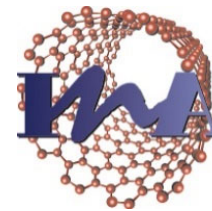
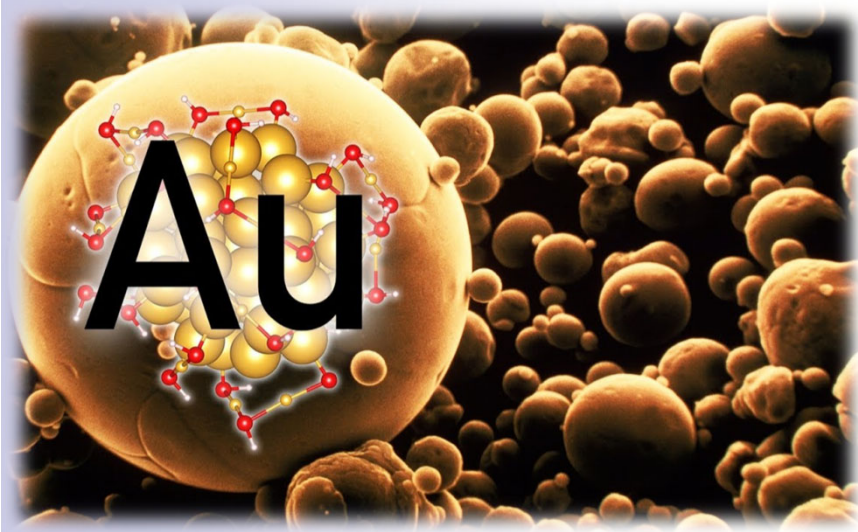


# MODULATION OF INFLAMMATION IN THE TUMOUR MICROENVIRONMENT BY GOLD AND POLYMERIC NANOPARTICLES

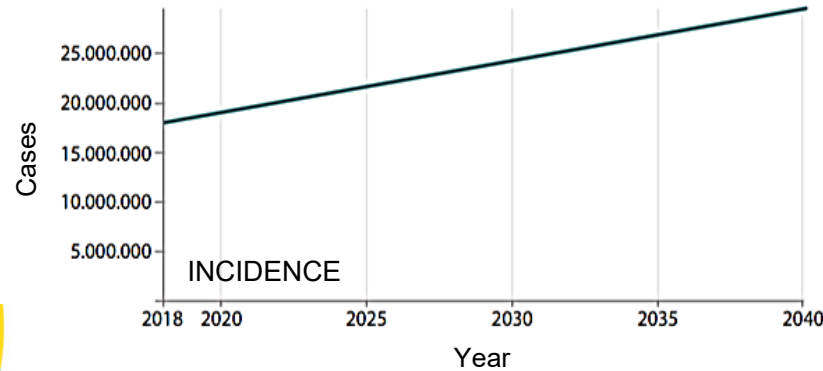
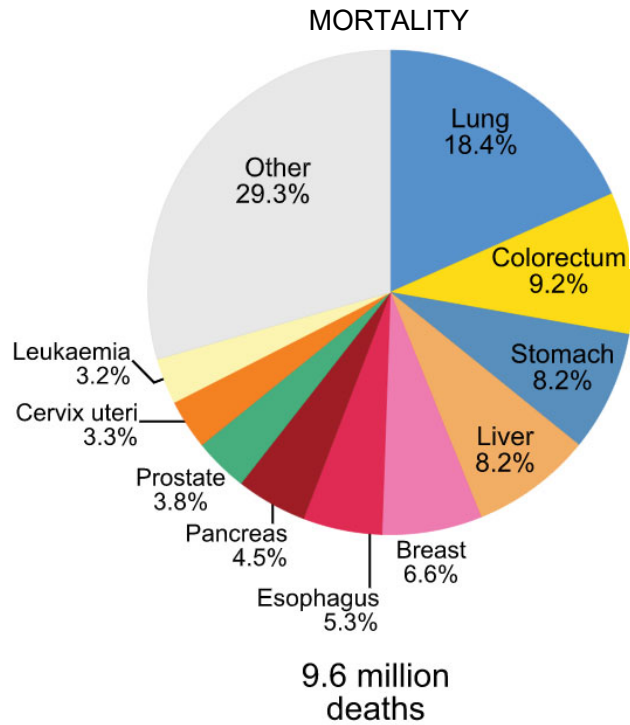
*LAURA COMAS CALMET*



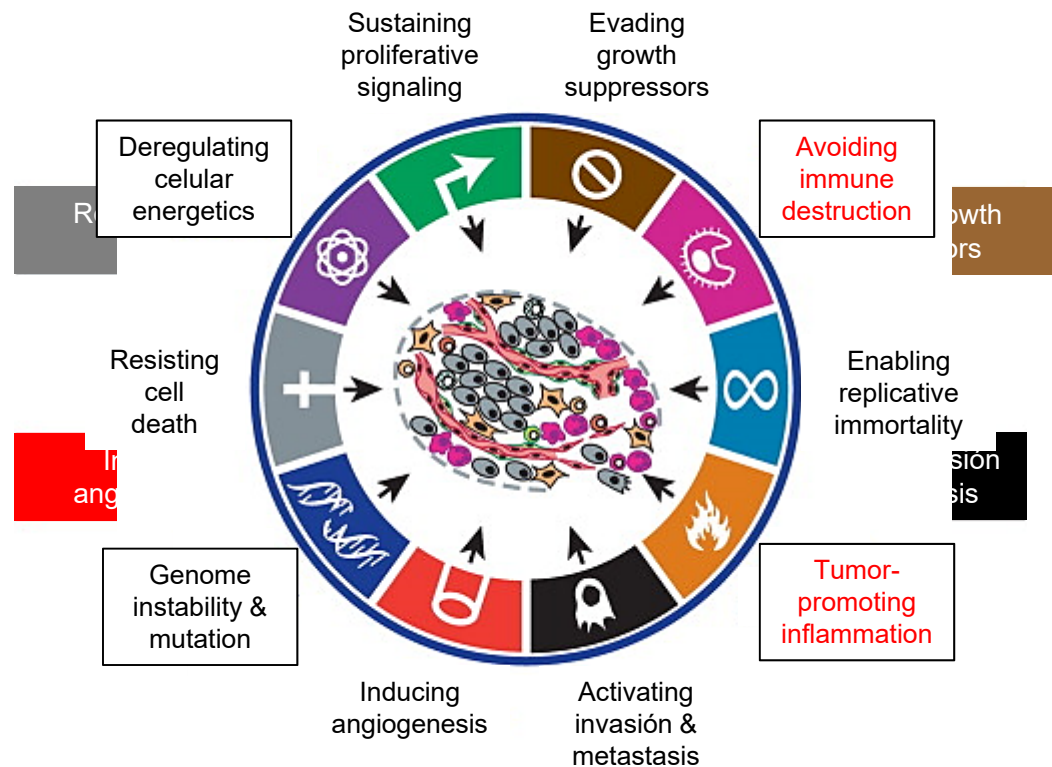
Instituto Universitario de Investigación  
en Nanociencia de Aragón  
**Universidad Zaragoza**

# TUMOUR MICROENVIRONMENT

Source: GLOBOCAN 2018

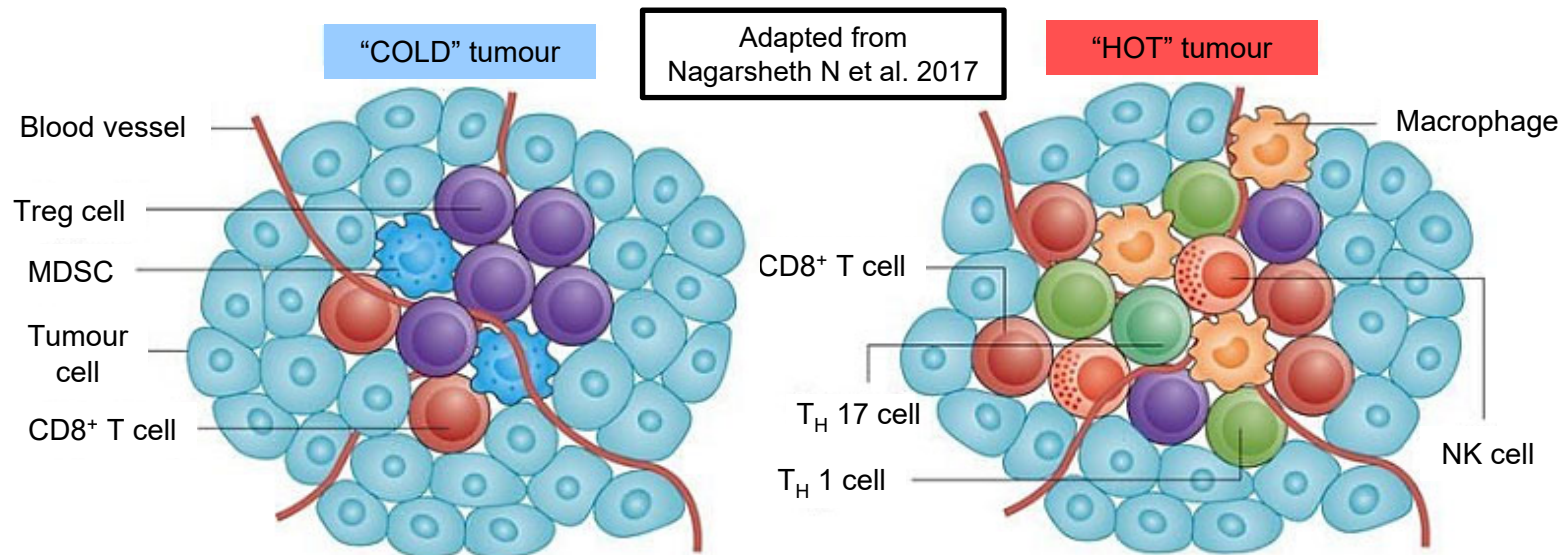


Adapted from Hanahan D et al. 2011

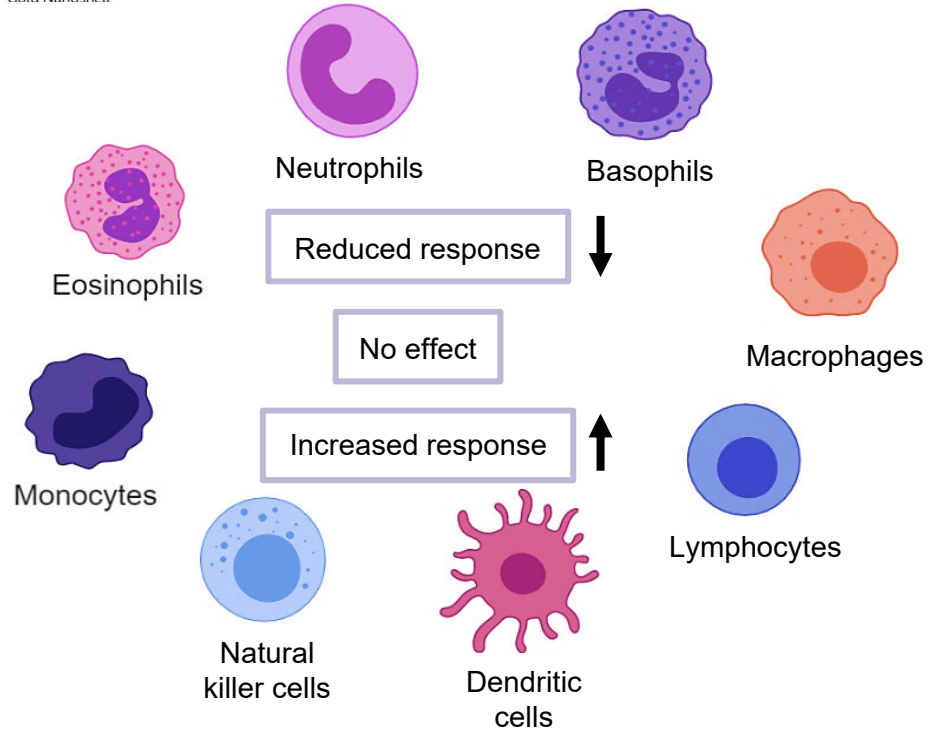
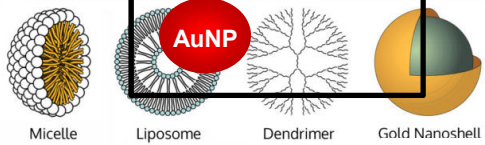
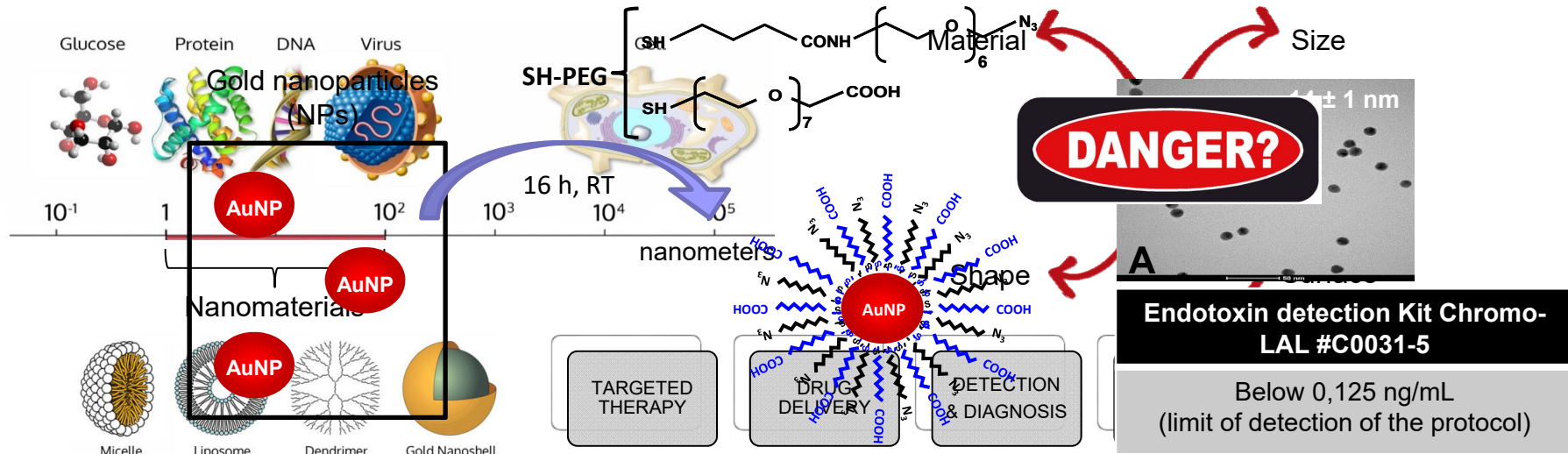


# TUMOUR MICROENVIRONMENT

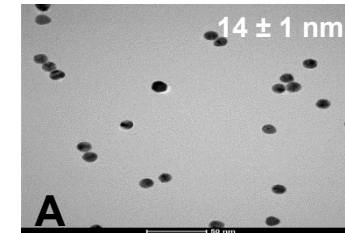
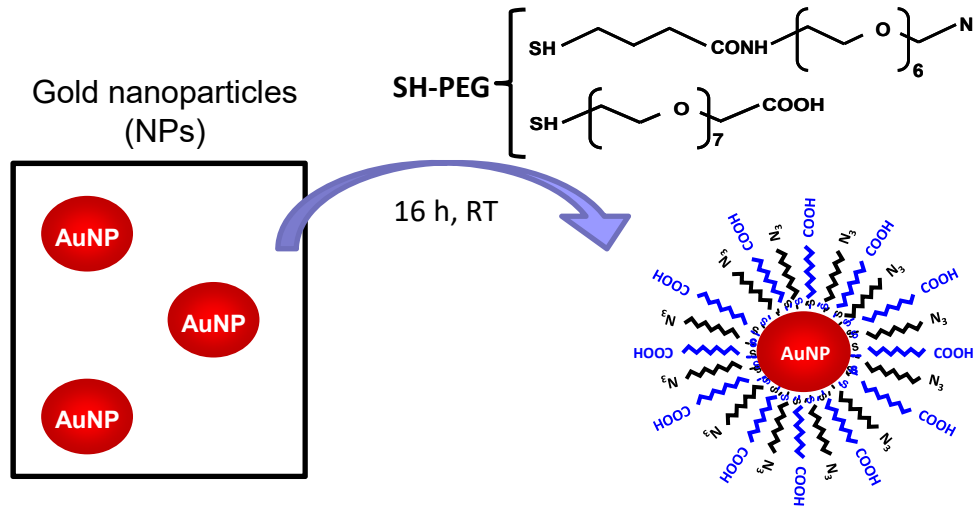
Immunological characteristics	
Enriched in immunosuppressive cytokines	Enriched in T <sub>H</sub> 1-type chemokines
High numbers of Treg cells and MDSCs	High numbers of effector immune cells (T <sub>H</sub> 1 cells, NK cells and CD8 <sup>+</sup> T cells)
Few T <sub>H</sub> 1 cells, NK cells and CD8 <sup>+</sup> T cells	High numbers of functional APCs
Few functional APCs	High PDL1 expression



# NANOMATERIALS



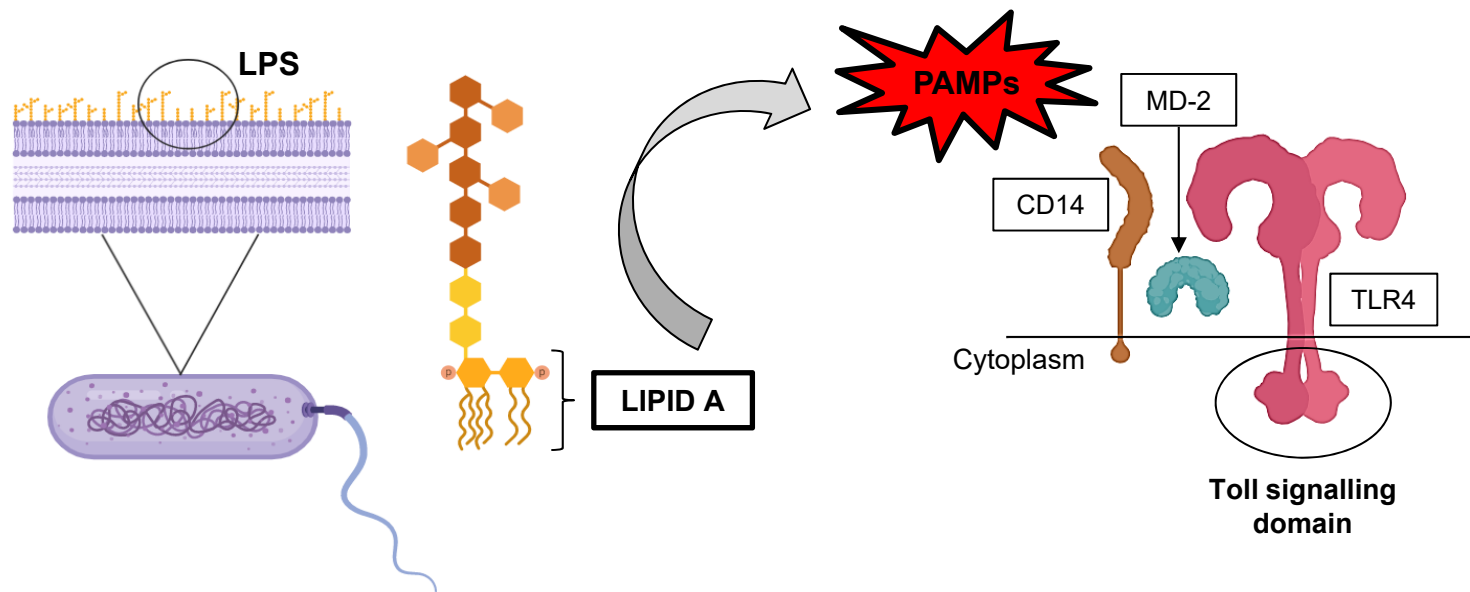
# NANOMATERIALS



**Endotoxin detection Kit Chromo-LAL #C0031-5**

Below 0,125 ng/mL  
(limit of detection of the protocol)

# LIPOPOLYSACCHARIDE



### **CIBA** (Dr. Julián Pardo)

- Ariel Ramírez (Post-doctoral)
- Llipsy Santiago (PhD student)
- Pilar Lanuza (PhD student)
- Iratxe Uranga (PhD student)
- Marcela Garzón (PhD student)

### **ICB/CSIC** (Dra. Eva M. Gálvez)

- Maykel Arias (Post-doctoral)
- M Pilar Domingo (Post-doctoral)
- Sergio Redrado (PhD student)

### **INA** (Dr. Jesús Martínez)

- Álvaro Artiga (PhD student)
- Inés Serrano (PhD student)

