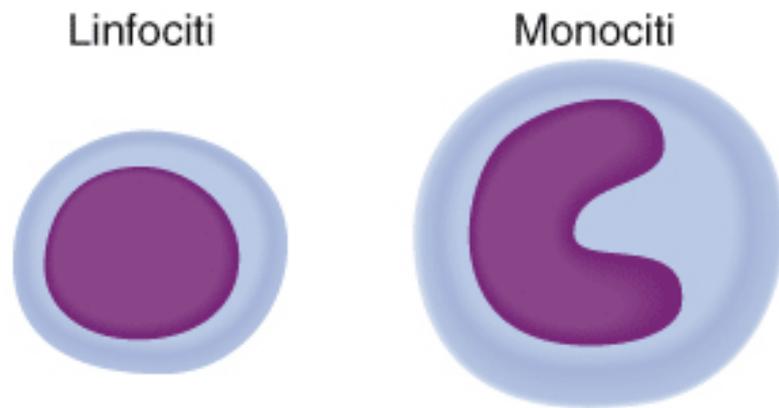


Figura 9.11 Le due classi di leucociti agranulari.

- A: granulocita neutrofilo
- B: granulocita basofila
- C: granulocita eosinofilo
- D: monocita

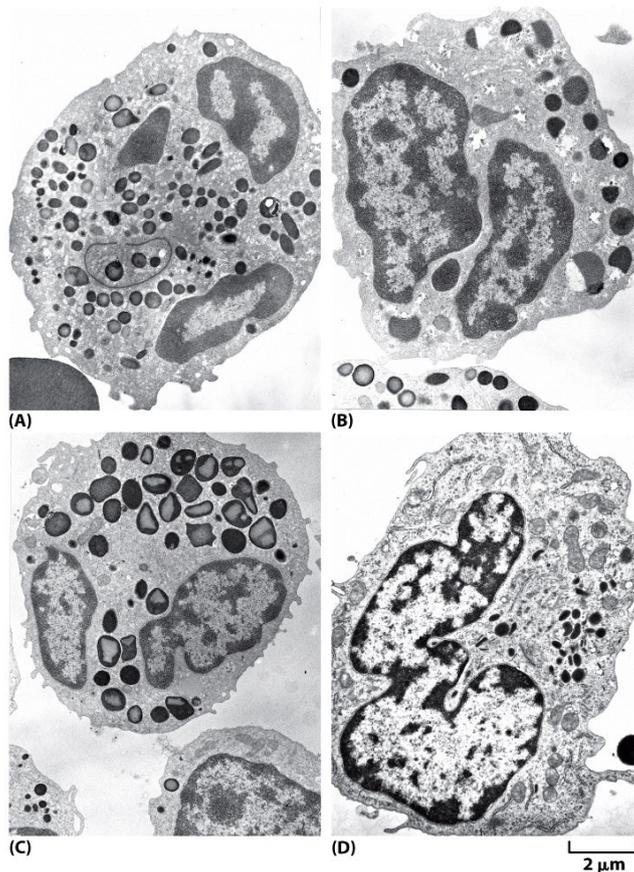
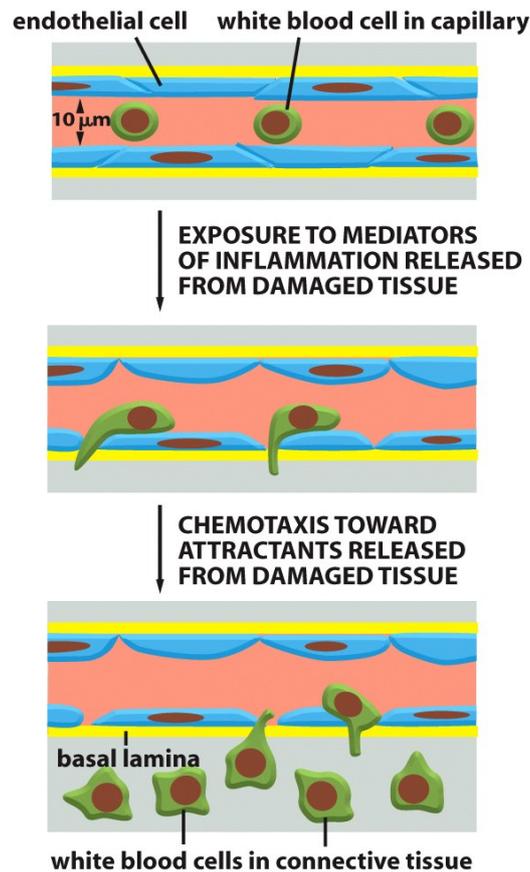


Table 23-1 Blood Cells

TYPE OF CELL	MAIN FUNCTIONS	TYPICAL CONCENTRATION IN HUMAN BLOOD (CELLS/LITER)
Red blood cells (erythrocytes)	transport O ₂ and CO ₂	5 × 10 ¹²
White blood cells (leucocytes)		
<i>Granulocytes</i>		
Neutrophils (polymorphonuclear leucocytes)	phagocytose and destroy invading bacteria	5 × 10 ⁹
Eosinophils	destroy larger parasites and modulate allergic inflammatory responses	2 × 10 ⁸
Basophils	release histamine (and in some species serotonin) in certain immune reactions	4 × 10 ⁷
<i>Monocytes</i>	become tissue macrophages, which phagocytose and digest invading microorganisms and foreign bodies as well as damaged senescent cells	4 × 10 ⁸
<i>Lymphocytes</i>		
B cells	make antibodies	2 × 10 ⁹
T cells	kill virus-infected cells and regulate activities of other leucocytes	1 × 10 ⁹
Natural killer (NK) cells	kill virus-infected cells and some tumor cells	1 × 10 ⁸
Platelets (cell fragments arising from megakaryocytes in bone marrow)	initiate blood clotting	3 × 10 ¹¹

Humans contain about 5 liters of blood, accounting for 7% of body weight. Red blood cells constitute about 45% of this volume and white blood cells about 1%, the rest being the liquid blood plasma.



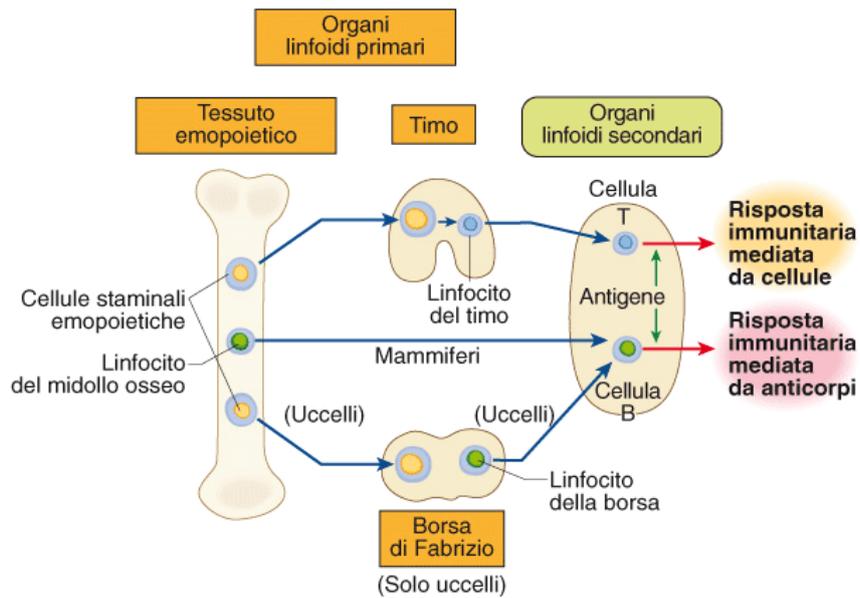
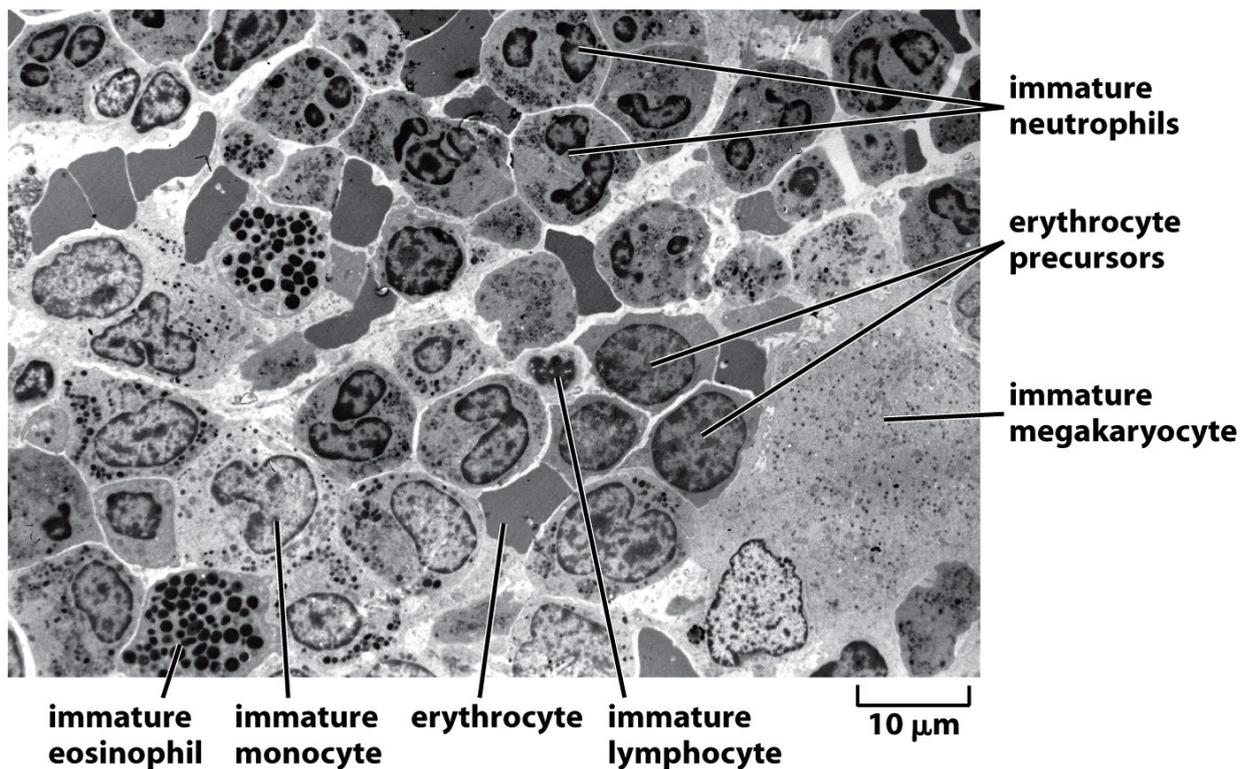
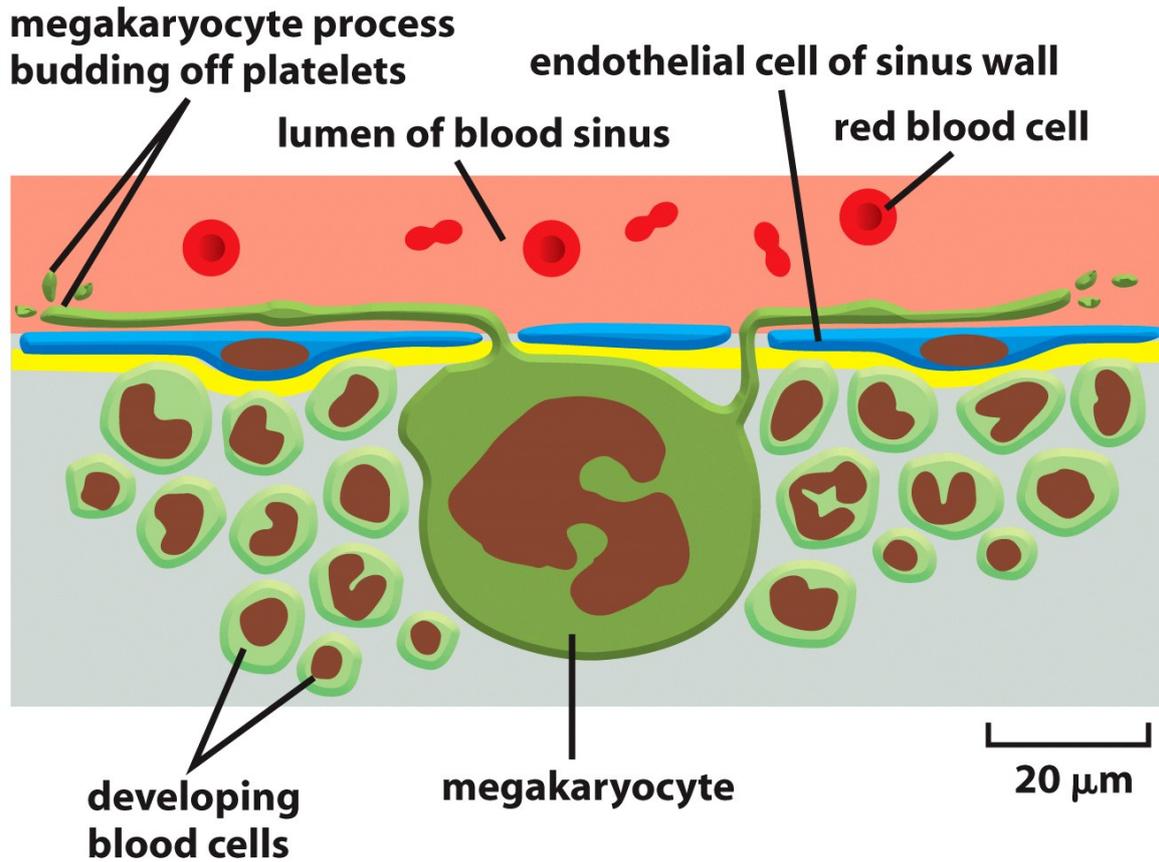


Figura 9.22 Sviluppo e maturazione dei linfociti. I linfociti originano da cellule staminali pluripotenti che si trovano nei tessuti emopoietici (il midollo osseo nell'adulto). Nei mammiferi, le cellule B e le cellule NK si sviluppano nei tessuti emopoietici stessi, mentre le cellule T si sviluppano nel timo. I tessuti emopoietici ed il timo sono definiti organi linfoidi primari o centrali.

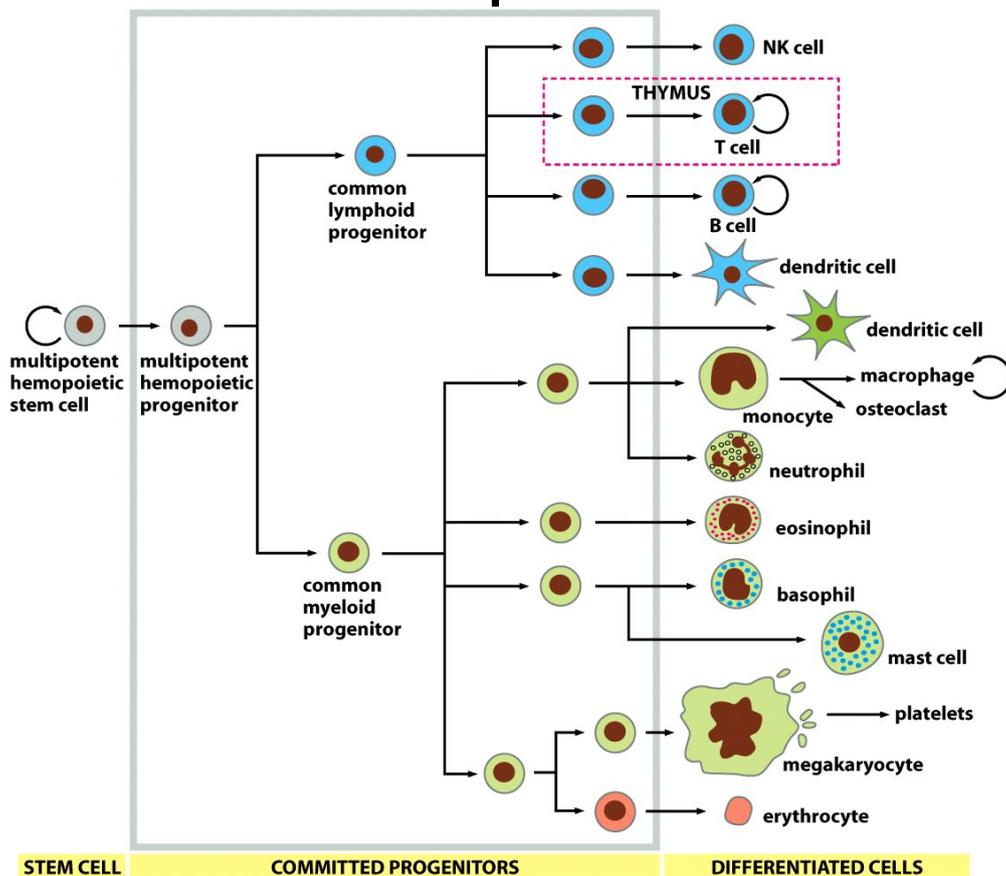
Midollo osseo rosso



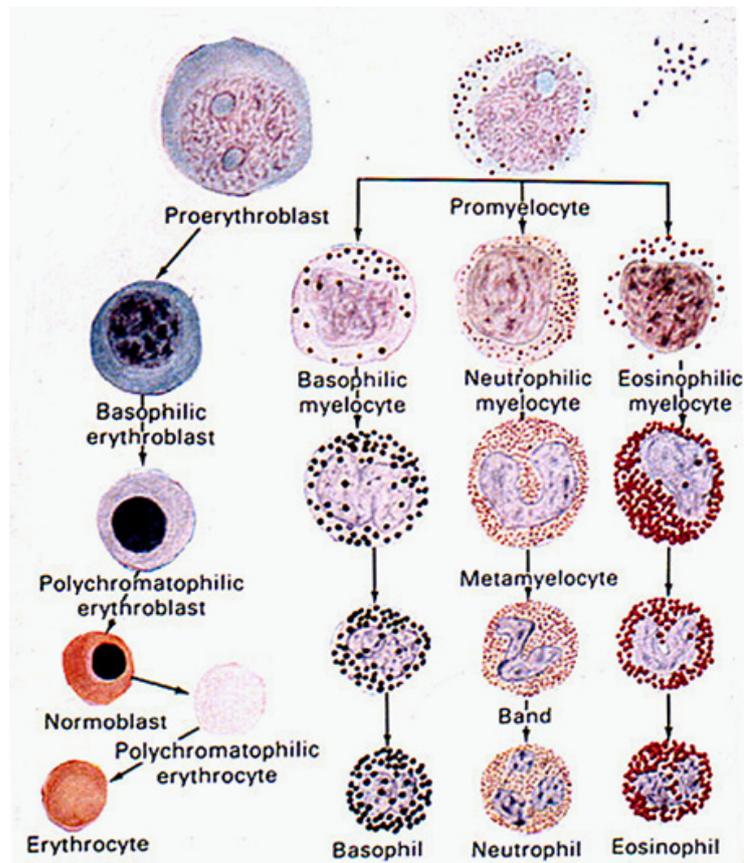
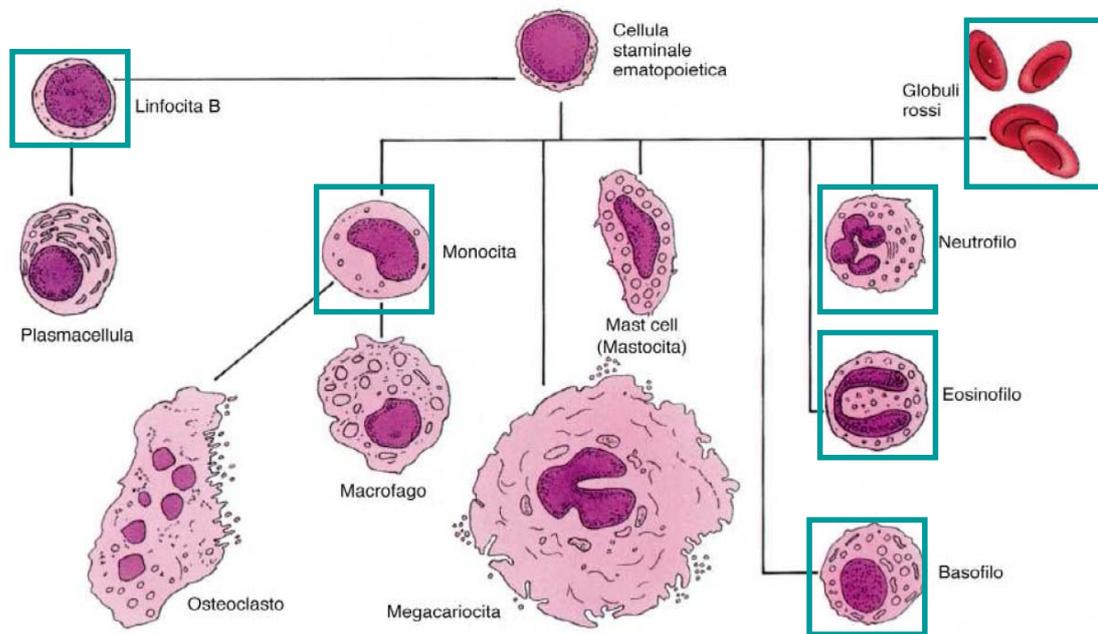
Formazione piastrine



Emopoiesi



ORIGINE DELLE CELLULE DEL SANGUE



Eritropoiesi

