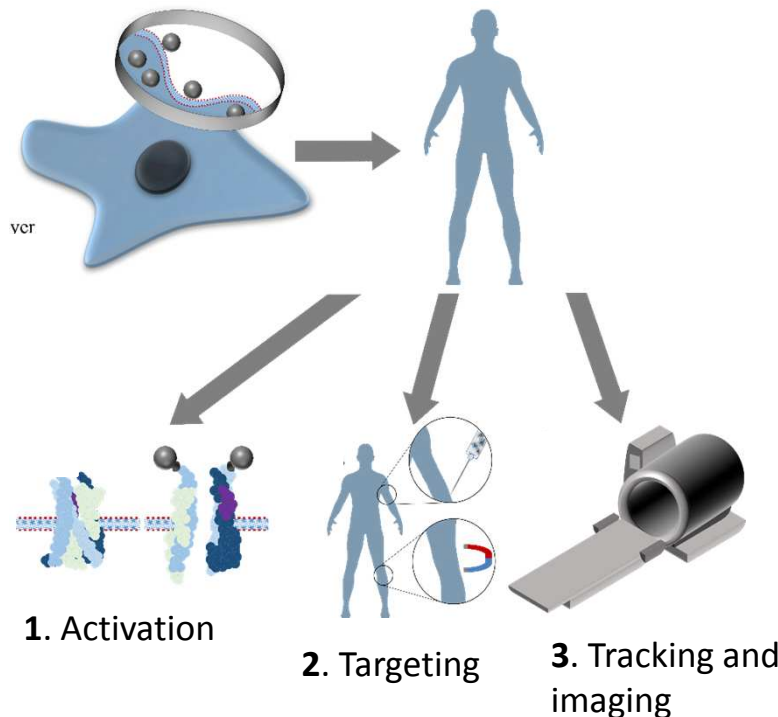
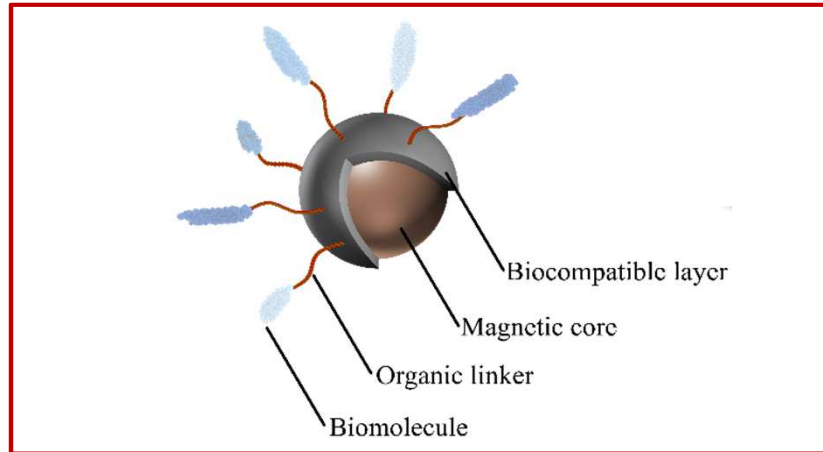


# Magnetic Nanoparticles (MNPs)

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UK Regenerative  
Medicine Platform



## What is it?

Iron oxide core coated with a biocompatible polymer and functionalised with ligands/biomolecules which can be targeted to specific receptors on the surface of cells

## Strengths

Tailored to specific applications  
Superparamagnetic in nature - Safe!  
Improved control over implanted cell  
Remote control!

## Potential Applications

Regenerative medicine  
Cell therapy  
Pharma  
ADME toxicity assays

## Weaknesses

Long term *in vivo* association of MNP and cells still unknown