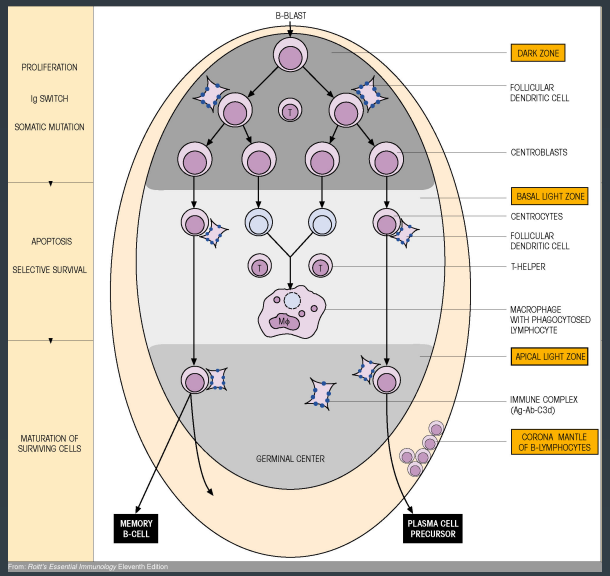
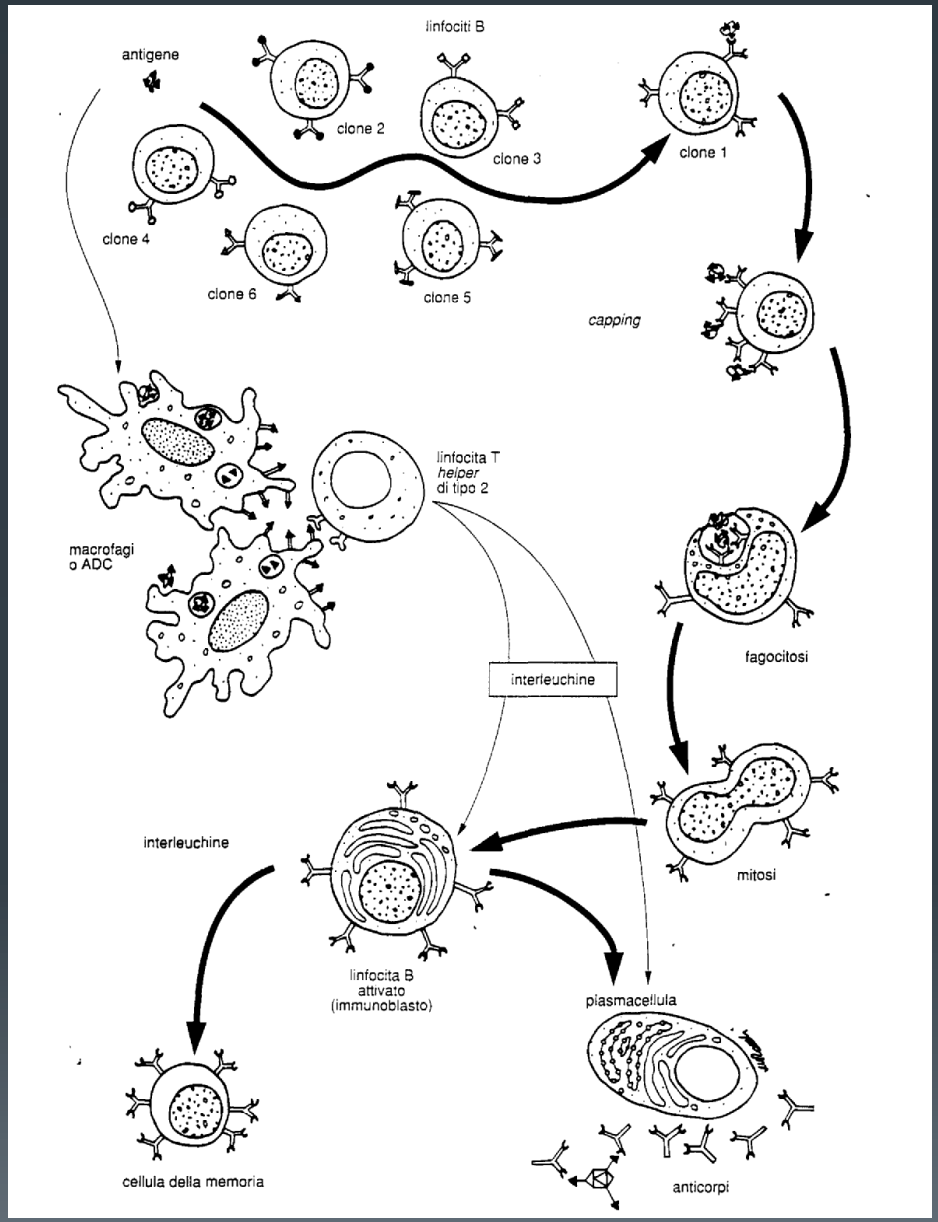
Caratteristiche	IgM	IgG	IgA	IgE	IgD
Struttura					
Contenuto nel siero (mg/100 ml)	100-150	1.300 ca.	150-250	0,03-0,1	n.d.
% degli anticorpi totali	5-10	78-85	5-20	1	n.d.
Peso molecolare	900.000	160.000	170/390.000*	185.000	185.000
Coefficiente di sedimentazione	19	7	7/13	8	7
Contenuto % in carboidrati	11,8-12	2,5-2,9	7-7,5	11-12	13
Catena *J*	+	−	+	−	−
Resistenza al mercaptoetanolo	−	++	±	−	++
Labilità a 56 °C	−	−	−	−	−
Sintesi (mg/kg/giorno)	5-8	28	8-10	n.d.	n.d.
Emivita (giorni)	5,1	23	5,8	2,5	n.d.
Fissazione del complemento	+	+ (IgG_4 escluse)	−	−	−
Legame ai mastociti**					
omocitotropia	−	−	−	−	−
eterocitotropia	−	+ (IgG_2 escluse)	−	−	−
Passaggio transplacentare	−	+	−	−	−
Reazione con il fattore reumatoide	−	+	−	−	−

* 170.000 = peso molecolare della forma monomerica; 390.000 = peso molecolare della forma secretoria: (170.000 × 2) + 58.000 (pezzo secretorio).

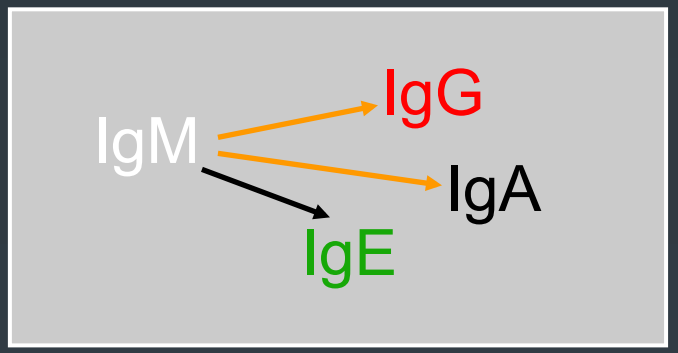
** Per omocitotropia ed eterocitotropia si intende la trasmissione passiva della sensibilizzazione anafilattica o allergica rispettivamente a soggetti della stessa specie animale e di specie animali diverse. Il carattere indicato nella tabella si riferisce al siero umano; differente è il comportamento per le altre specie animali. Elementi di chiarificazione a riguardo sono riportati nel capitolo sull'allergia.

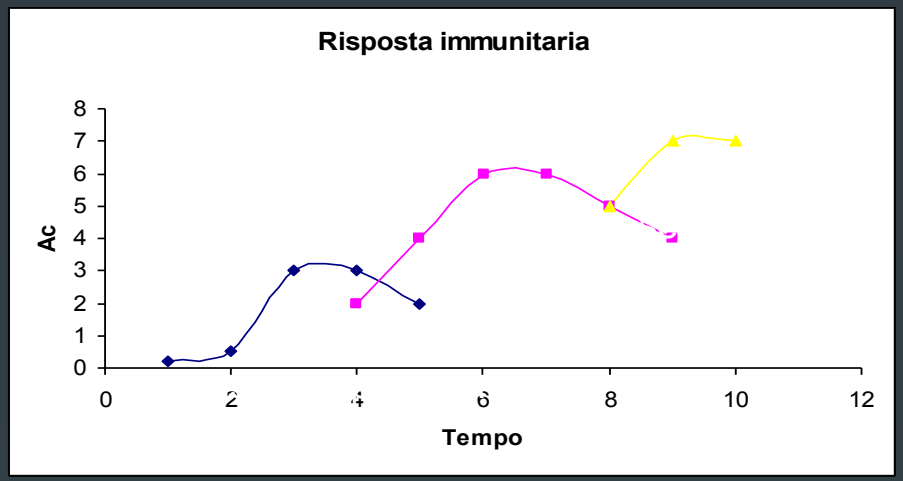
n.d. = non determinato.


B-BLAST
PROLIFERATION
Ig SWITCH
SOMATIC MUTATION
APOPTOSIS
SELECTIVE SURVIVAL
MATURATION OF SURVIVING CELLS
DARK ZONE
FOLLICULAR DENDRITIC CELL
CENTROBLASTS
BASAL LIGHT ZONE
CENTROCYTES
FOLLICULAR DENDRITIC CELL
T-HELPER
MACROPHAGE WITH PHAGOCYTOSED LYMPHOCYTE
APICAL LIGHT ZONE
IMMUNE COMPLEX (Ag-Ab-C3d)
CORONA MANTLE OF B-LYMPHOCYTES
GERMINAL CENTER
MEMORY B-CELL
PLASMA CELL PRECURSOR
From: Roitt's Essential Immunology Eleventh Edition

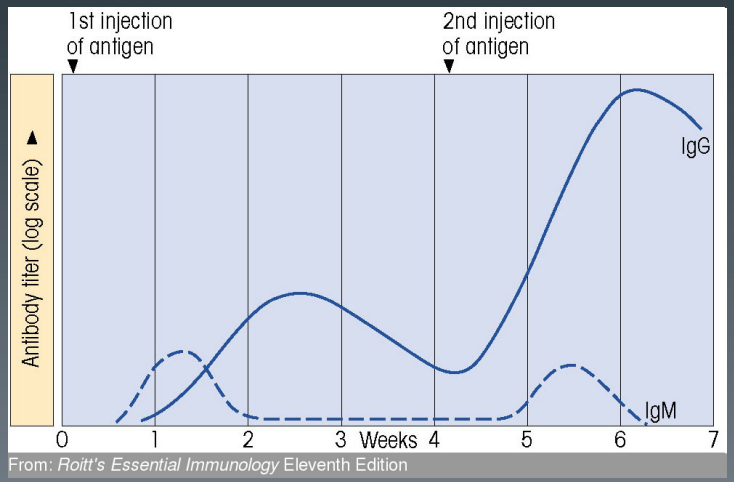

antigene
linfociti B
clone 2
clone 3
clone 1
clone 4
clone 6
clone 5
capping
linfocita T
helper
di tipo 2
macrofagi
o ADC
fagocitosi
interleuchine
interleuchine
mitosi
linfocita B
attivato
(immunoblasto)
piasmacellula
cellula della memoria
anticorpi

Commutazione di classe





Effetto booster



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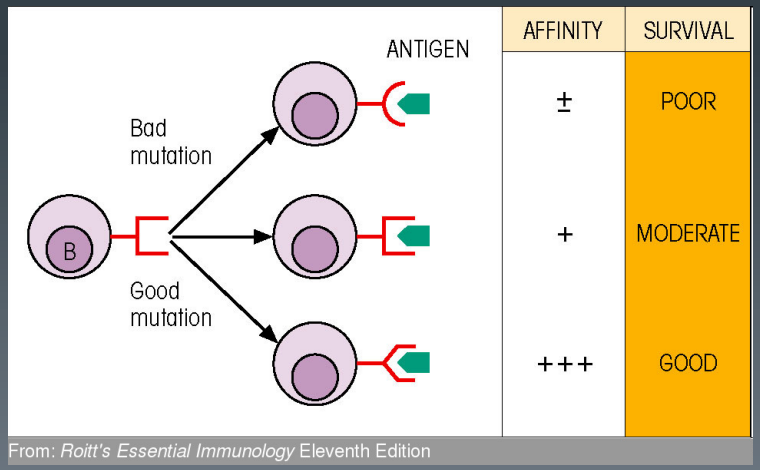
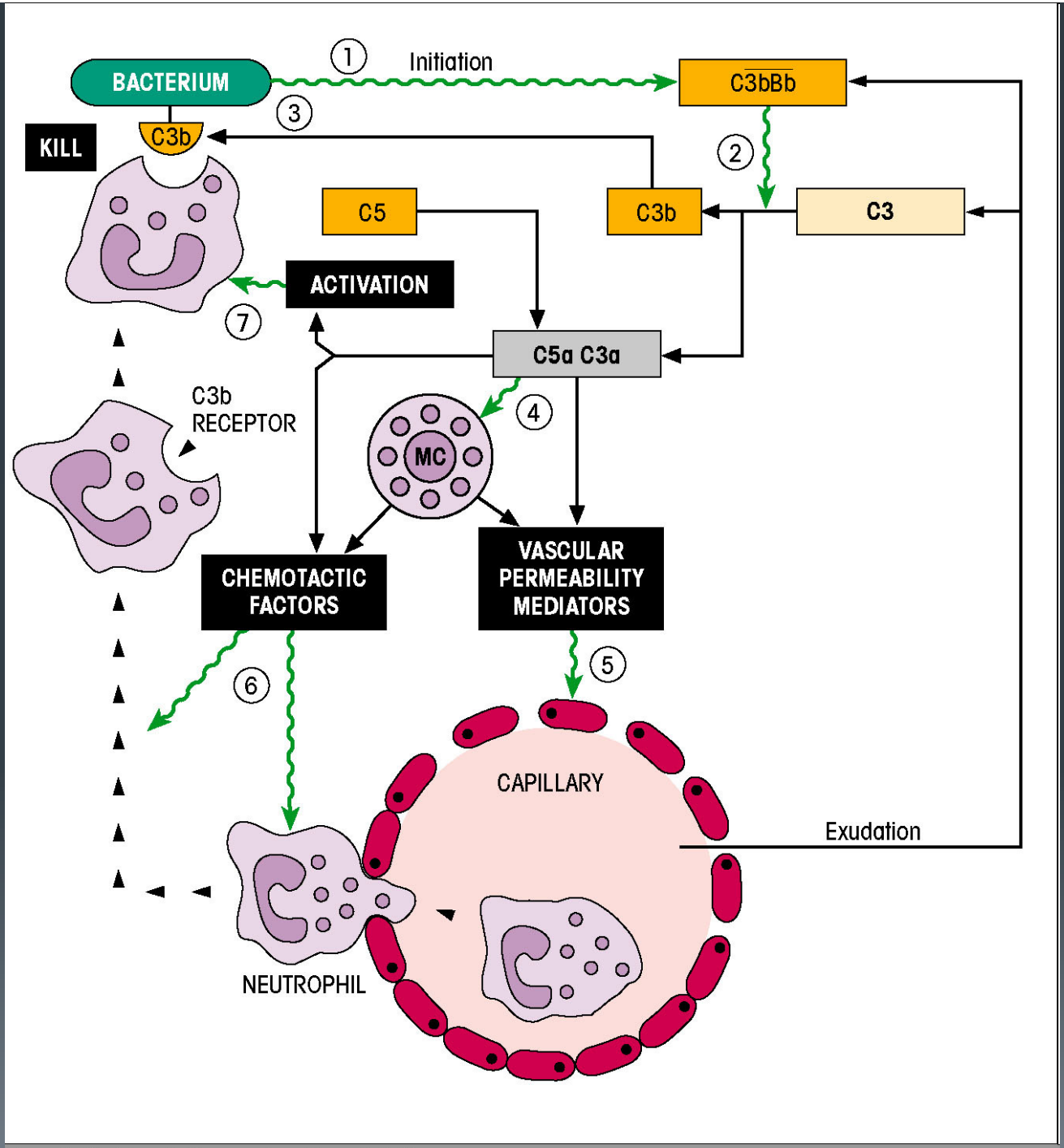


From: *Roitt's Essential Immunology* Eleventh Edition



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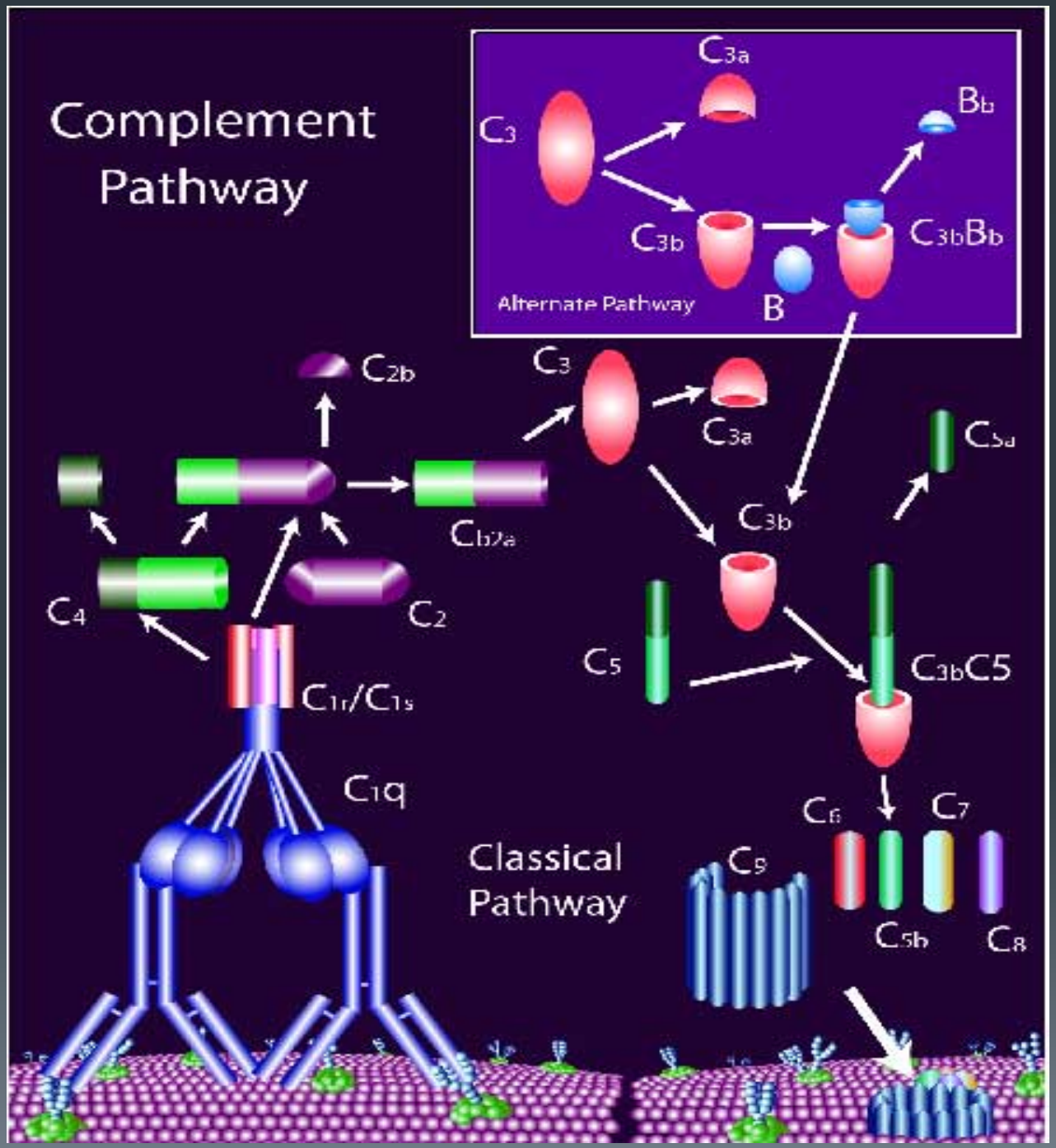
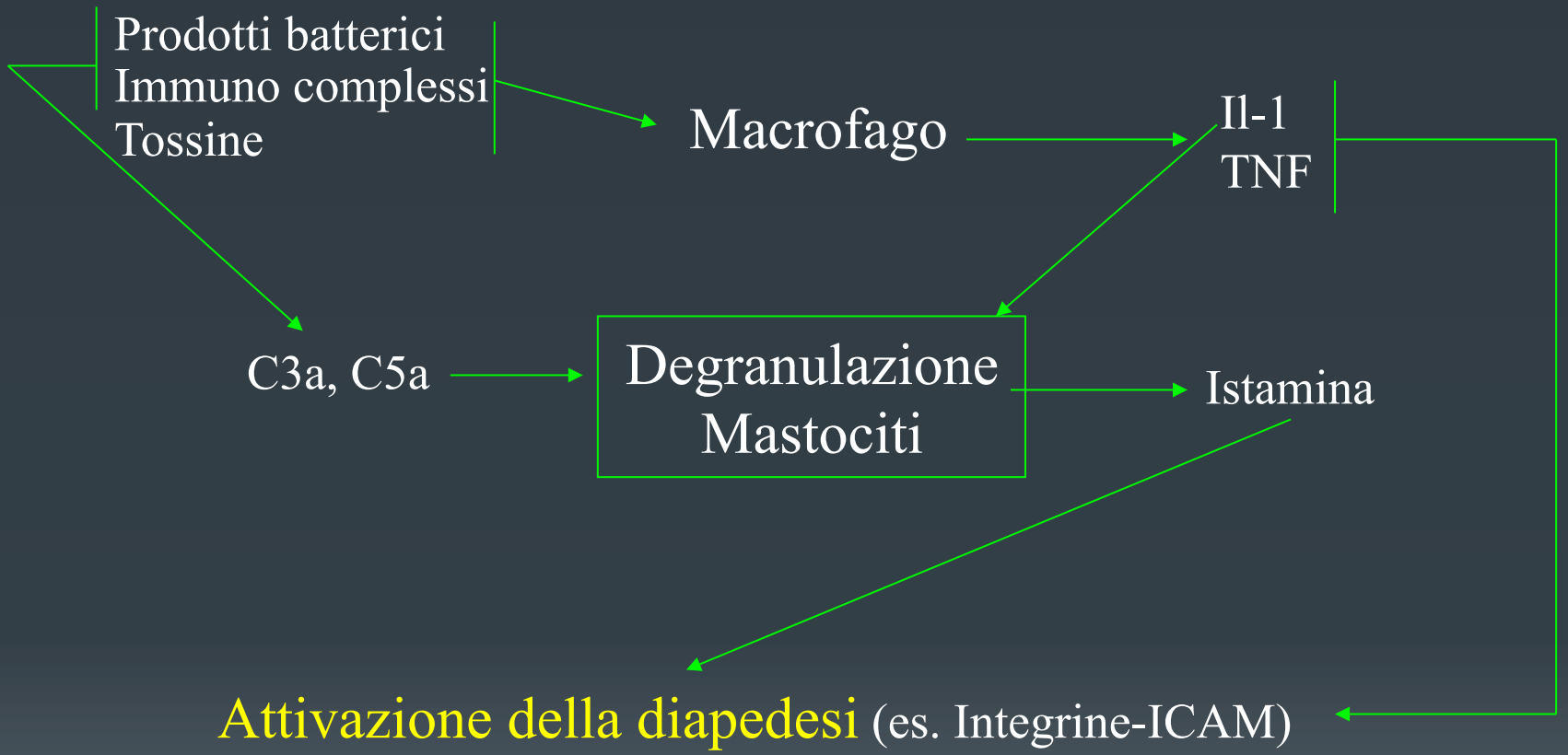

Complement Pathway
C3a
Bb
C3
C3b
C3bBb
B
Alternate Pathway
C2b
C3
C3a
C5a
Cb2a
C3b
C4
C2
C5
C3bC5
C1r/C1s
C1q
C6
C7
Classical Pathway
C9
C5b
C8

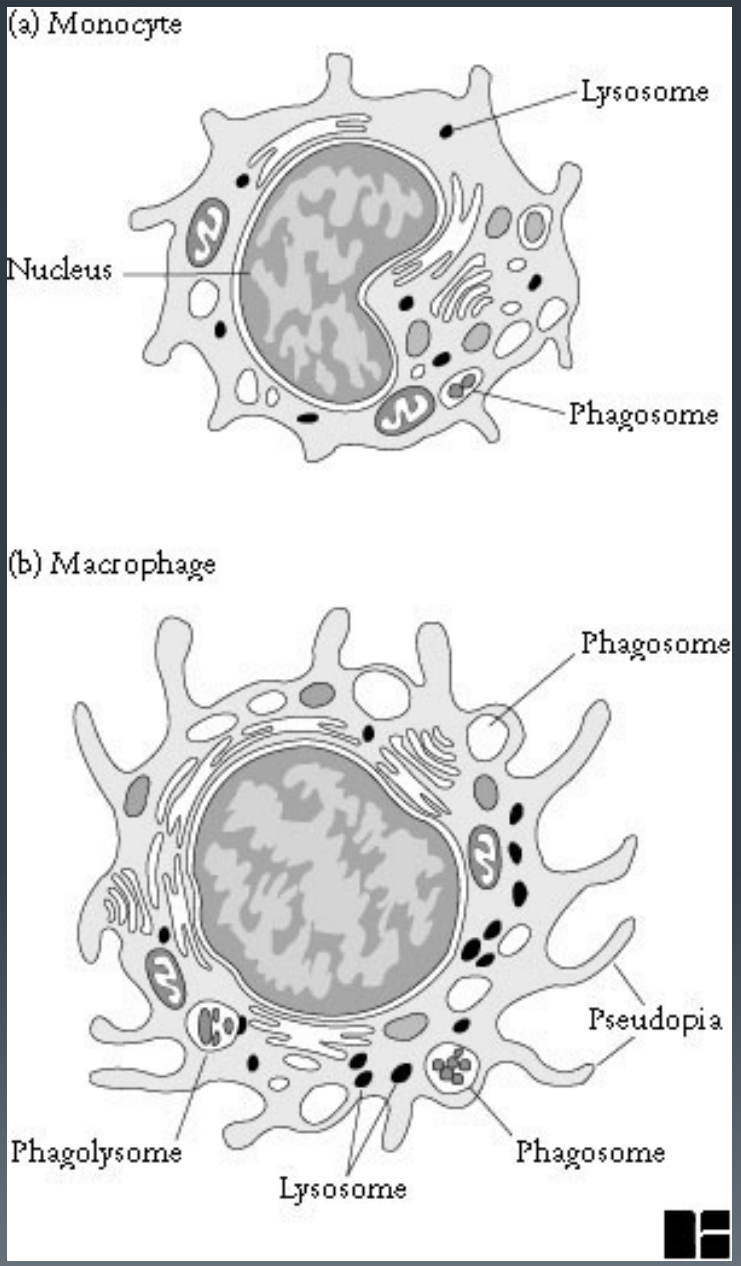
http://2.bp.blogspot.com/_K37RxkxR390/

Cosa stimola i neutrofili a migrare nei tessuti?



MONOCITA

MACROFAGO

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Una cellula fagocitaria come riconosce la particella da fagocitare?

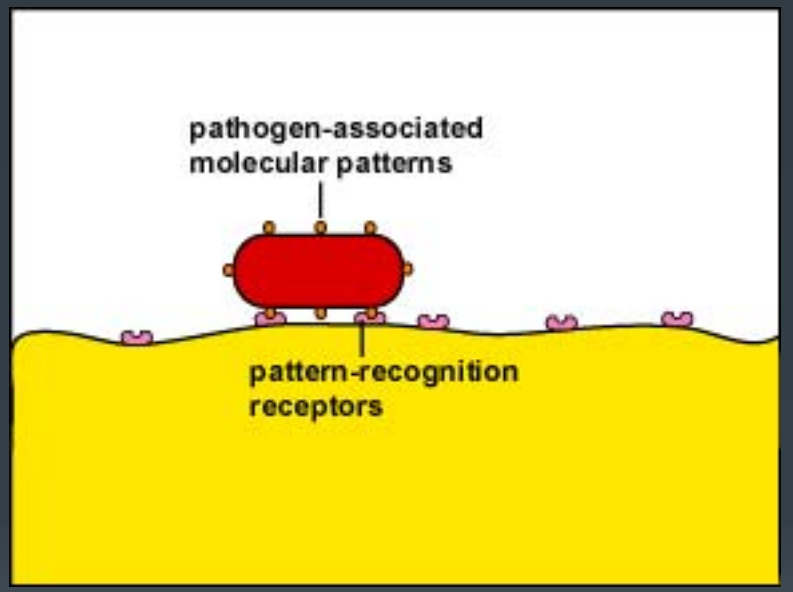
BATTERIO

Mannani

LPS

Ac. teicoici

Lectine



Recettori verso il Mannosio

Integrine

CELLULA

Intermediari dell'infiammazione

Burst respiratorio

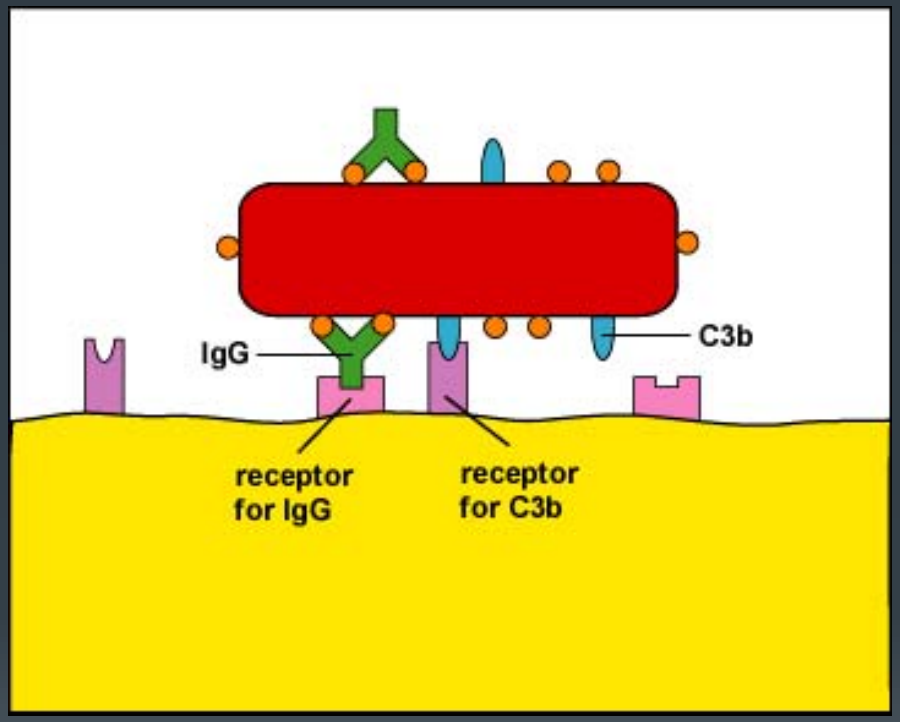
Polimerizzazione-depolimerizzazione actina

BATTERIO

C3b

CR3

CELLULA

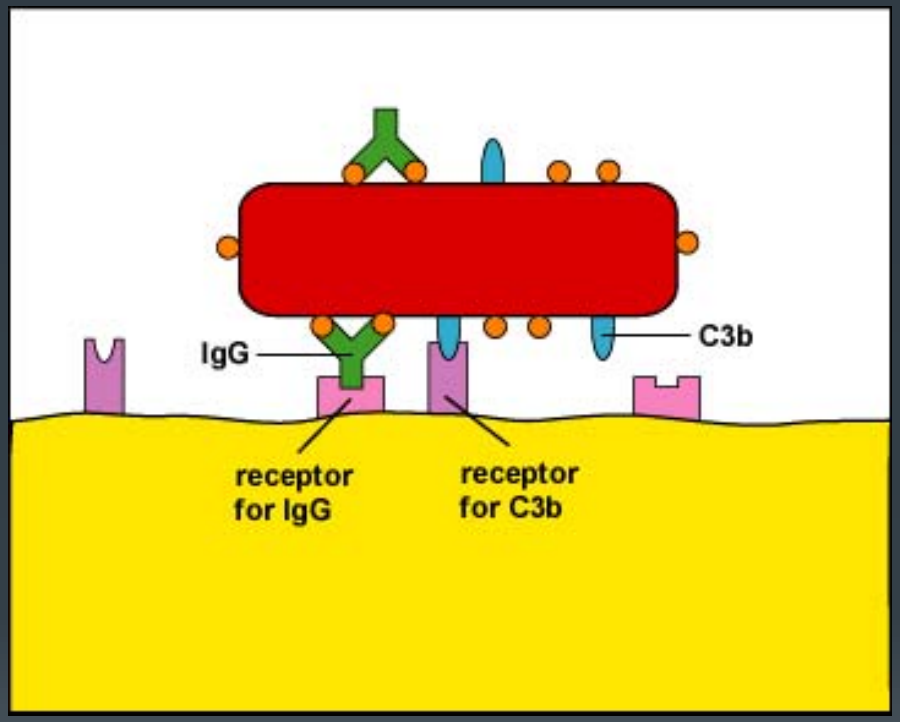


BATTERIO

IgG

FcγR

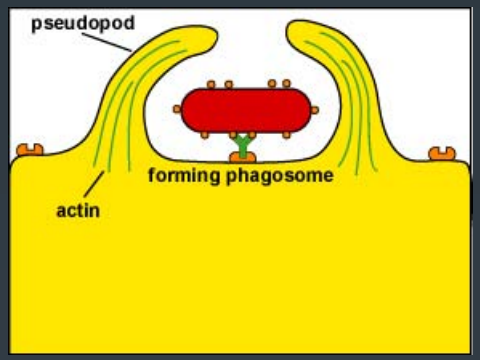
CELLULA



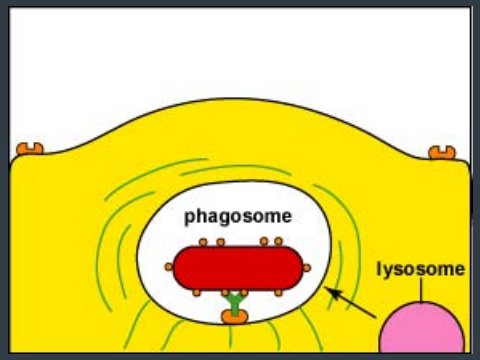
Intermediari dell'infiammazione

Burst respiratorio

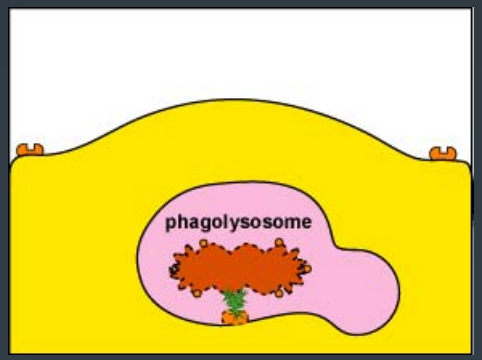
Polimerizzazione-depolimerizzazione actina



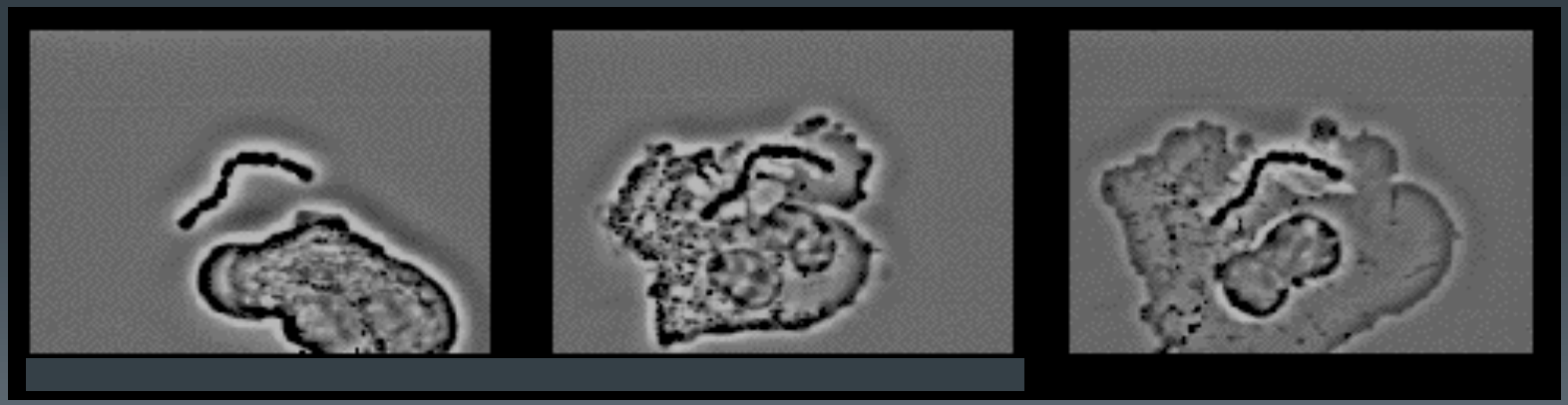
Inglobamento



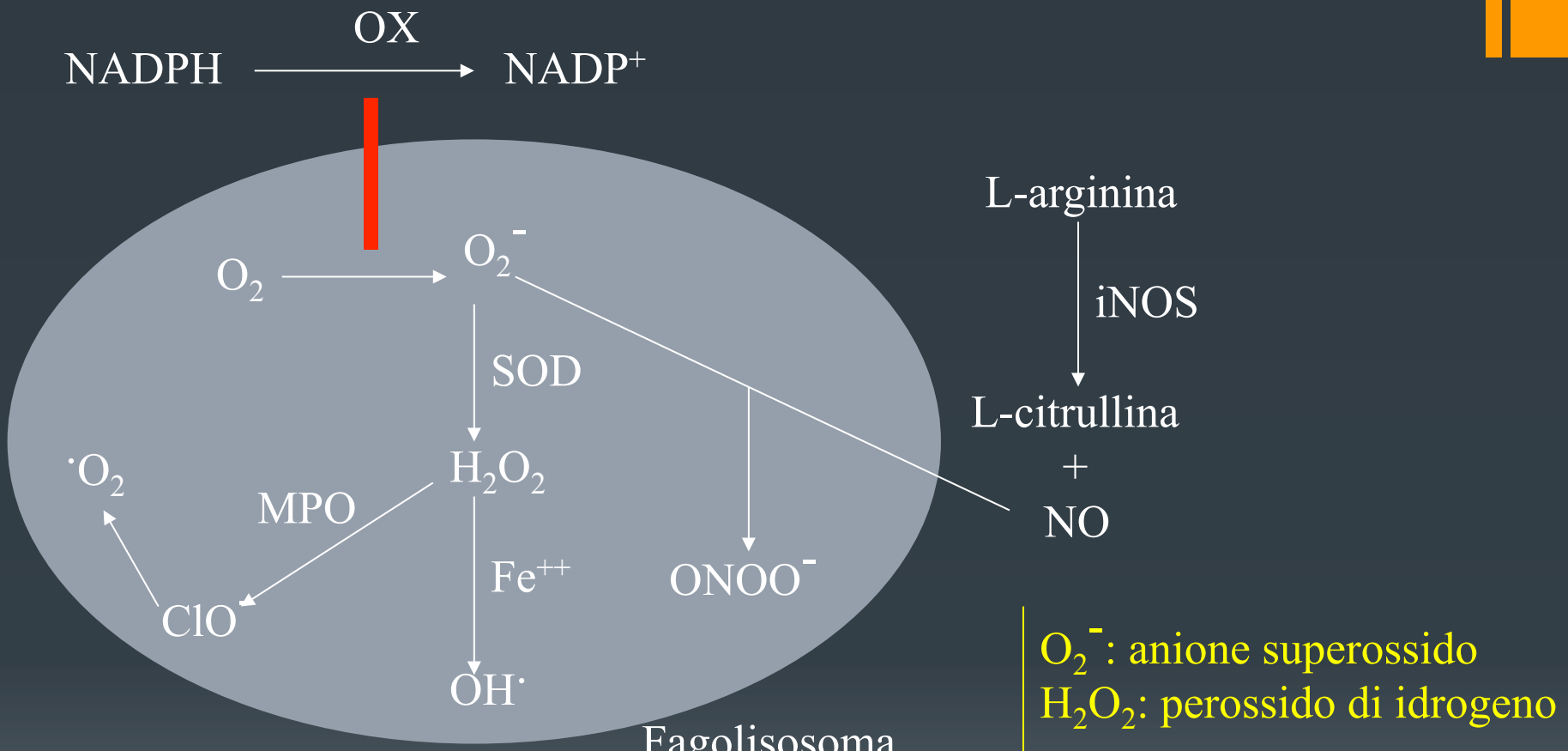
Formazione del fagosoma



Fusione del fagosoma con il lisosoma formando il fagolisosoma



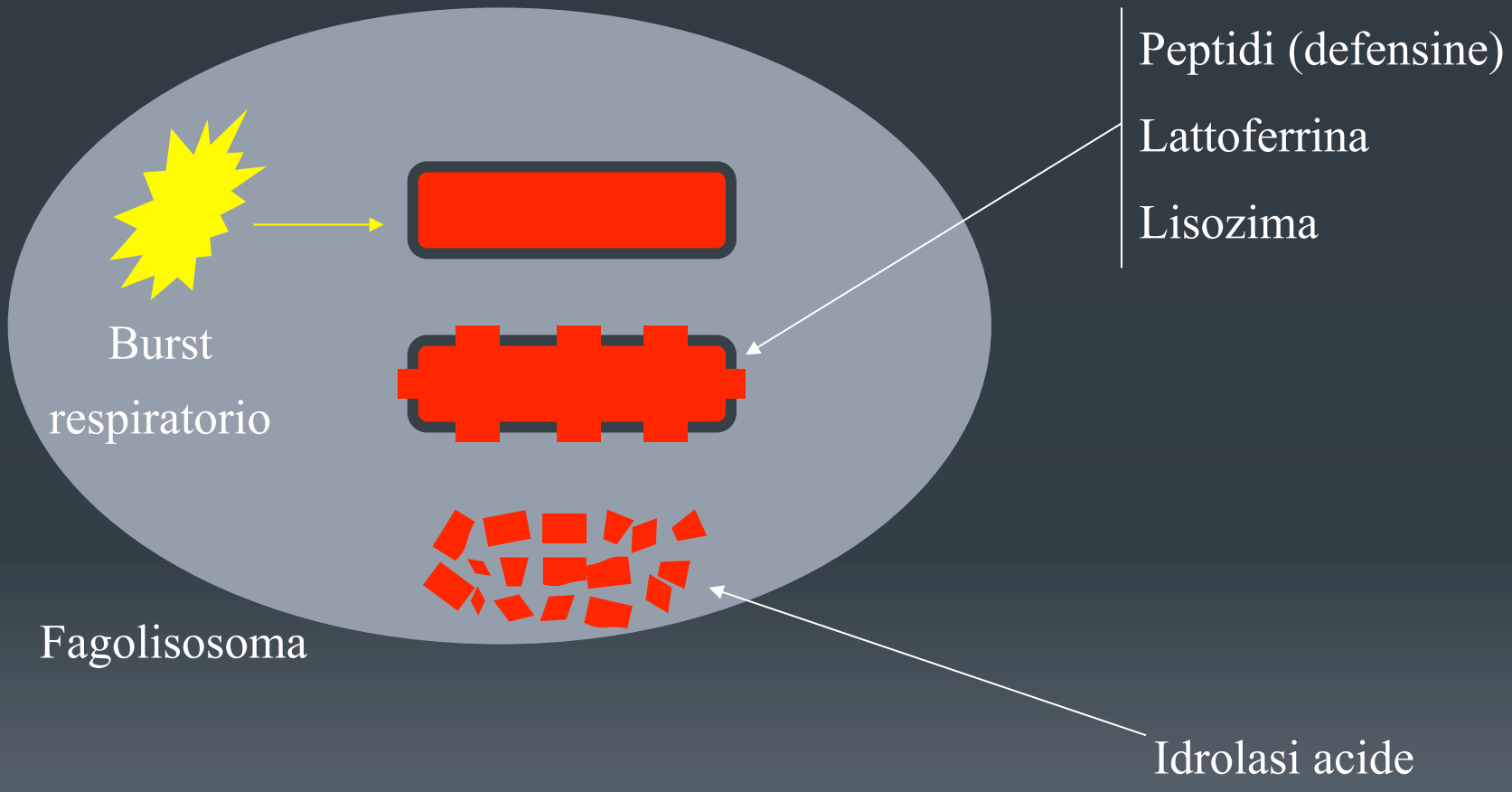
Come fa la cellula a distruggere il fagocitato?

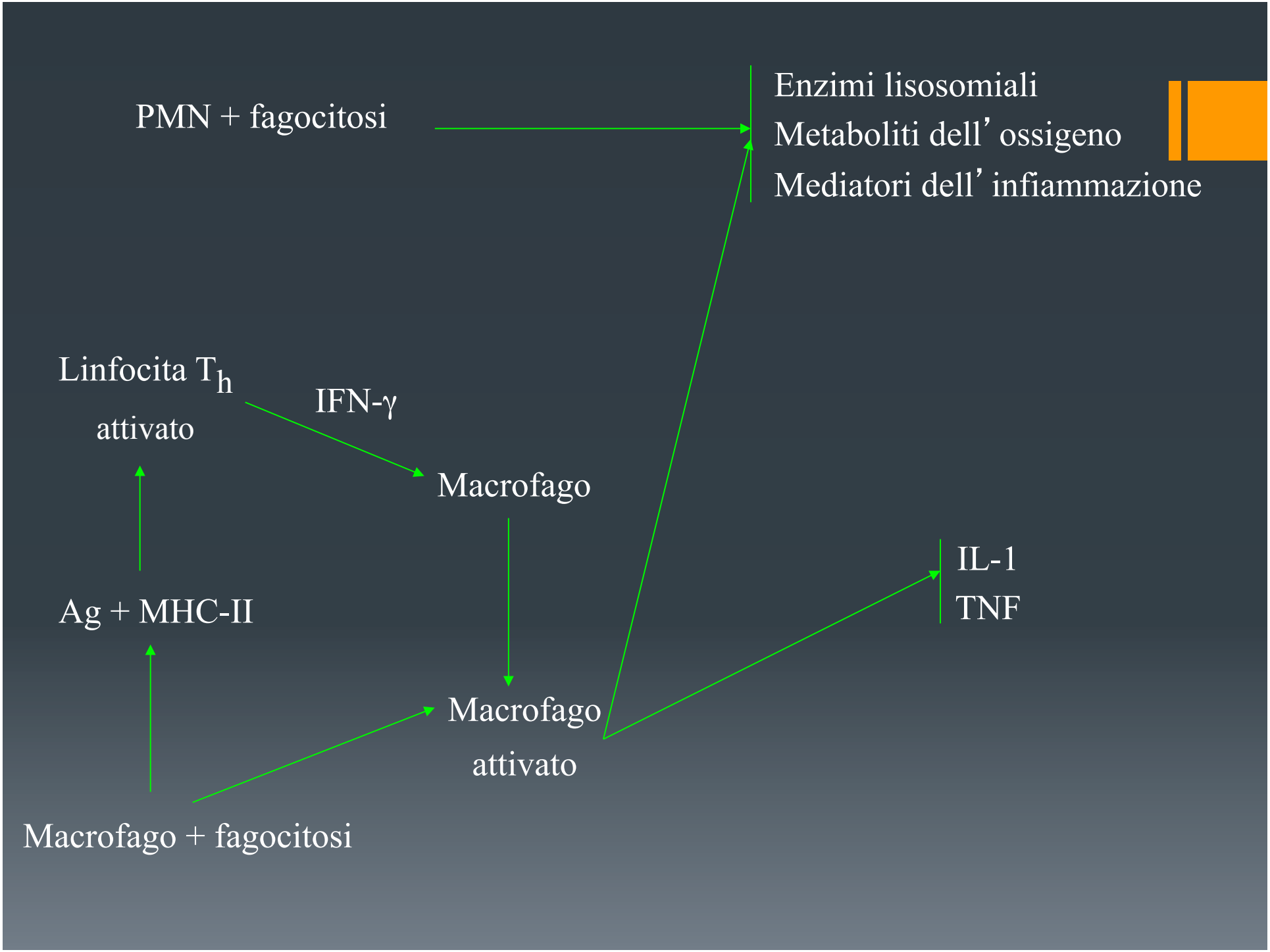


Burst respiratorio

O_2^-: anione superossido
H_2O_2: perossido di idrogeno
$OH^{\cdot}$: radicale idrossilico
ClO^-: ione ipoclorito
$^{\cdot}O_2$: ossigeno singoletto
$ONOO^-$: perossinitrito

Come fa la cellula a distruggere il fagocitato?




PMN + fagocitosi
Enzimi lisosomiali
Metaboliti dell' ossigeno
Mediatori dell' infiammazione
Linfocita T_h attivato
IFN-γ
Macrofago
IL-1
TNF
Ag + MHC-II
Macrofago attivato
Macrofago + fagocitosi