

Terapias biológicas en EAS

Nuevas moléculas

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Servicio EAS, ICMiD, UB
Hospital Clínic, Barcelona*

Terapias biológicas en EAS

Nuevas moléculas

Introducción
Metodología
Resultados
Top 5 Mec
Tendencias

Terapias biológicas en EAS

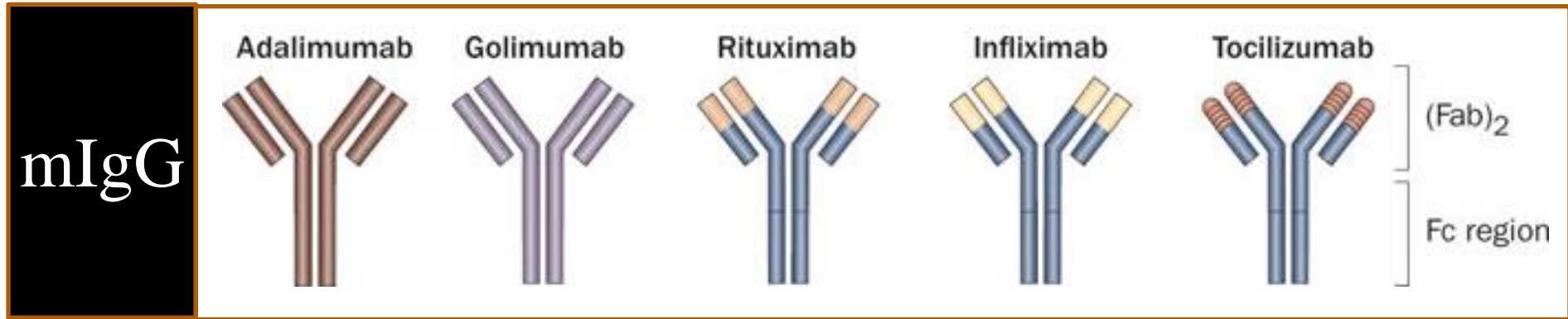
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Tendencias

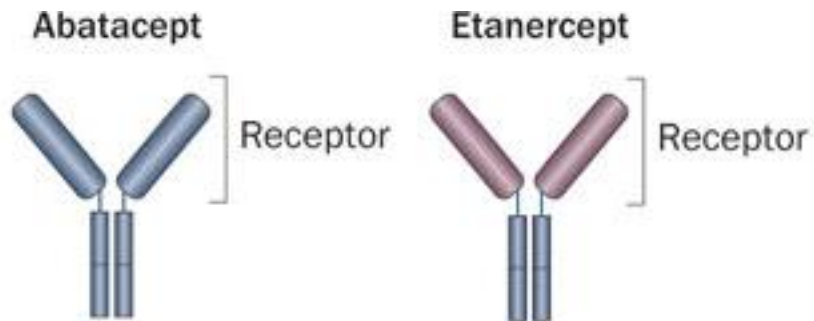
¿Cuál es su composición?

Tipo de molécula	Anticuerpos monoclonales			Fragmentos pegilados	Proteínas de fusión	Análogos de citoquinas
	Quiméricos	Humanizados	Humanos			
	Infliximab		Adalimumab Golimumab	Certolizumab	Etanercept	
	Rituximab	Ocrelizumab	Ofatumumab			
		Epratuzumab				
					Abatacept Belatacept	
			Canakinumab		Rilonacept	
						Anakinra
		Daclizumab				
		Tocilizumab				
		(Efalizumab)				
			Belimumab			

¿Cuál es su composición?

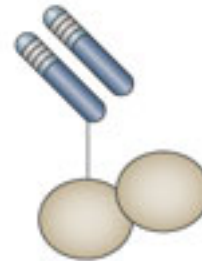


Híbridos (proteínas fusión)



Pegolización

Certolizumab pegol



Análogos

Anakinra



¿Cuál es su diana terapéutica?

Dianas terapéuticas	Anticuerpos monoclonales			Fragmentos pegilados	Proteínas de fusión	Análogos de citoquinas
	Quiméricos	Humanizados	Humanos			
TNF α	Infliximab		Adalimumab Golimumab	Certolizumab	Etanercept	
CD20	Rituximab	Ocrelizumab	Ofatumumab			
CD22		Epratuzumab				
CD80/86					Abatacept Belatacept	
IL-1			Canakinumab		Riloncept	
Receptor IL-1						Anakinra
Receptor IL-2		Daclizumab				
Receptor IL-6		Tocilizumab				
LFA-1		(Efalizumab)				
BLyS (BAFF)			Belimumab			

SISTEMA INMUNE

*Células
procesadoras/
presentadoras*

CÉLULAS

Células estructura

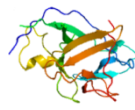
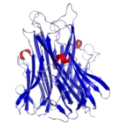
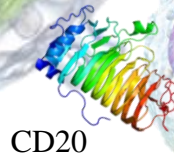
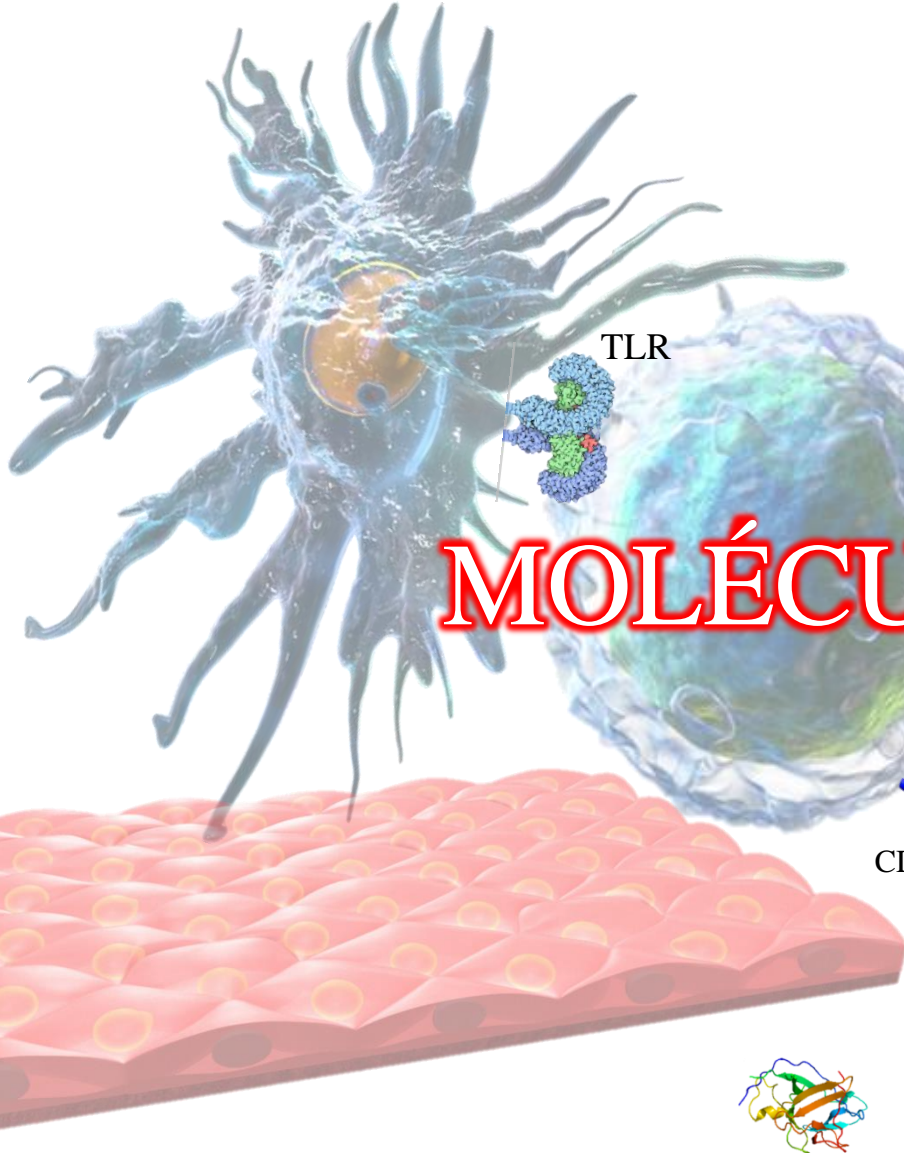
Células hematopoiéticas



SISTEMA INMUNE



MOLÉCULAS

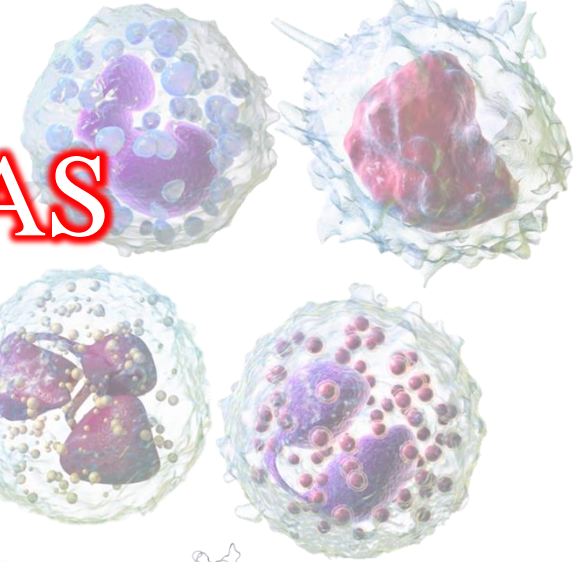


IL1

BAFF

TNF

IL6

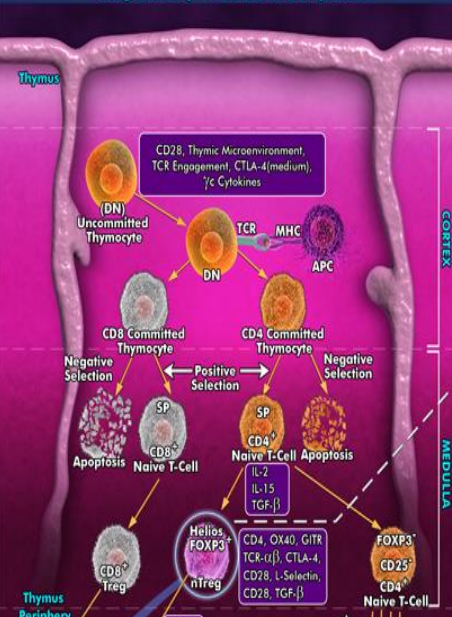


Terapias biológicas en EAS

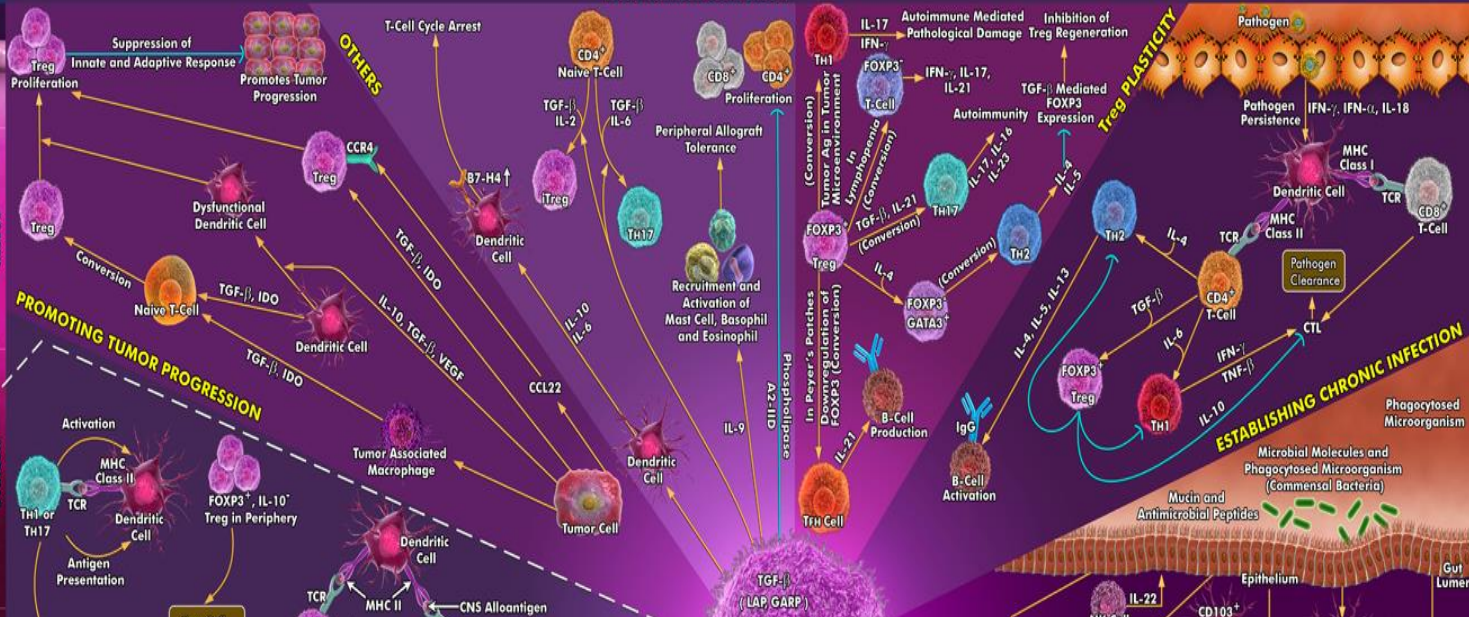
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Regulatory T-Cell Development



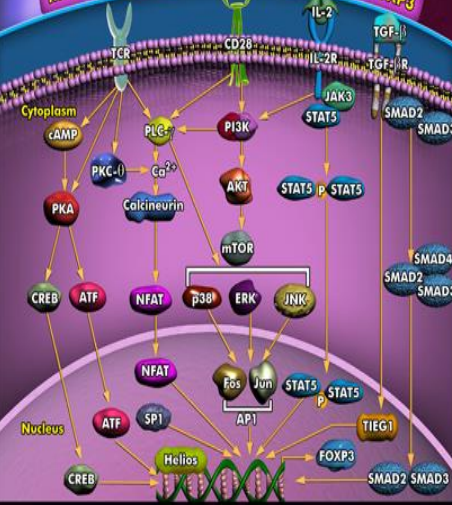
Mechanism of Action



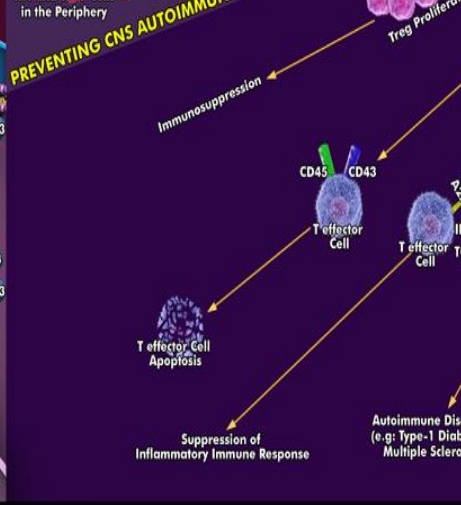
>100 moléculas

>30 EAS

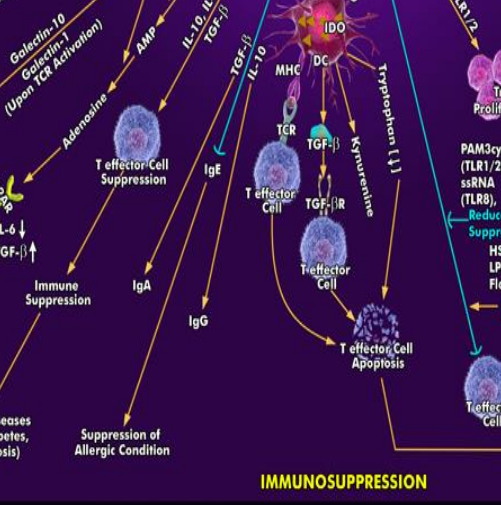
Multiple Signaling Pathways for Induction of FOXP3



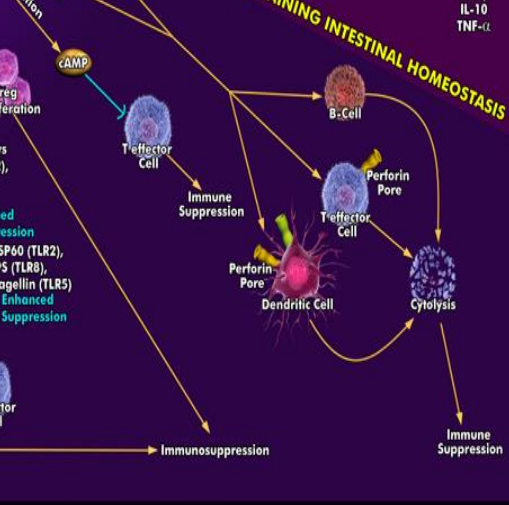
Preventing CNS Autoimmunity



Immunosuppression



Maintaining Intestinal Homeostasis

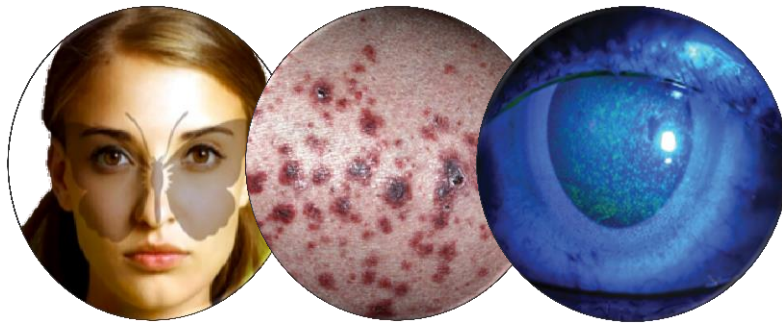




Focus on the
TOPIC

EAS

SOURCE



ClinicalTrials.gov is a registry of federally and privately supported clinical trials conducted in the United States and around the world. ClinicalTrials.gov gives you information about a trial's purpose, who may participate, locations, and phone numbers for more details. This information should be used in conjunction with advice from health care professionals. [Read more...](#)

▶ **Search for Clinical Trials**

Find trials for a specific medical condition or other criteria in the ClinicalTrials.gov registry. ClinicalTrials.gov currently has **83,678 trials** with locations in **171 countries**.

▶ **Investigator Instructions**

Get instructions for clinical trial investigators/sponsors about how to register trials in ClinicalTrials.gov. Learn about mandatory registration and results reporting requirements and US Public Law 110-85 (FDAAA).

▶ **Background Information**

Learn about clinical trials and how to use ClinicalTrials.gov, or access other consumer health information from the US National Institutes of Health.

Resources:

- [Understanding Clinical Trials](#)
- [What's New](#)
- [Glossary](#)

Study Topics:

- [List studies by Condition](#)
- [List studies by Drug Intervention](#)
- [List studies by Sponsor](#)
- [List studies by Location](#)



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Rank

Status

Study

1

Recruiting

[Targeted Therapy Using Intradermal Injection of Etanercept for Remission Induction in Discoid Lupus Erythematosus](#)

Conditions: Lupus Erythematosus, Discoid; Lupus Erythematosus, Cutaneous; Lupus Erythematosus, Chronic Cutaneous

Intervention: Drug: Etanercept

2

Not yet recruiting

[The Effect of Metformin on Reducing Lupus Flares](#)

Condition: Systemic Lupus Erythematosus

Interventions: Drug: metformin; Drug: placebo

3

Recruiting

[Prospective Evaluation of Decision and Compliance With Antimalarials in Patients With Systemic Lupus](#)

Condition: Systemic Lupus Erythematosus

Intervention: Other: therapeutic education

4

Recruiting

[Comparison Between Tacrolimus \(TAC\) and Mycophenolate Mofetil \(MMF\) for Induction of Remission in Lupus Nephritis](#)

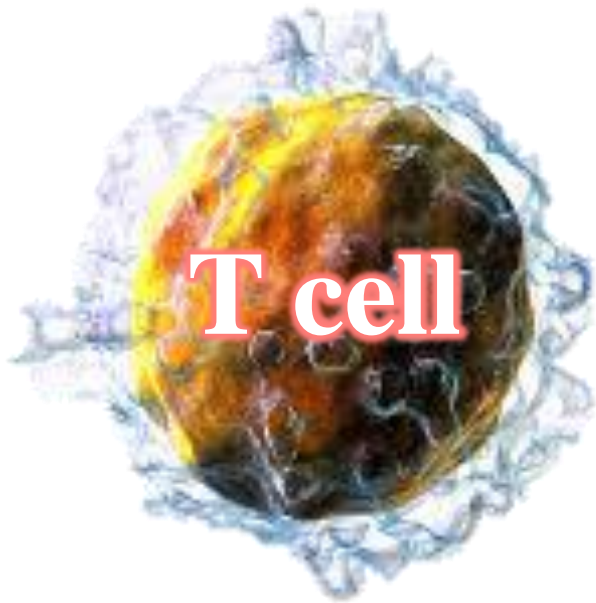
Condition: Lupus Nephritis

Intervention: Drug: Tacrolimus vs. Mycophenolate mofetil for Induction Therapy in Lupus Nephritis

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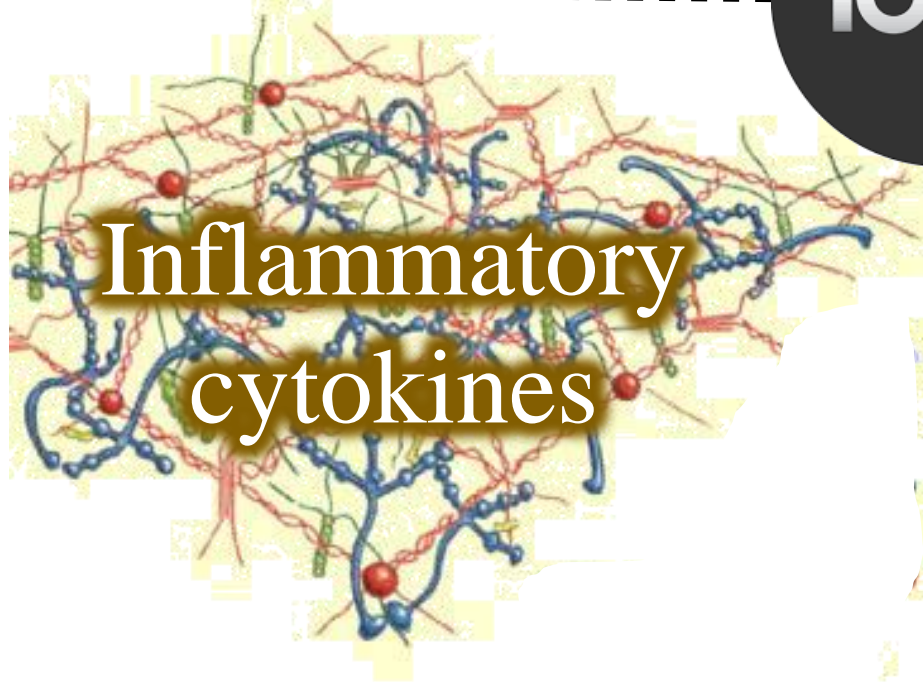


T cell



B cell

Top4

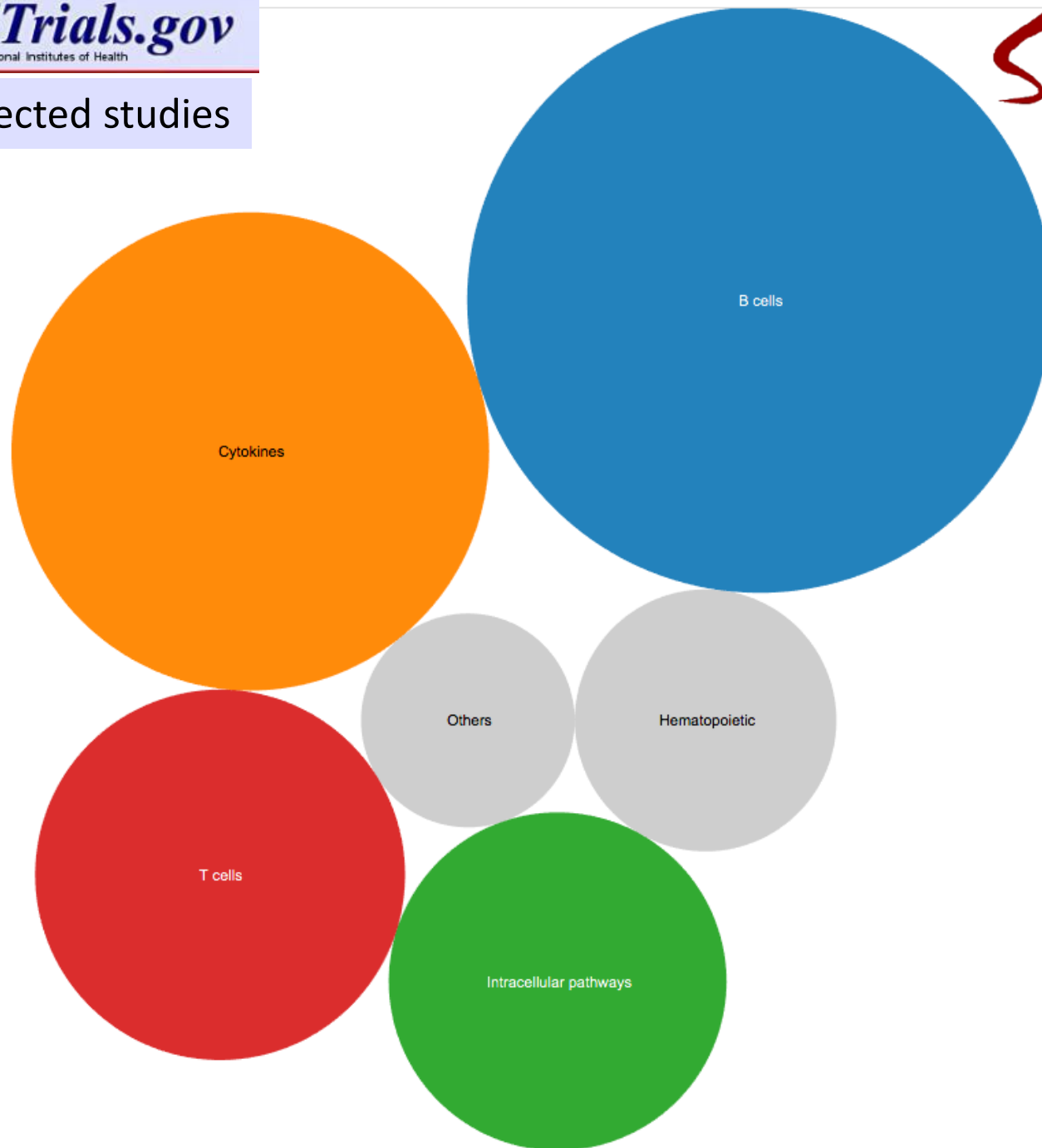


**Inflammatory
cytokines**



**Intracellular
pathways**

N = 82 selected studies






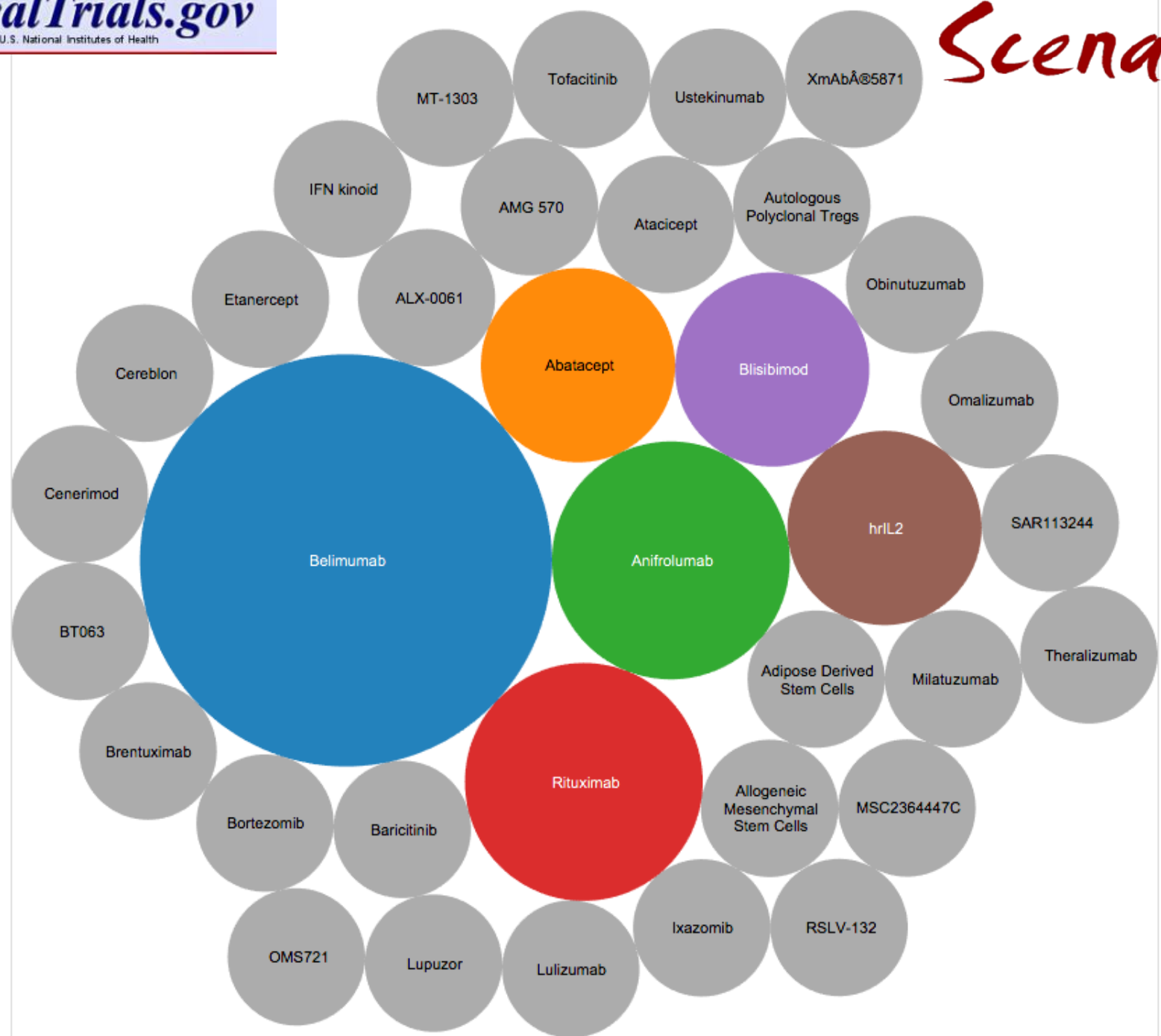
**Terapias
biológicas
en EAS**



**Nuevas
moléculas**



**Lupus
Eritematoso
Sistémico**



Milatumuzumab Brentuximab

SAR 113244

CD74

CD30

XmAb5871

CD19

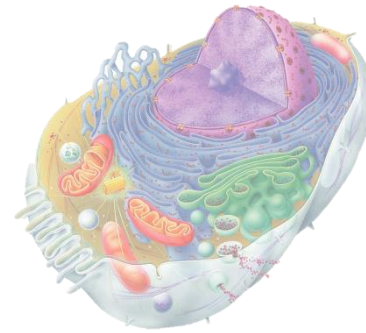
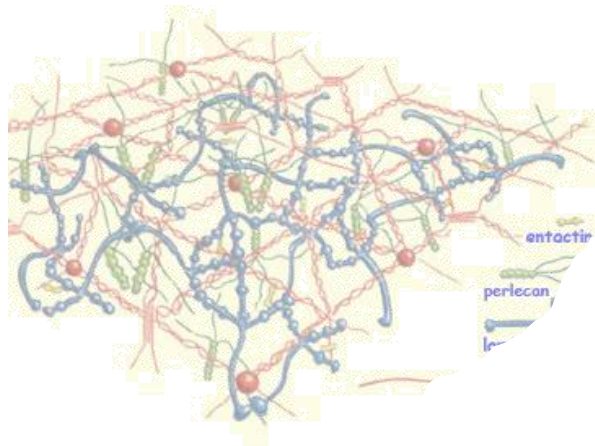
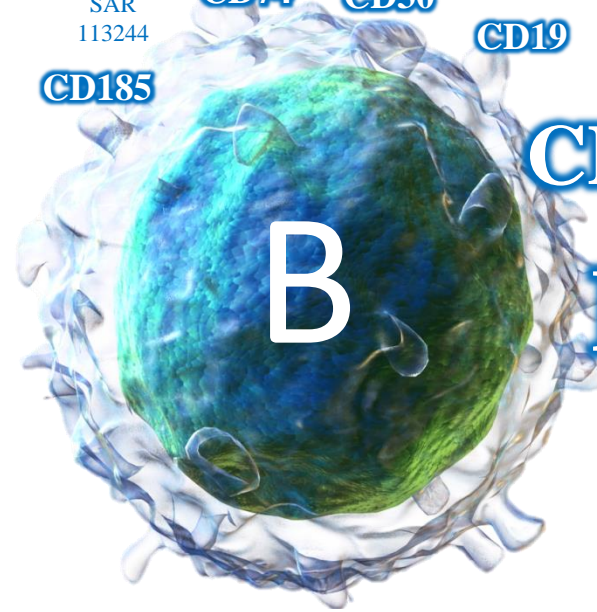
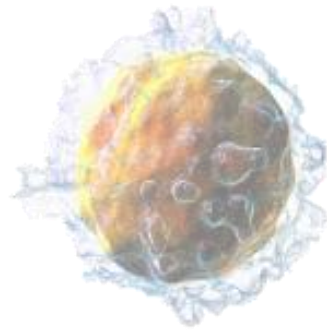
CD185

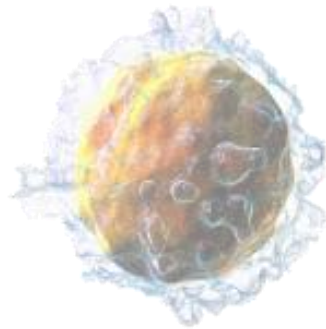
CD20 Rituximab Obinutuzumab

B

BAFF

Belimumab
Blisibimod
Atacicept





Milatuzumab
SAR 113244
CD185

Brentuximab
CD74

XmAb5871
CD30

CD19

CD20
Rituximab
Obinutuzumab

BAFF

Belimumab
Blisibimod
Atacicept

Tocilizumab
IL-6

BT063
IL-10

Ustekinumab
IL-12/IL-23

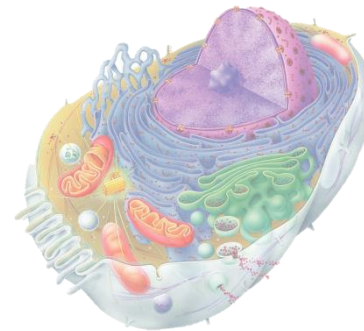
IL-2

hrIL-2

CK

IFN-I

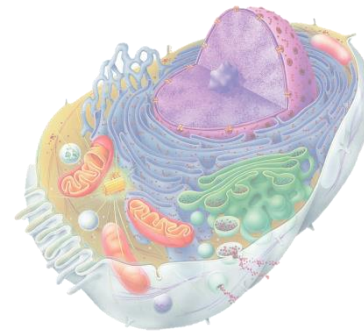
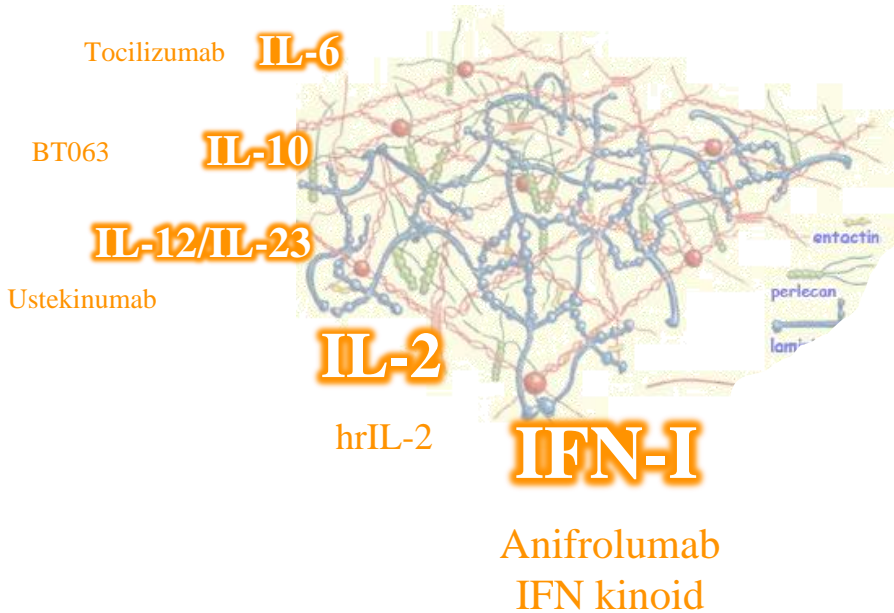
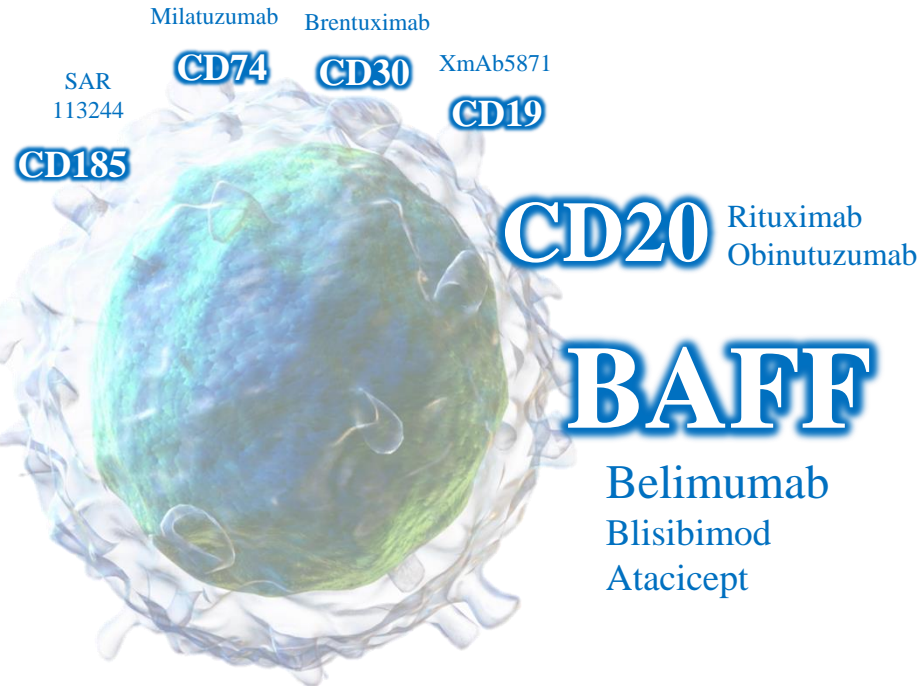
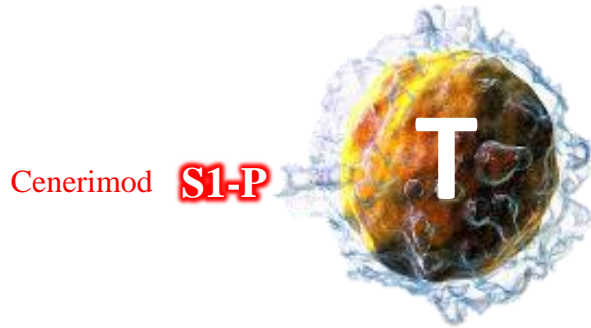
Anifrolumab
IFN kinoid



Lulizumab
Theralizumab

Abatacept
AMG570

CD28/80/86

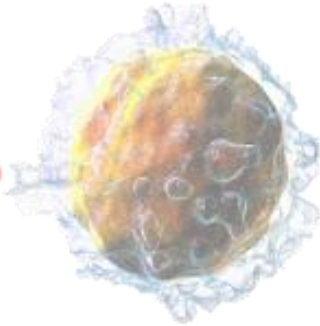


Lulizumab
Theralizumab

Abatacept
AMG570

CD28/80/86

Cenerimod **S1-P**



Milatumuzumab
Brentuximab

SAR
113244

CD74

CD30

XmAb5871

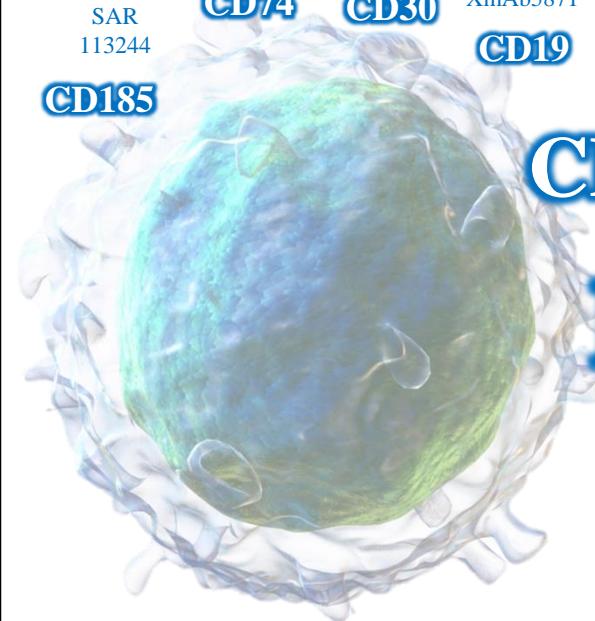
CD19

CD185

CD20 Rituximab
Obinutuzumab

BAFF

Belimumab
Blisibimod
Atacept



Tocilizumab **IL-6**

BT063 **IL-10**

IL-12/IL-23

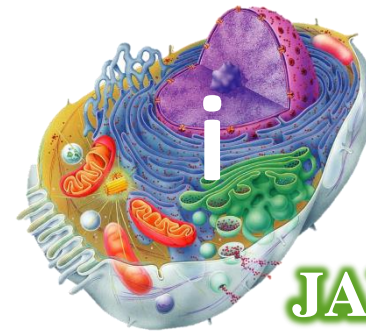
Ustekinumab

IL-2

hrIL-2

IFN-I

Anifrolumab
IFN kinoid



Proteasome

Bortezomib
Ixazomib
Cereblon

JAK

RNAse
RSLV-132

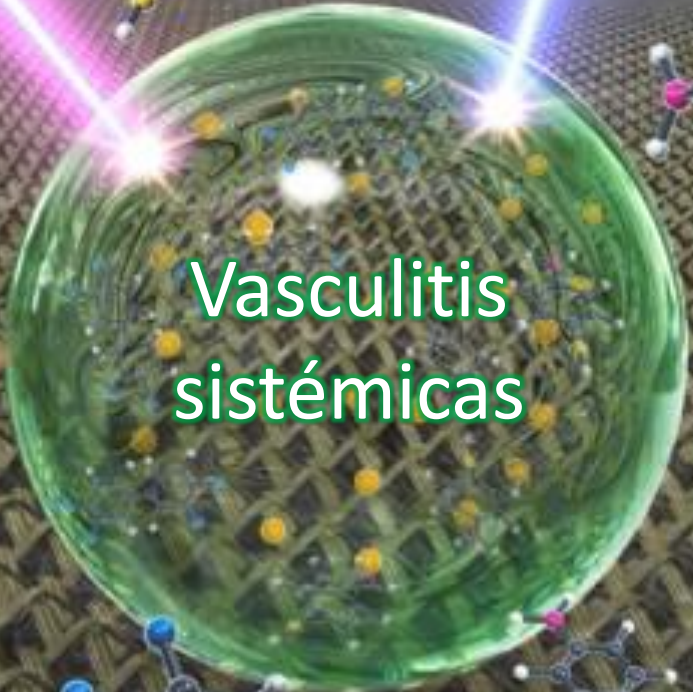
Baricitinib
Tofacitinib
MSC2364447C



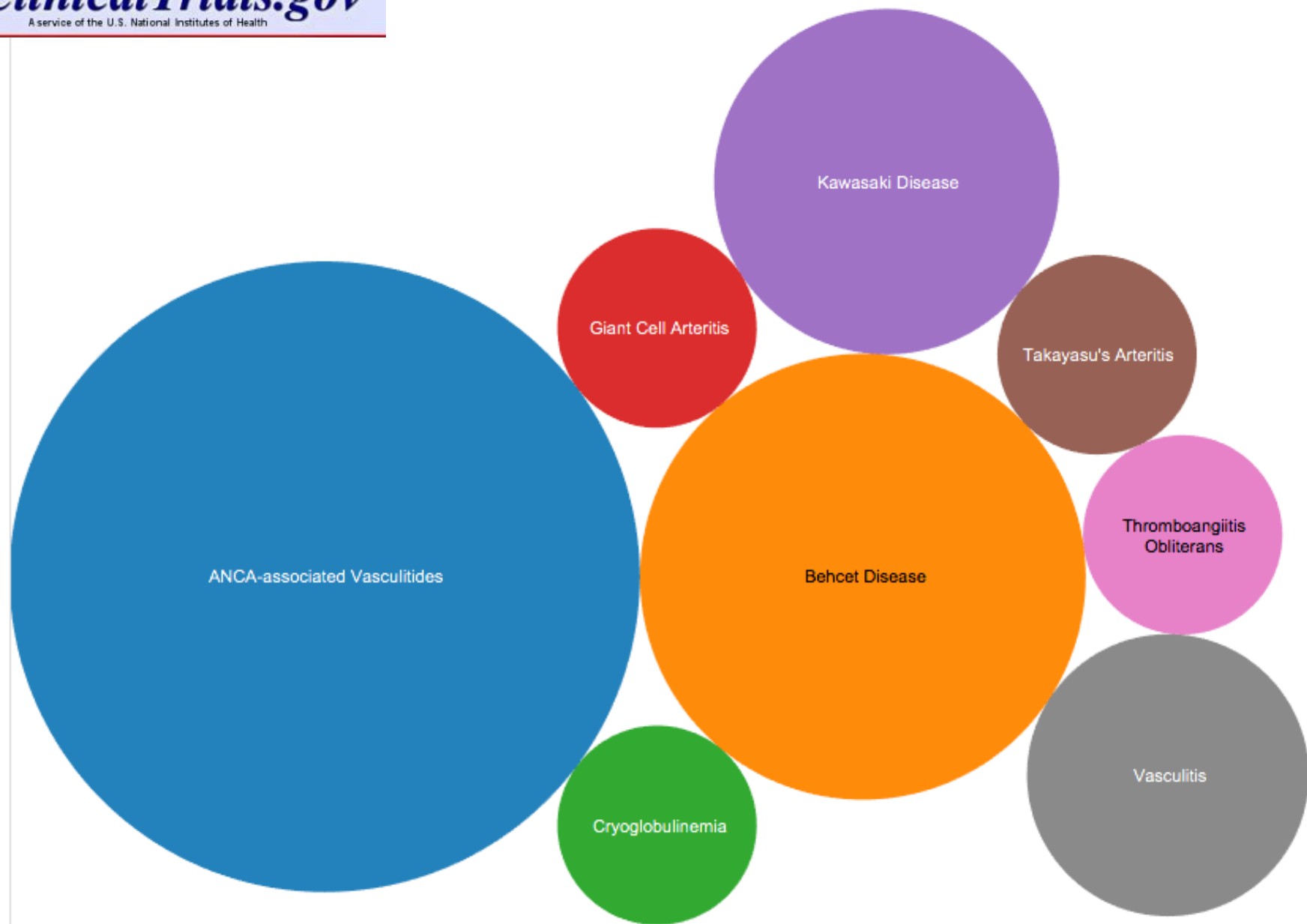
**Terapias
biológicas
en EAS**



**Nuevas
moléculas**

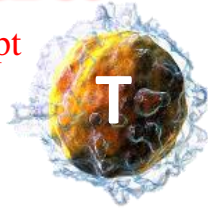


**Vasculitis
sistémicas**



CD80/CD86

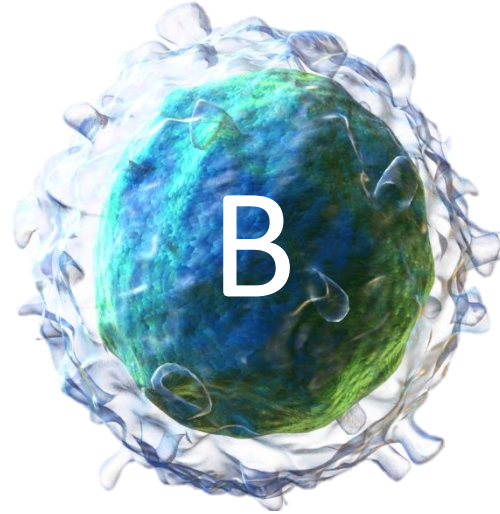
Abatacept



B

CD20

Rituximab



Sirukumab

IL-6

IL-1

Anakinra



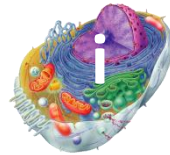
CK

IL-12/IL-23

Ustekinumab

TNFa

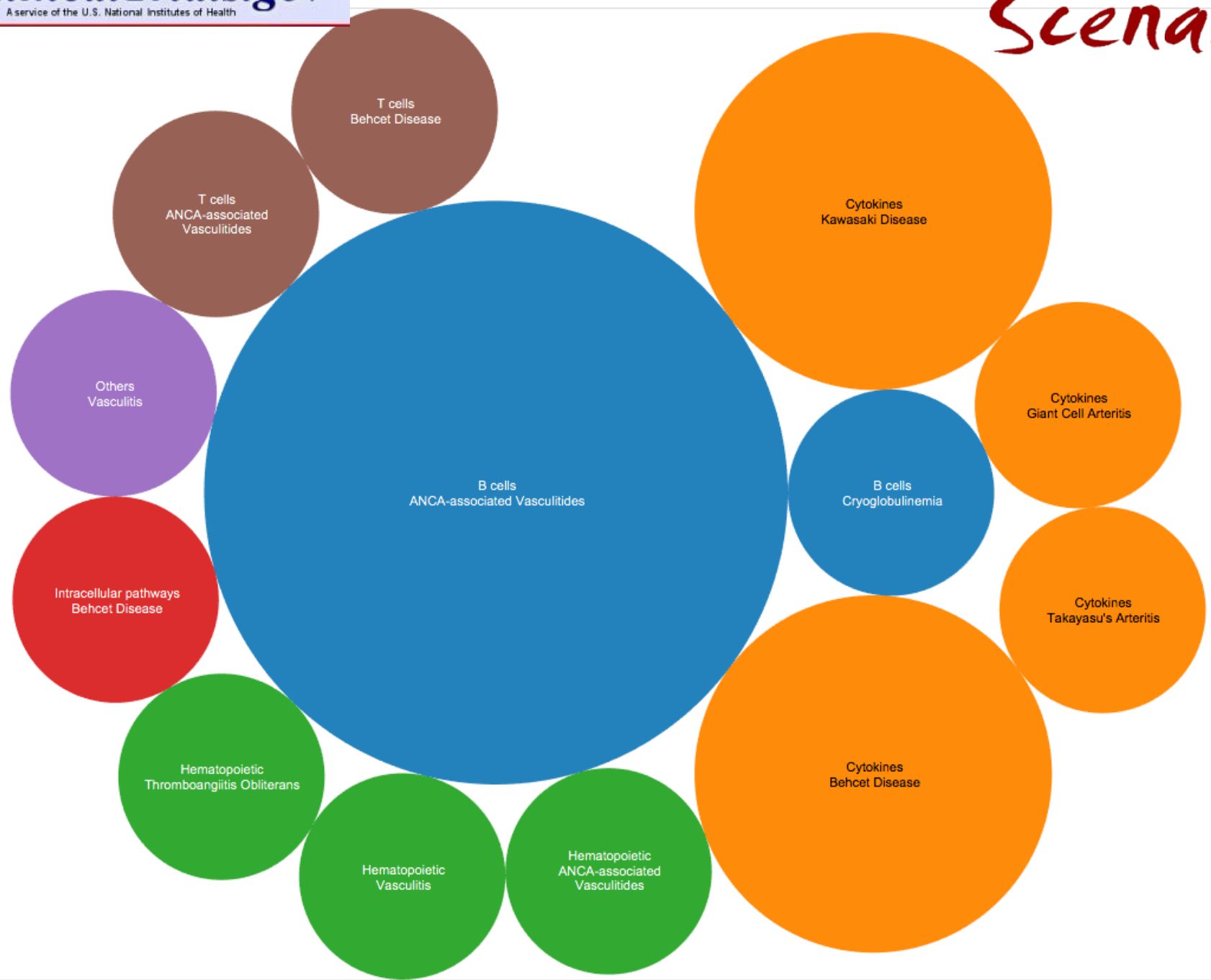
Infliximab
Etanercept
Adalimumab



PDE4

Apremilast

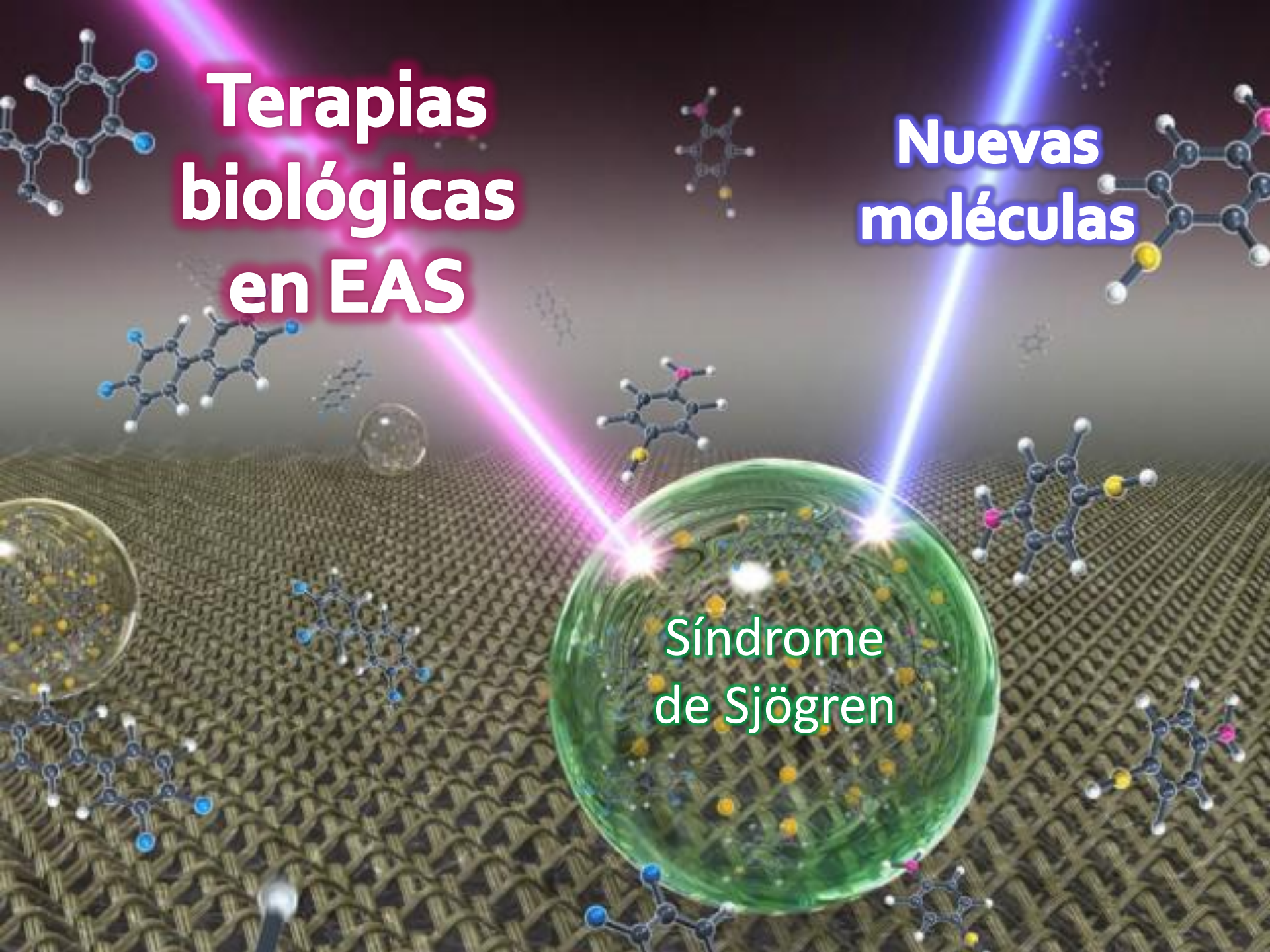
Scenario



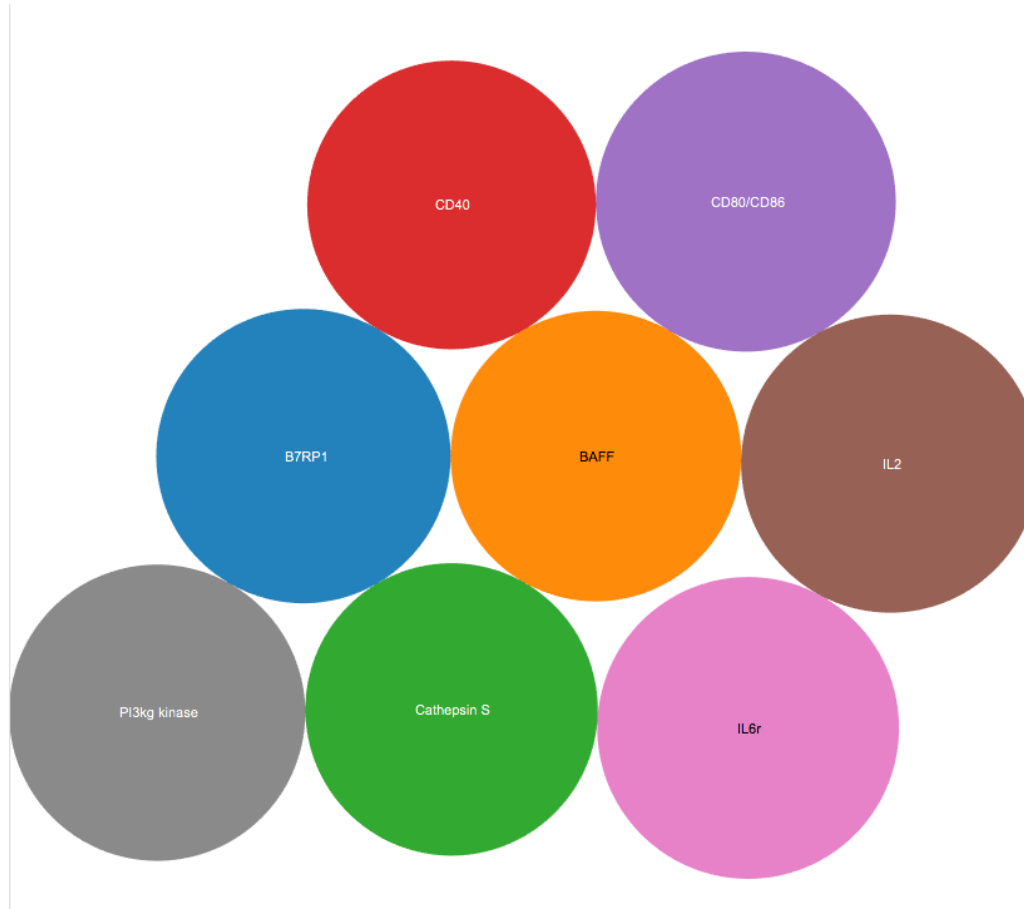
**Terapias
biológicas
en EAS**

**Nuevas
moléculas**

**Síndrome
de Sjögren**



Scenario



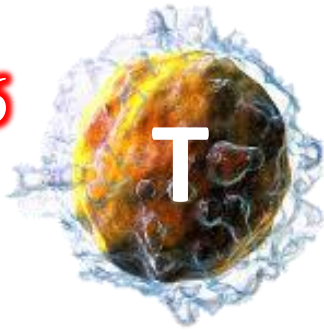
3

CD28/80/86

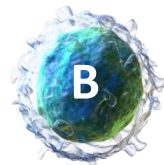
Abatacept
AMG570

CFZ533

CD40



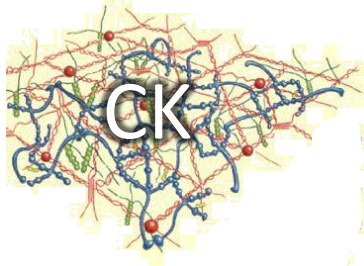
B



BAFF
Belimumab

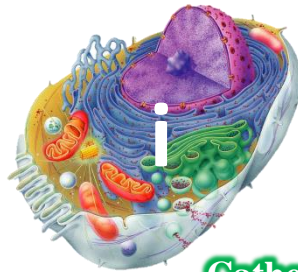
IL-6

Tocilizumab



IL-2

hrIL-2



Kinases
UCB5857

Cathepsin S
RO5459072

1

2

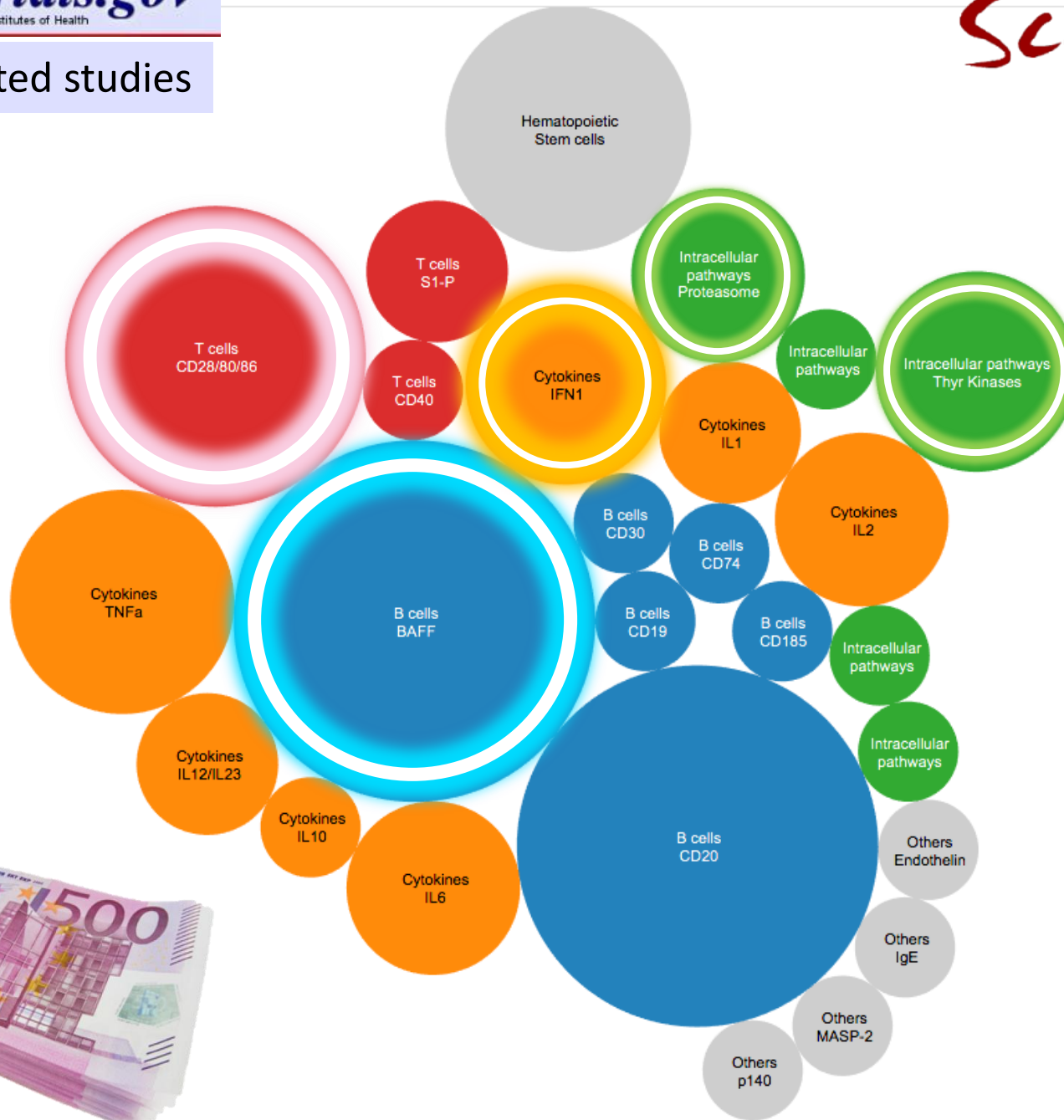
2

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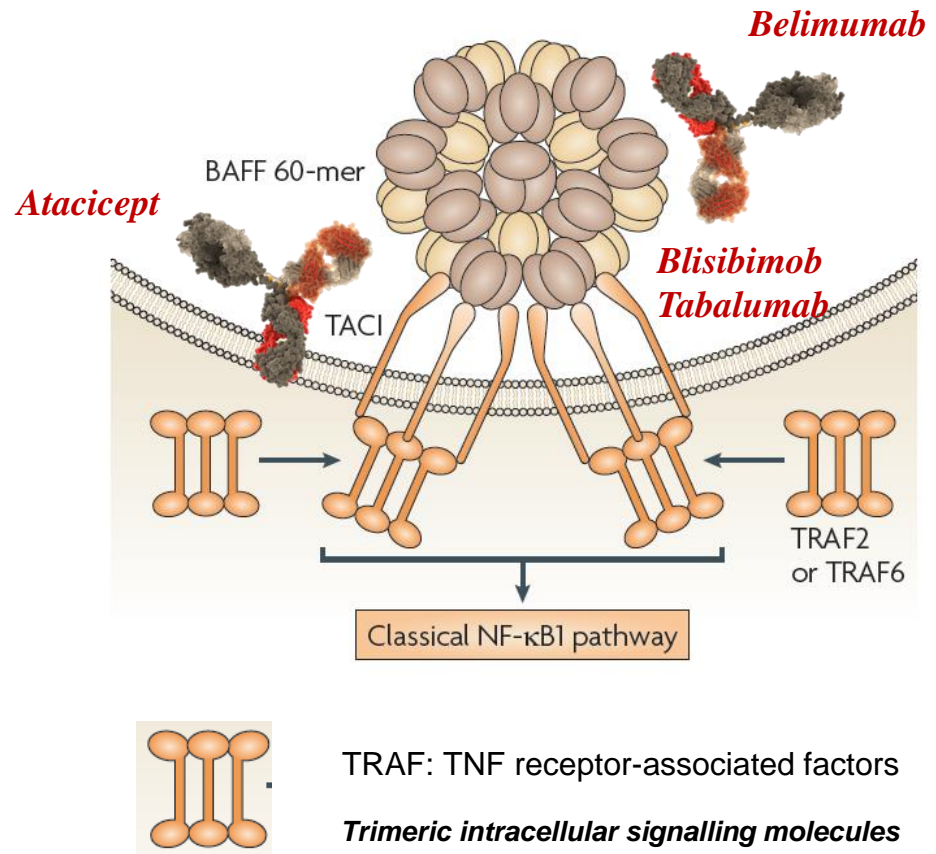
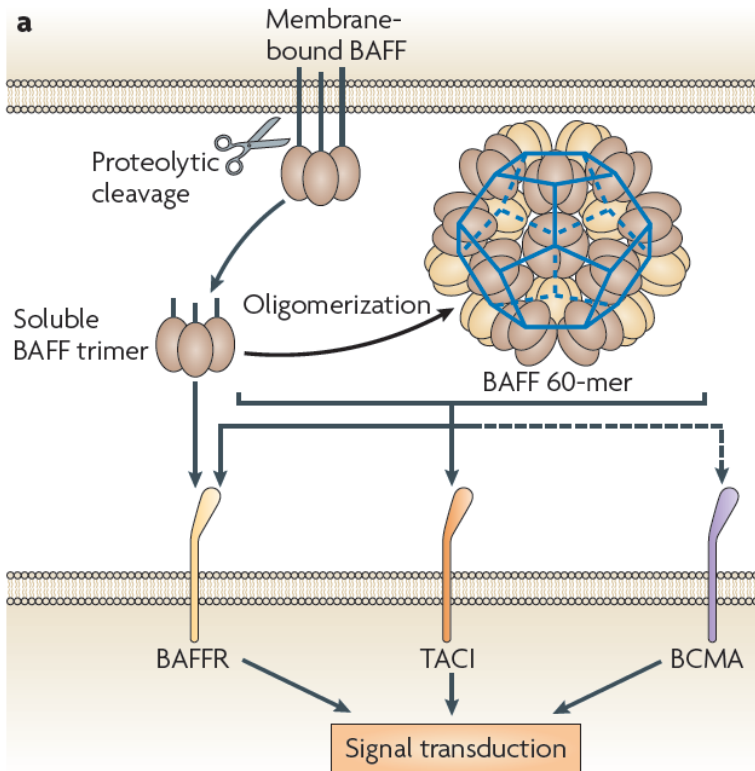
N = 82 selected studies

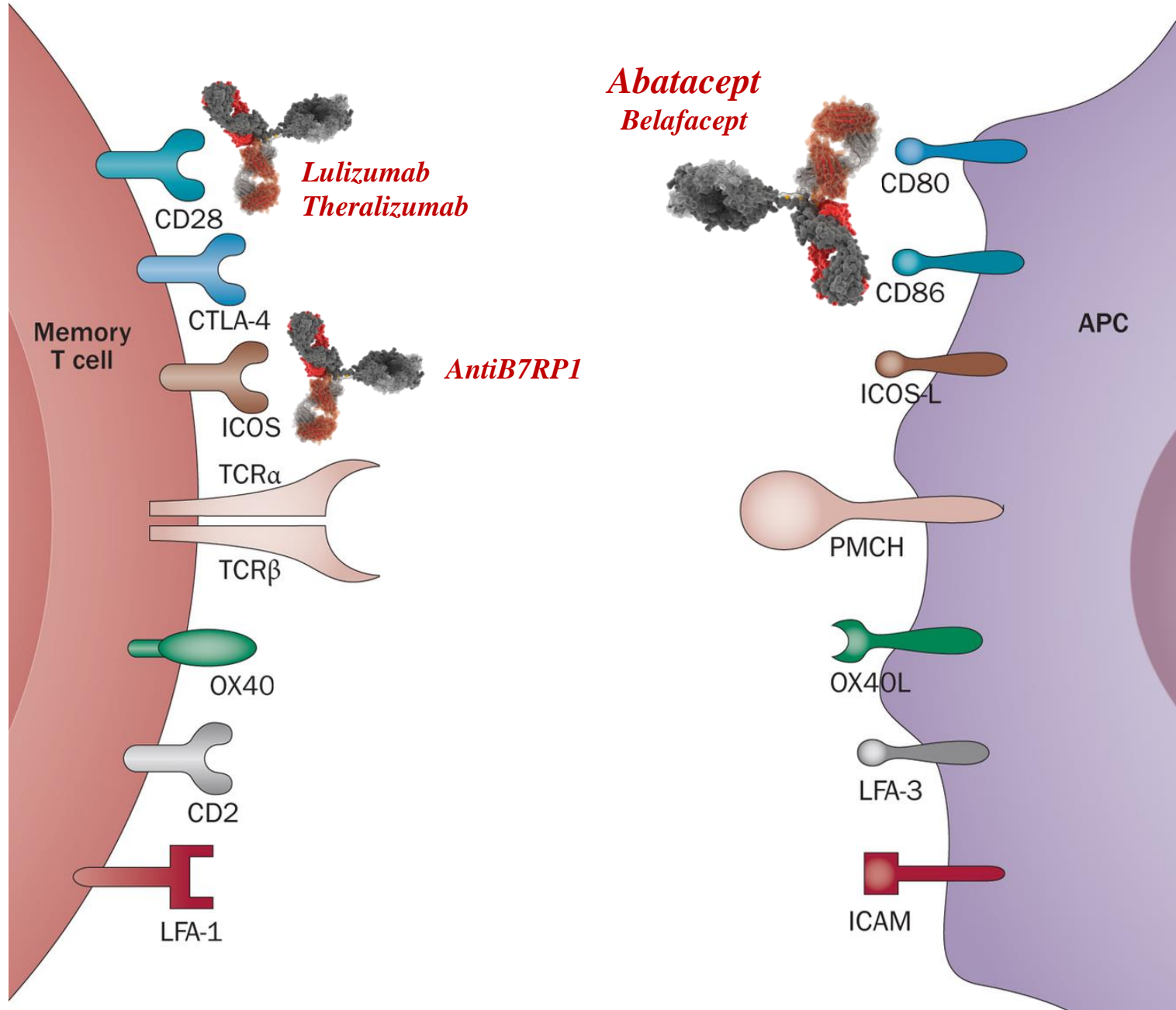


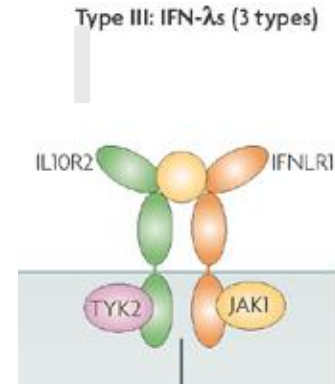
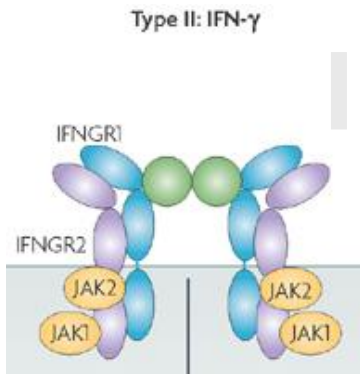
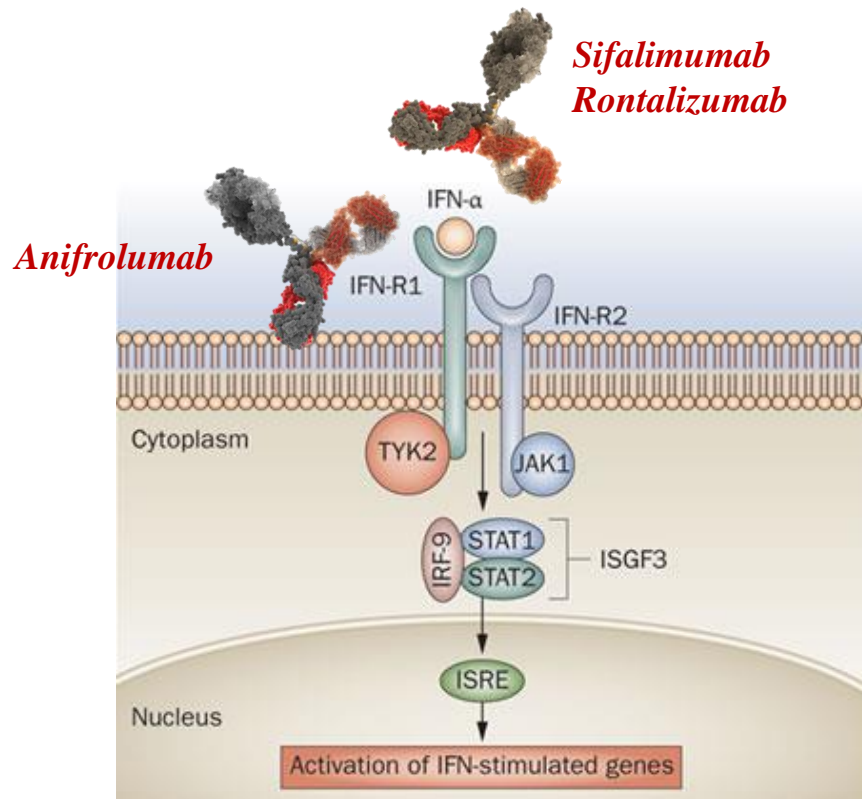
Cracking the BAFF code

Fabienne Mackay* and Pascal Schneider†

BAFF (B lymphocyte activating factor of the tumour necrosis factor family) is a vital homeostatic cytokine for B cells that helps regulate both innate and adaptive immune responses.



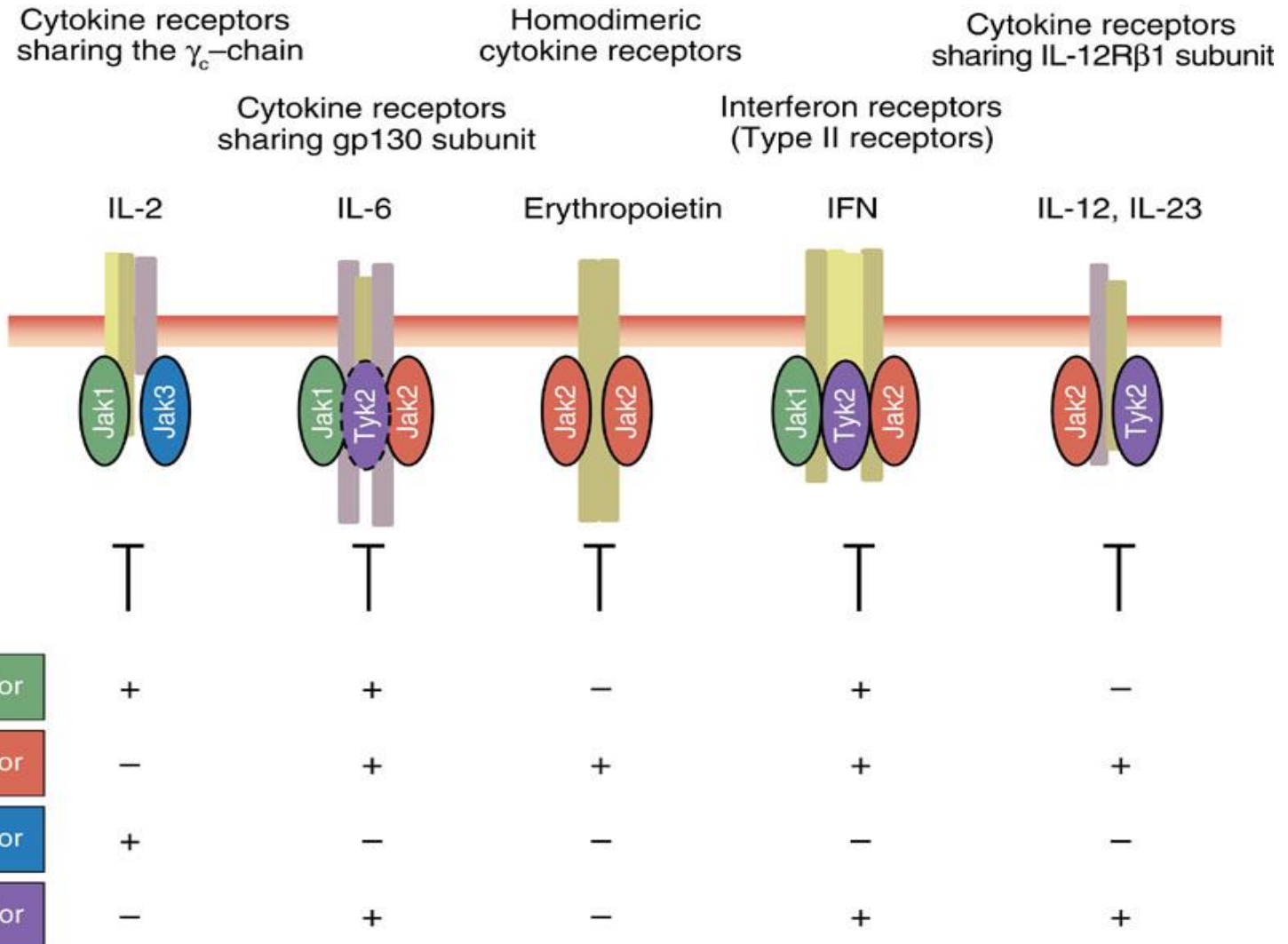


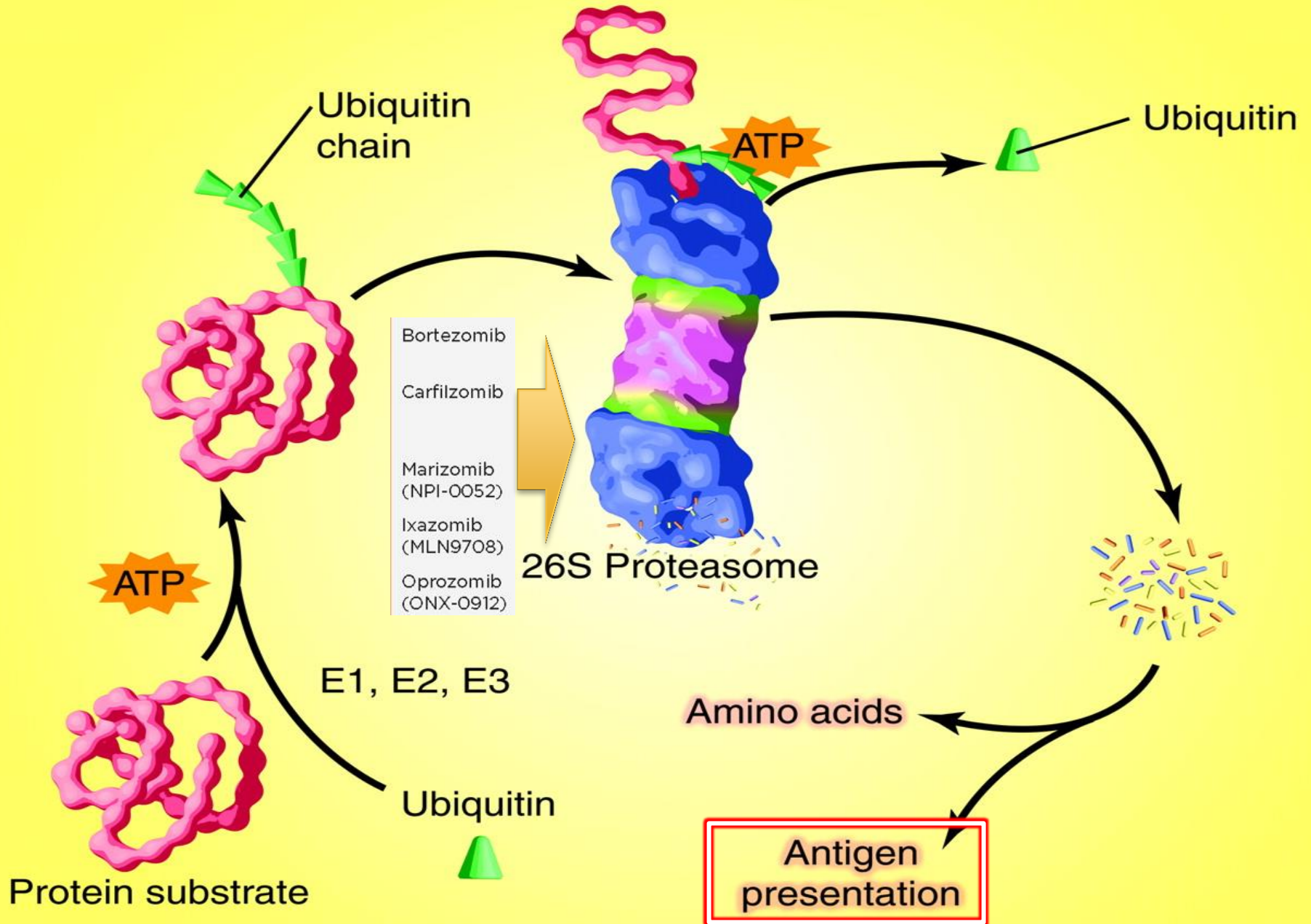


IFN type	Receptor type	Encoding gene	Structure	Interferons	Sources
I	IFN- α receptor that consists of IFNAR1 and IFNAR2 chains	Chromosome 9	α -spiral	IFN α -2a and -2b IFN- β IFN- ω IFN- ϵ IFN- κ IFN- γ	Leukocytes, macrophages, endothelial cells, tumor cells, keratinocytes, and mesenchymal cells Fibroblasts, endothelial cells, macrophages, and epithelial cells T lymphocytes Cerebral tissues Not known yet T cells and NK cells
II	IFNGR that consists of IFNGR1 and IFNGR2 chains	Chromosome 12	Core of six α -helices and an extended unfolded sequence in the C-terminal region ^[1]		
III	Receptor complex consisting of IL10R2 (also called CRF2-4) and IFNLR1 (also called CRF2-12)	Chromosome 19		IFN- λ	Dendritic cells and macrophages

IFN: Interferons, IFNAR: IFN- α receptors

Janus kinases: family of intracellular nonreceptor tyrosine kinases that transmit cytokine-mediated signals





Terapias biológicas en EAS

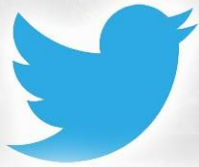
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Cuanto más cómodo, mejor





Trending Topic

Adiós a los glucocorticoides

India's **1**^{*}
No. 1
sweetener

1 sachet gives taste of
2 teaspoons of sugar

+ Serving Suggestion only

Cortis™
Free
~ Gold ~

Low Calorie Sugar Substitute



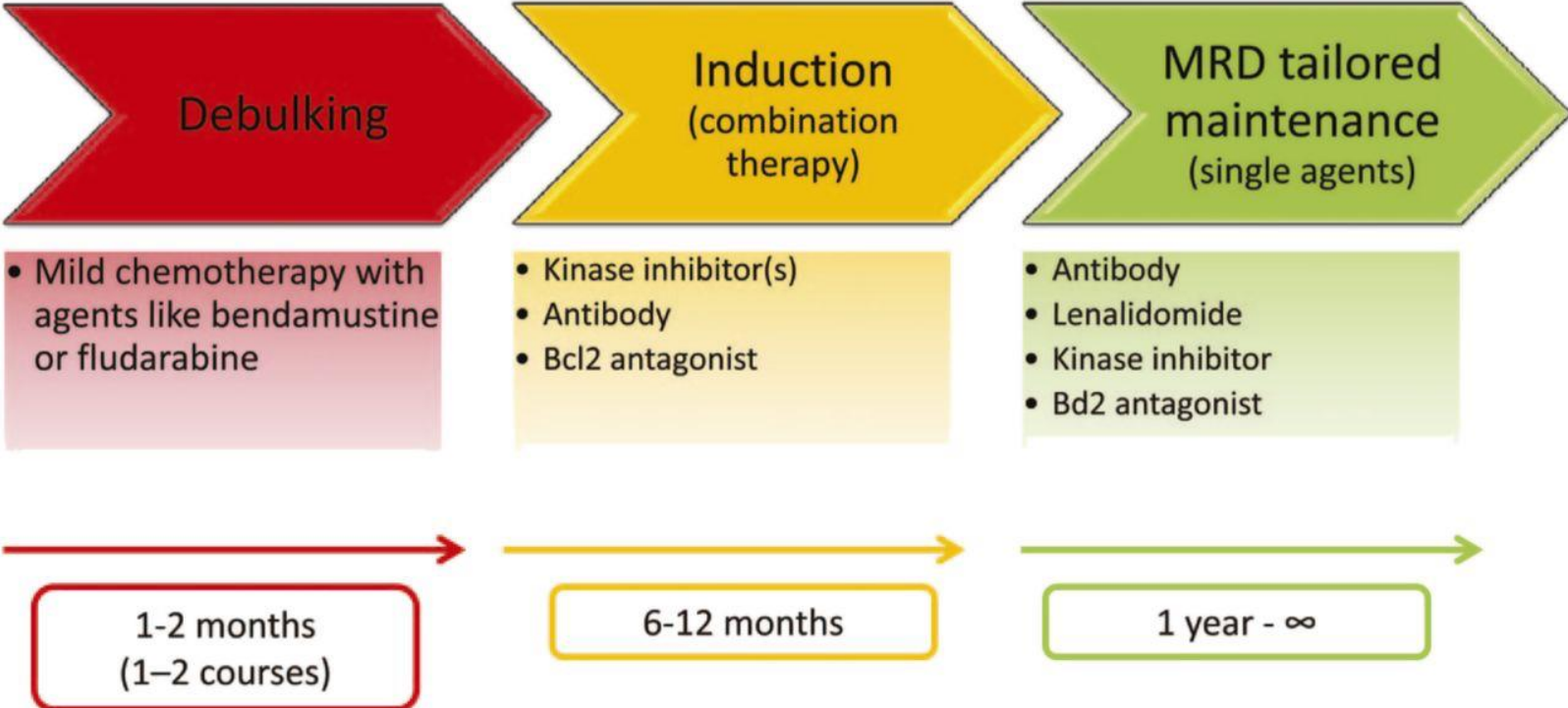
"Table Top Sweetener"

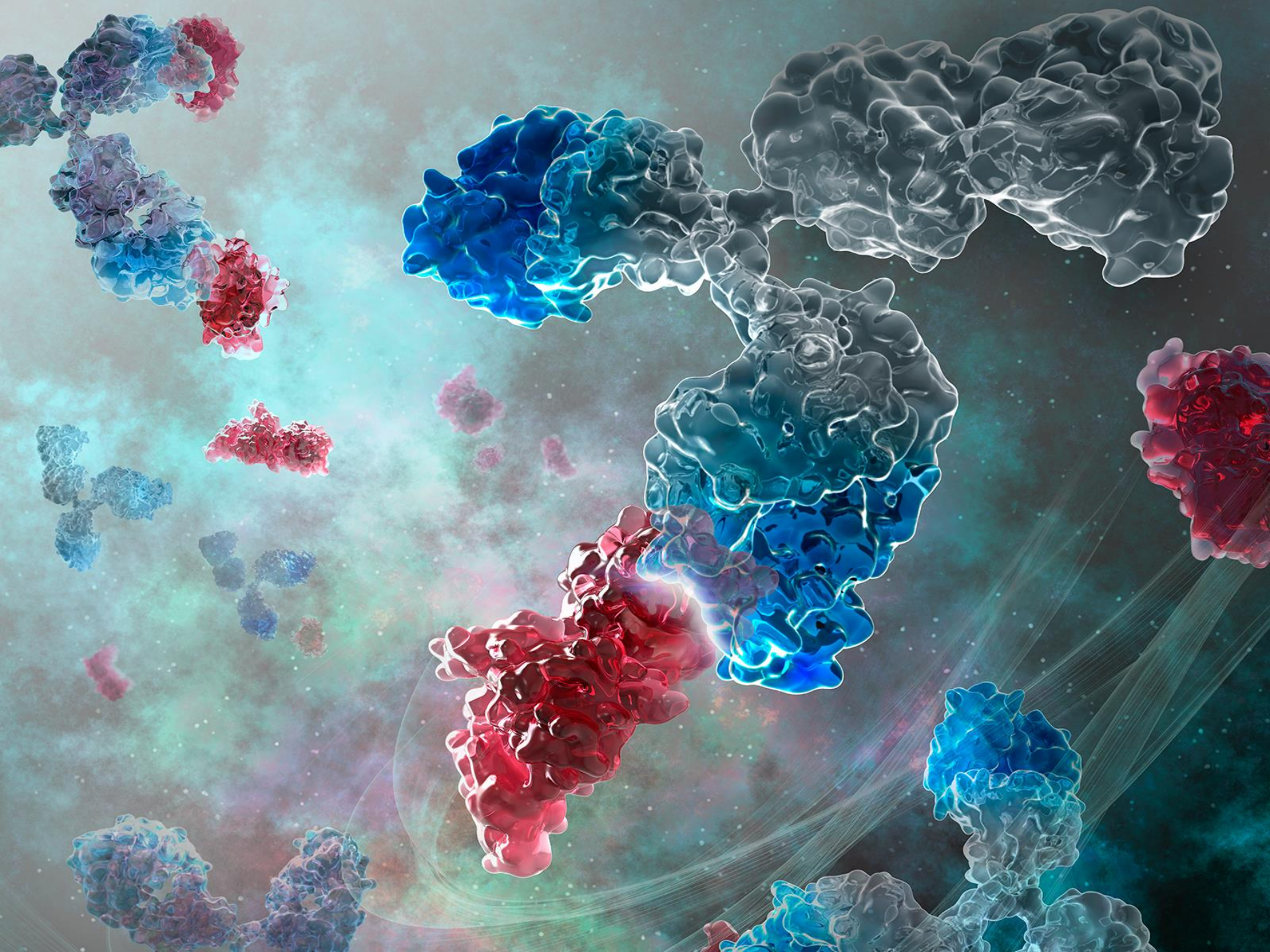




Terapias biológicas secuenciales

Potential future strategies to achieve long-term control of CLL







SOCIETAT
CATALANOBALEAR

MEDICINA INTERNA



L'Acadèmia

