

ACTIVATING IMMUNE RESPONSE TO CANCER

Introduction

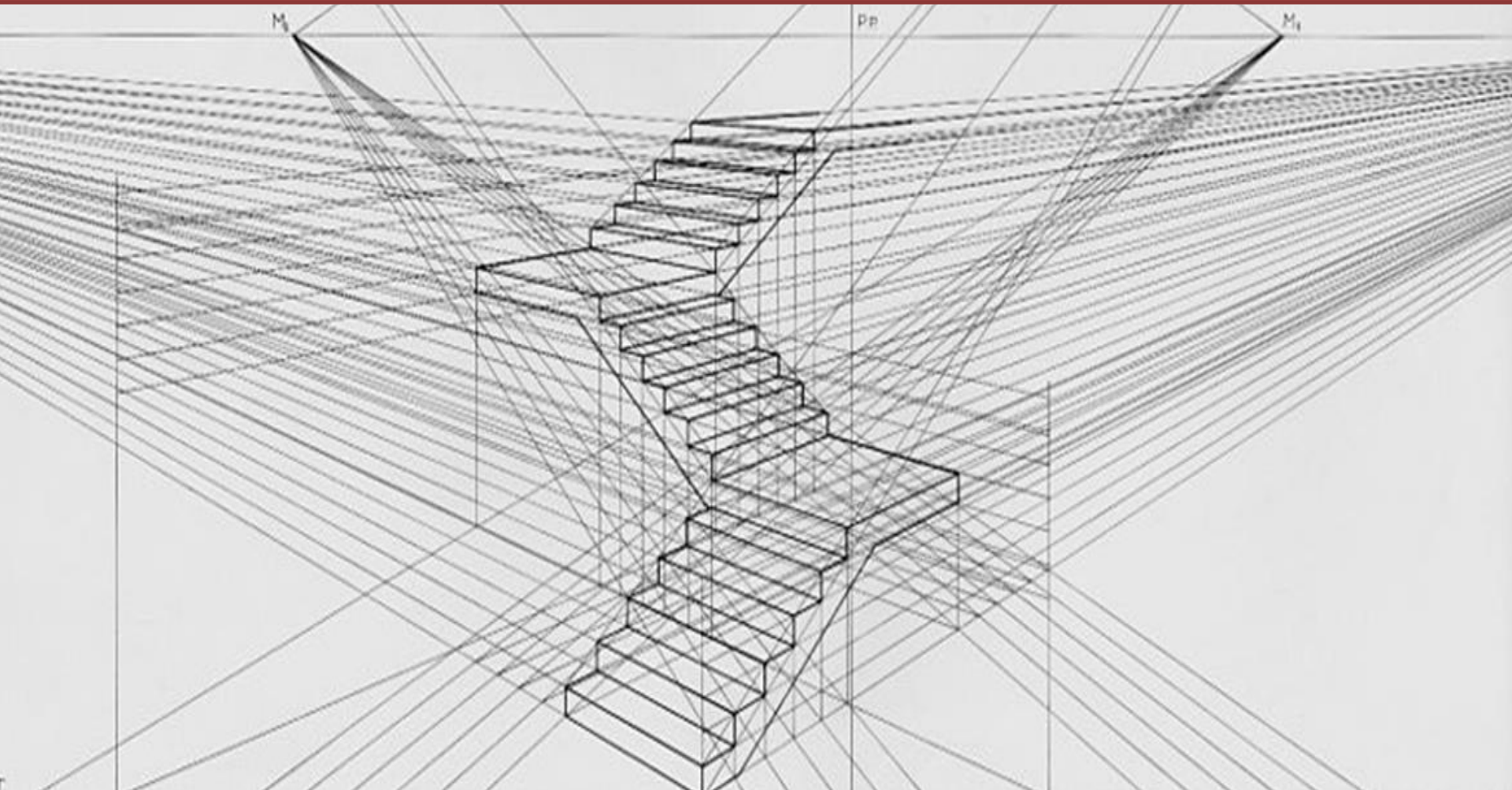
ESMO September 2014



Rational
Assessment
Innovative Drug
selection



**How can we successfully activate
the immune response in cancer?
How can we track immune responsive cells?**



Propulsion

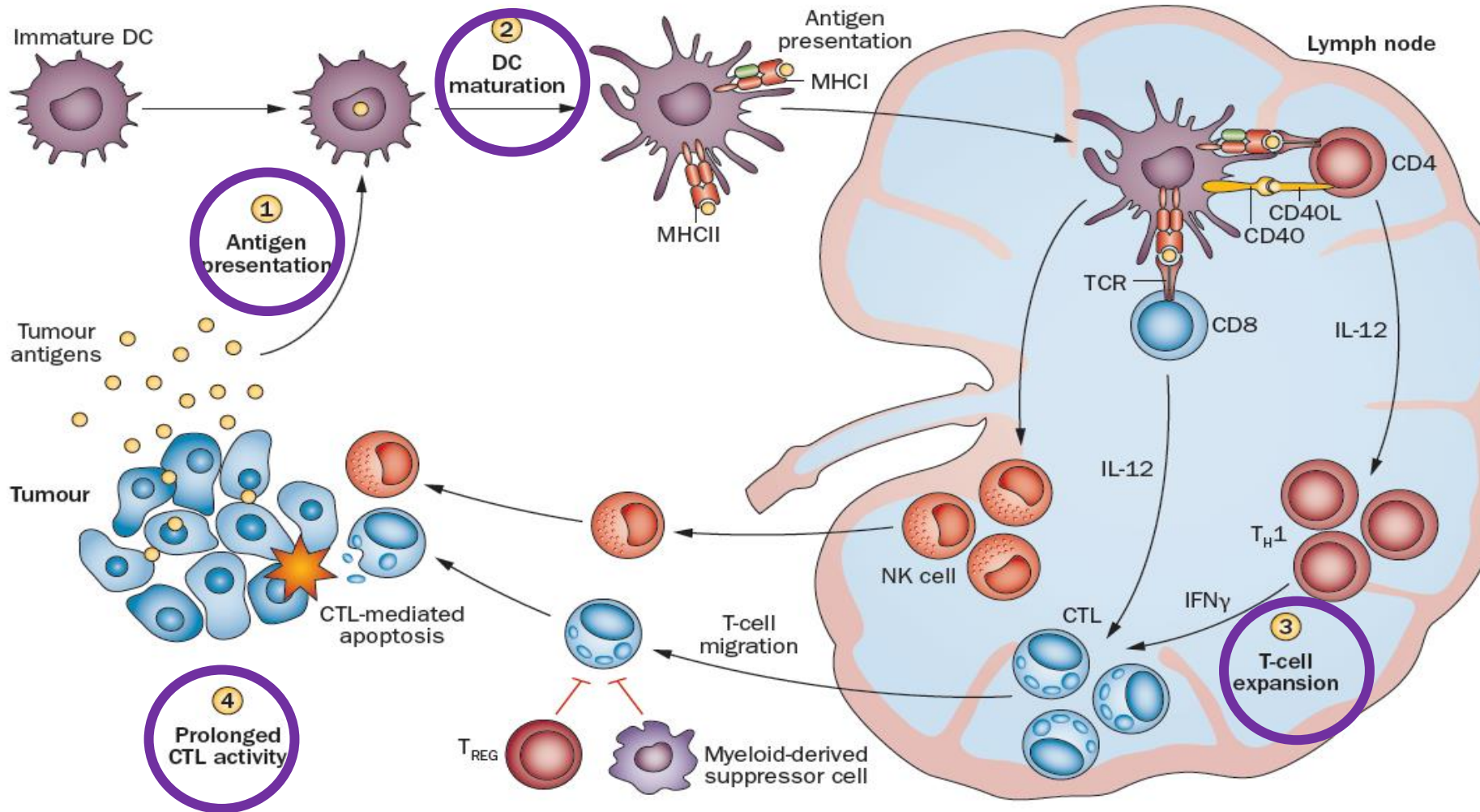
Lift/wings

Balanced center of gravity and weight



CONTROLLED FLIGHT

Prerequisites for immune function in the context of cancer



Principals of antitumor immune response

CROSSWINDS

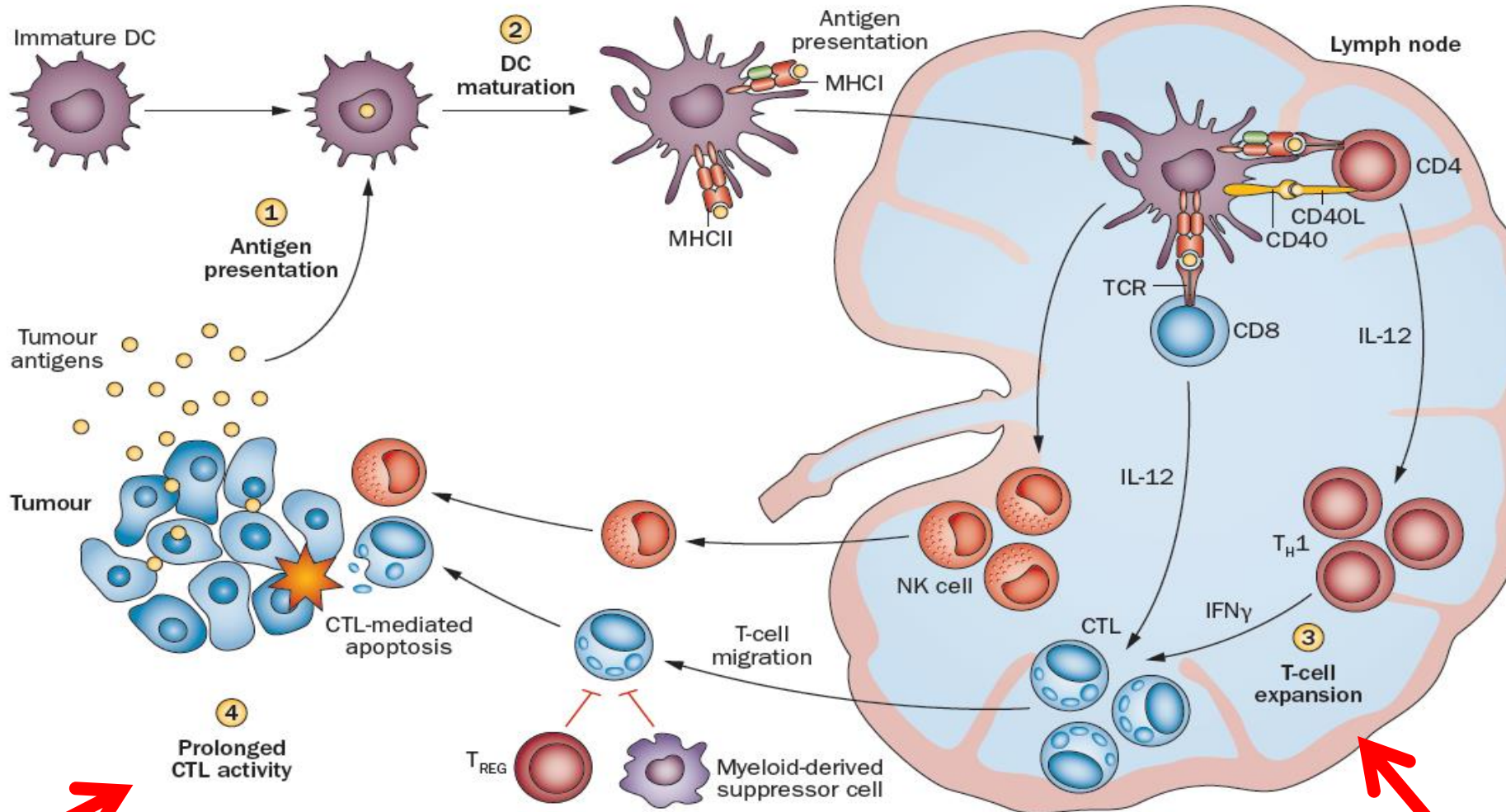
We can take TILS out of the crosswinds

And expand them in the laboratory

in a contained and defined environment



Prerequisites for immune function in the context of cancer



Principals of antitumor immune response

Rational combinations

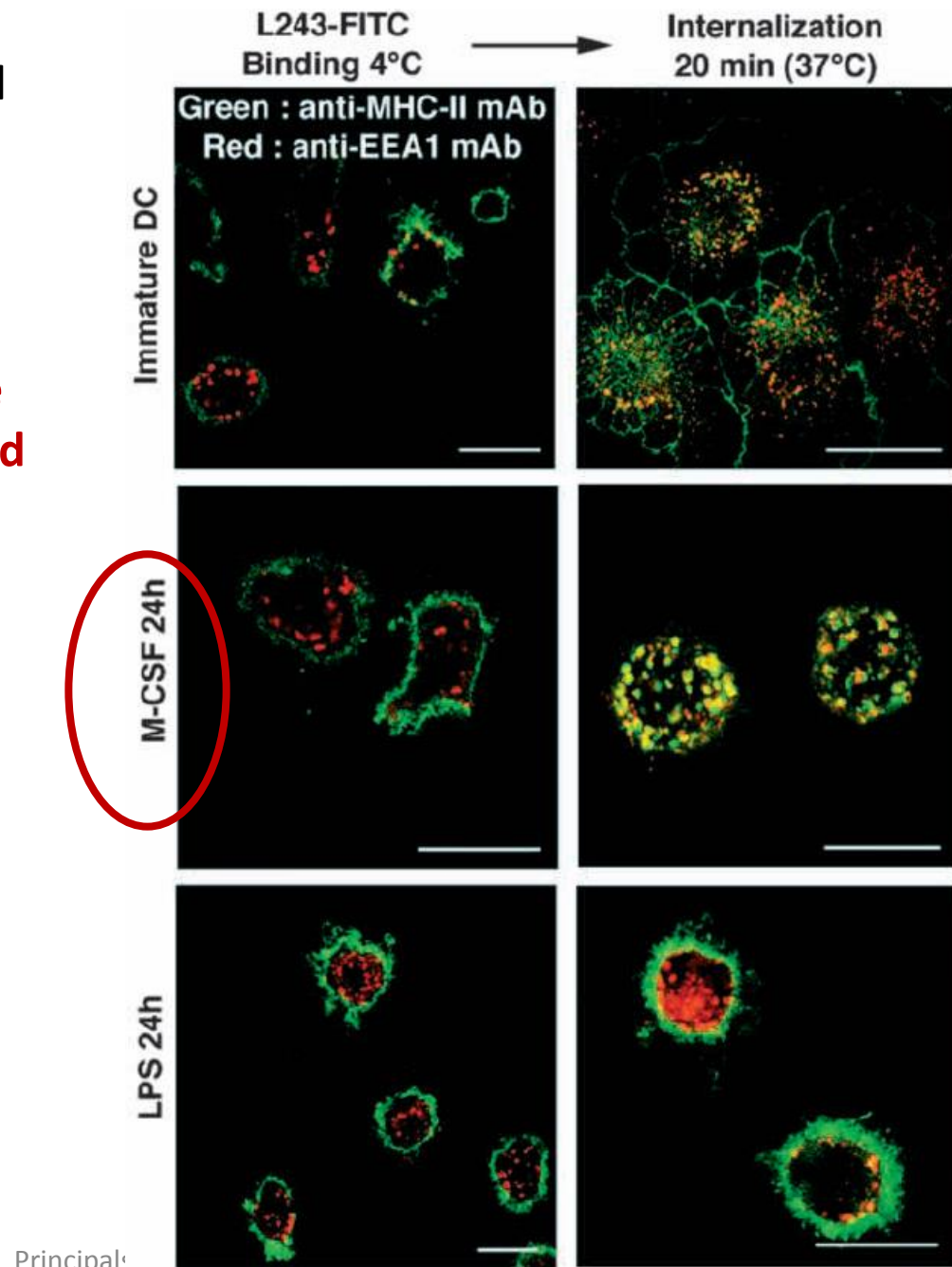


<i>Modify check points</i>	Prevent/decrease T-regulatory cells	Decrease myeloid suppressor activity
▪ Stimulation of activating Rcptrs ▪ Blockage of Inhibitory receptors/ligands PD-L1 , PD-1, CTLA4,	Active standard therapy - Chemotherapy, - Hormonetherap - Radiotherapy - Targeted therapy	DC maturation <i>in vivo</i> – Block TAM – Block CSF1/CSF1 R

In vitro studies on DC and macrophage differentiation

CSF1 is a key macrophage differentiation marker and abundant in tumors

The assessment of levels in the tumor micro environment and in the circulation may give valuable information on how the tumor microenvironment is geared

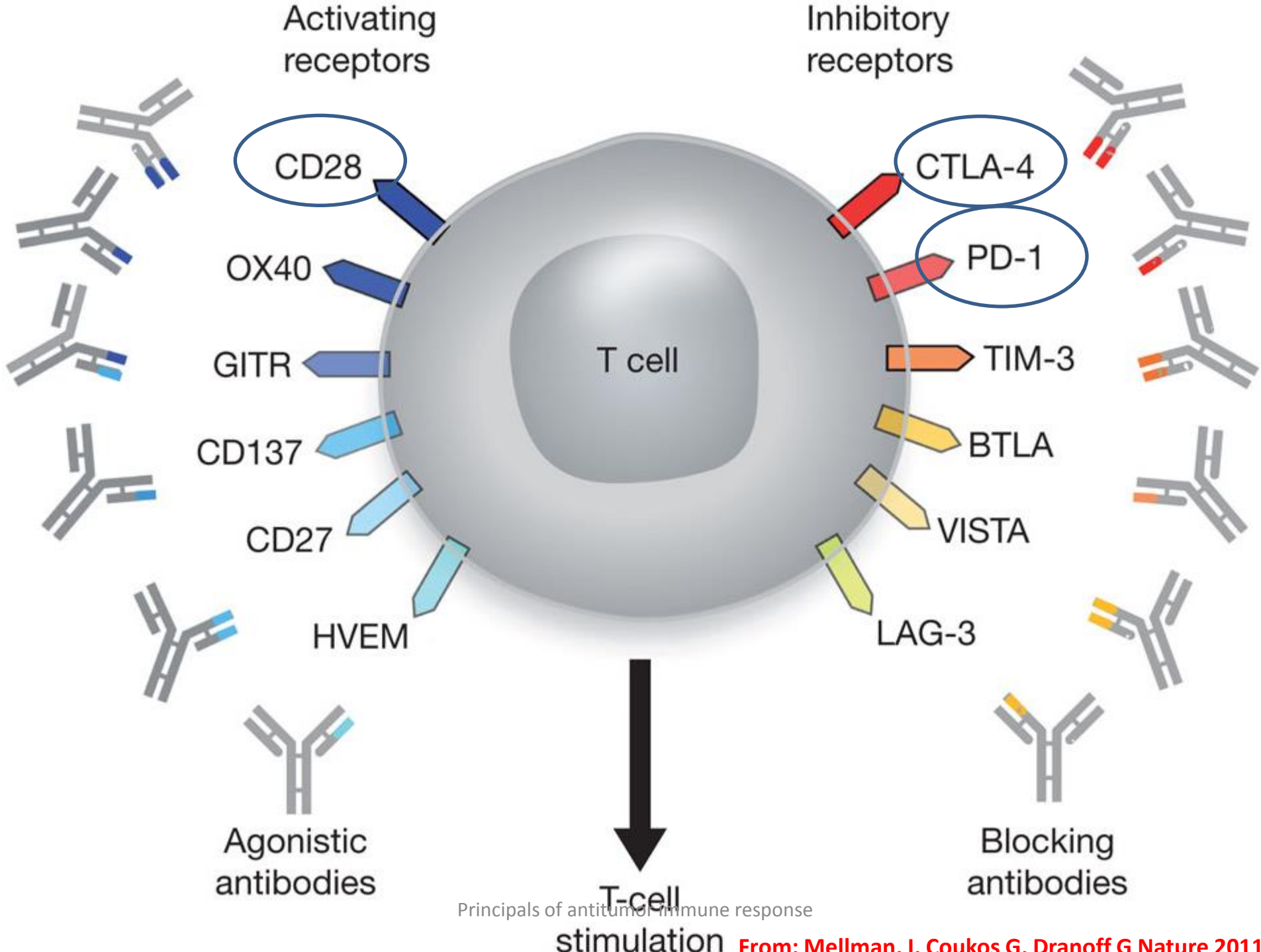


To improve range + maintain navigability
balance, centre of gravity



Weighting Model for a Horsa Glider

Principals of antitumor immune response





Future plane: Hoverbike

The Tyrannos
gets ready for take-off

☐ The Presentations Today

- ☐ Tumor infiltrating lymphocytes
- ☐ Adoptive Therapy with engineered T cells
- ☐ New developments in clinical vaccinations
- ☐ Rational combinations
- ☐ Clinical perspectives