PARITHERA

Prevention of cancer invasion by blood filtration

Problem

Over 90% of cancer patients die from metastases and none of the marketed therapies target circulating tumor cells (CTCs) the origin of metastases.

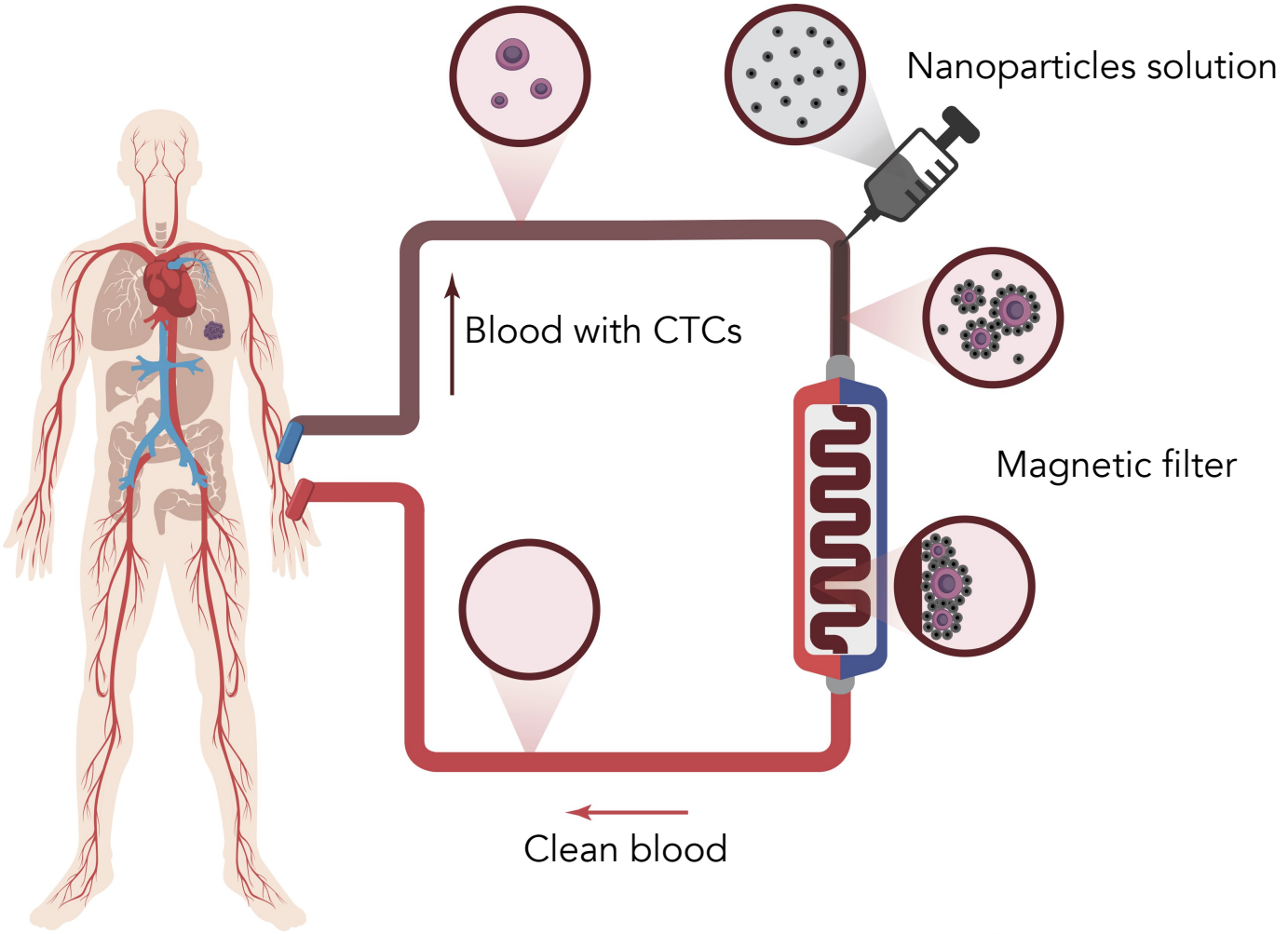
>90%[1]

1. *Paterlini-Brechot et al. Cancer Lett. 2007, 253, 180–204*

PARITHERA

Solution

The procedure is comparable to dialysis but focuses on removing CTCs from the blood with magnetic nanoparticles.



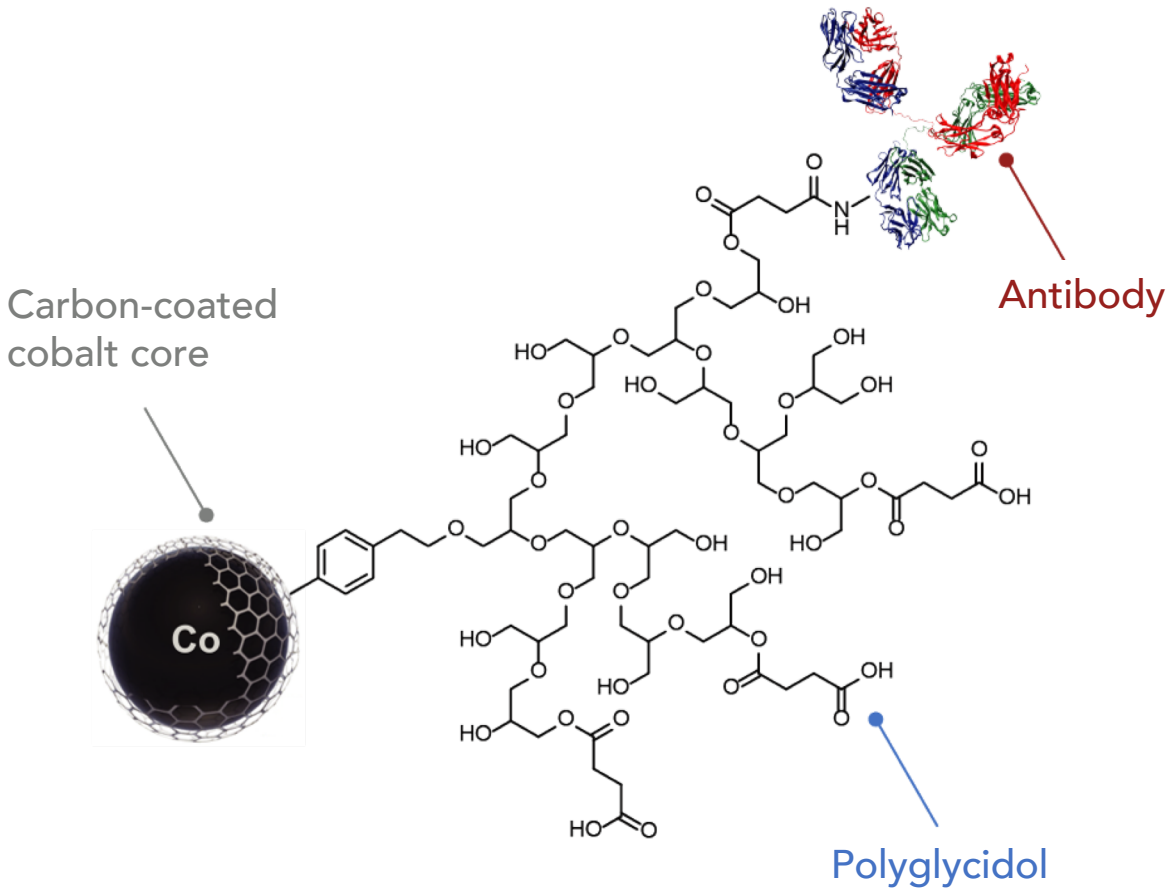
PARITHERA

Our invention:
A new generation of magnetic nanoparticles

Metallic core (Co or Fe)
provides magnetic properties

Polymer layer (polyglycidol)
provides antifouling properties

Antibody (application specific)
provides specific binding to target cells



PARITHERA

Results

High removal efficiency

High specificity

Low blood coagulation potential

The work was done as a collaboration between ETHZ and USZ.

ETH zürich

Developed magnetic nanoparticles

USZ Universitäts Spital Zürich

Tested procedure in blood samples

PARITHERA

Time for questions

Dr. Antoine Herzog

antoine.herzog@parithera.com

Dr. Weida Chen

weida.chen@parithera.com