

# *In vivo* isolation of circulating tumor cells

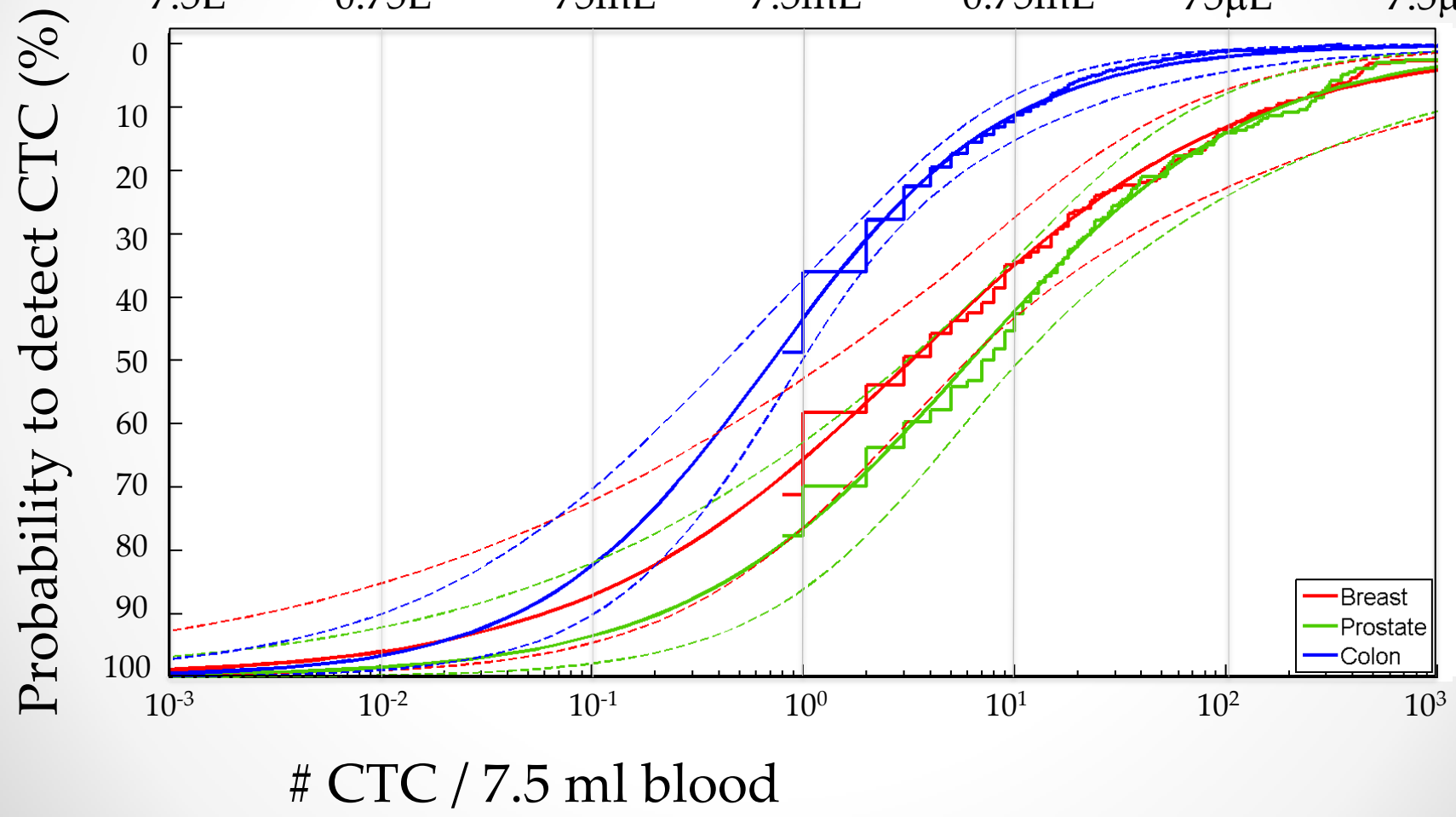
K. Lücke (CEO)

# CTC FREQUENCY DISTRIBUTION & EXTRAPOLATION

METASTATIC BREAST (N=177), COLORECTAL (N=428) AND PROSTATE CANCER (N=231)

Blood Volume / CTC

7.5L      0.75L      75mL      7.5mL      0.75mL      75μL      7.5μL



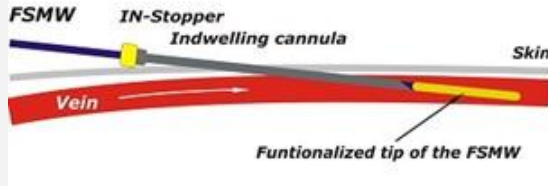
# Application of the CellCollector™ II



Insertion into patient's Vein at the doctor's office



Exposure time 30 min

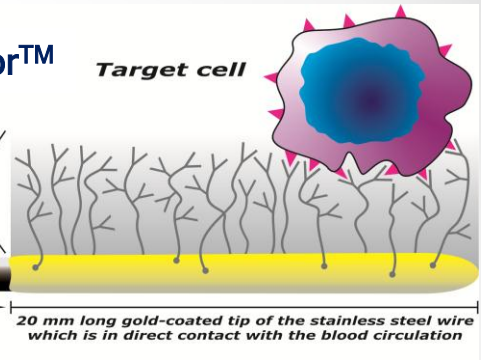


CellCollector™

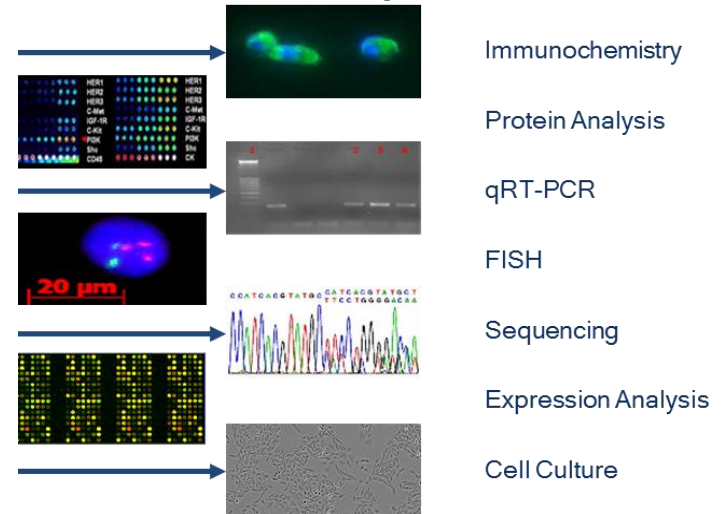
Target cell

Hydrogel (1 - 5 μm) functionalized with antibodies to epithelial cell surface marker EpCAM, attached to a 0.2 μm thick gold layer

Part of the wire which remains inside the puncture cannula



Downstream Diagnostic

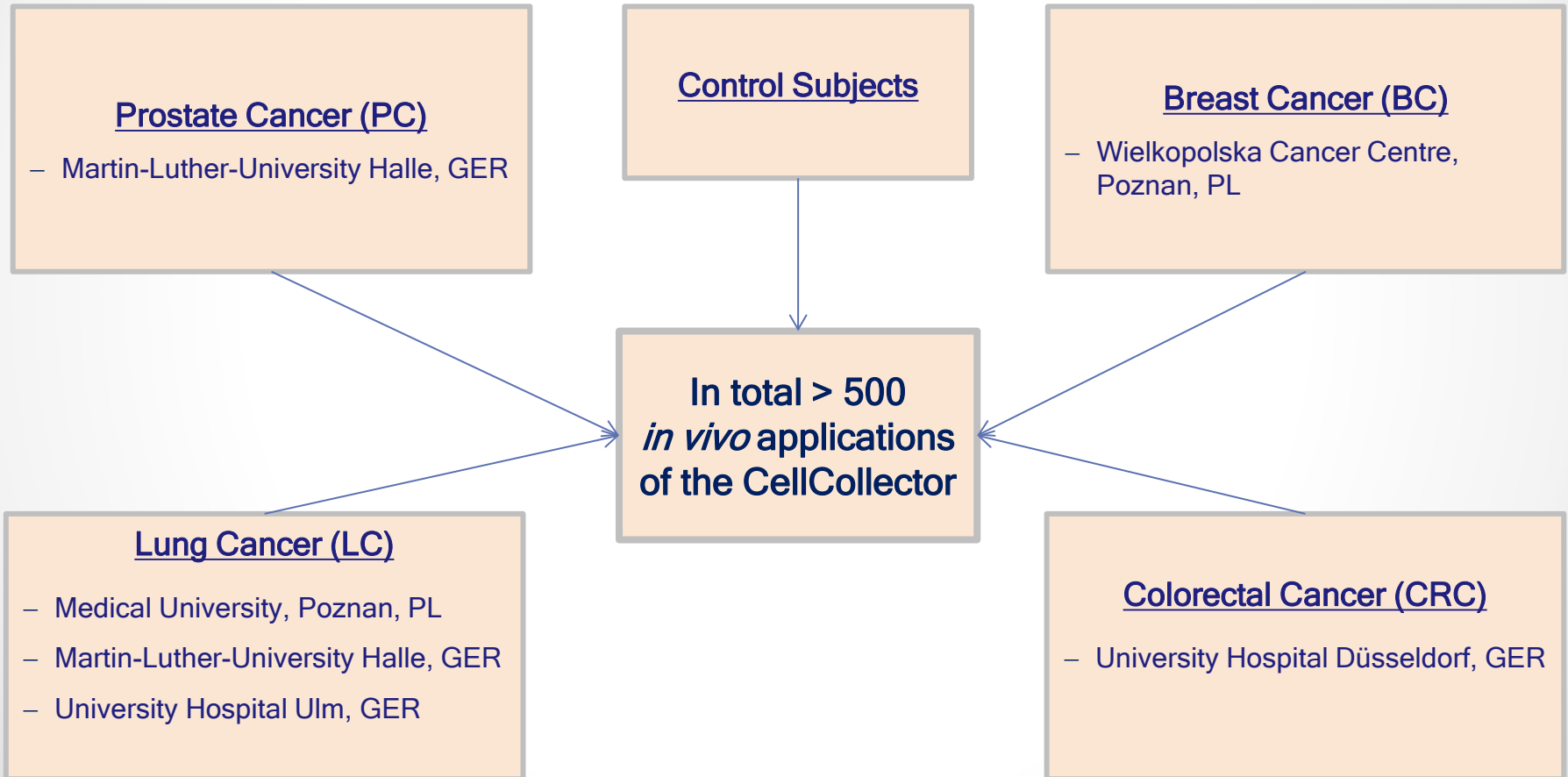


Result



# Pooled clinical data of the CellCollector™

Data collective: pooled data form clinical applications of the method



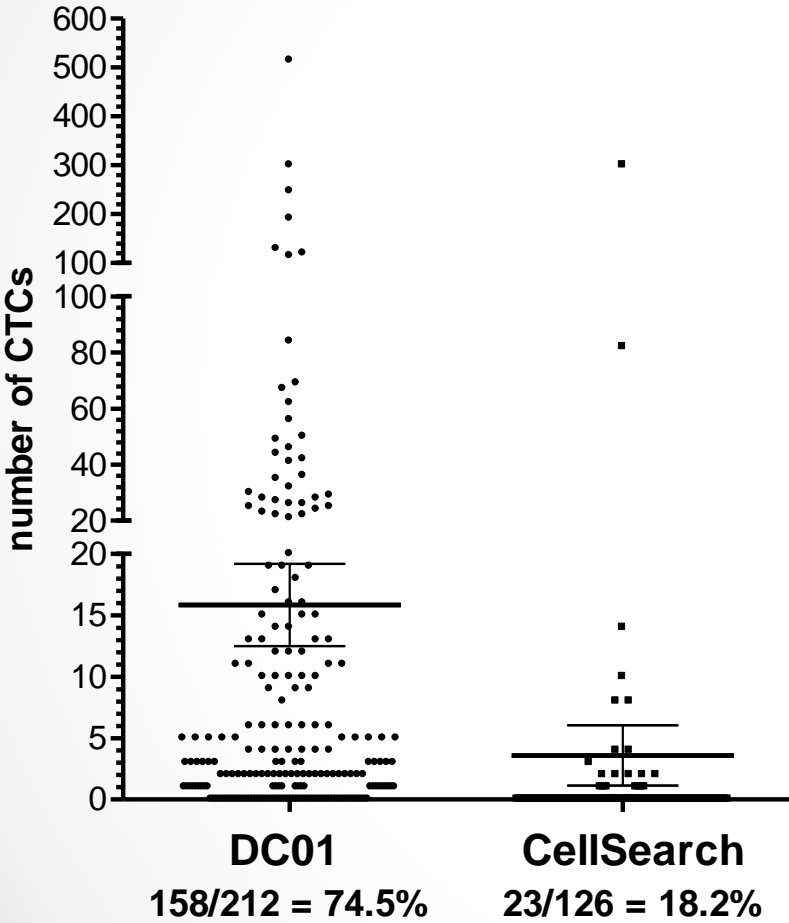
## Safety of the device

- Application of the CellCollector was **well tolerated**, with **no product related adverse events by 100%** of the subjects (more than 500 applications)
- More than 95 % of subjects described the discomfort as “similar to a blood draw”
- CE Approval

## Efficacy of the device

- CellCollector detection rate **74,5%** (158 of 212)
- median (range) CTCs: 3 (0-515)
- mean 15 CTCs
- similar for early and late stage cancer patients
- In healthy patient the detection rate was less than 3 % (1 cell in 35 vol.)

# Current clinical data of the CellCollector™



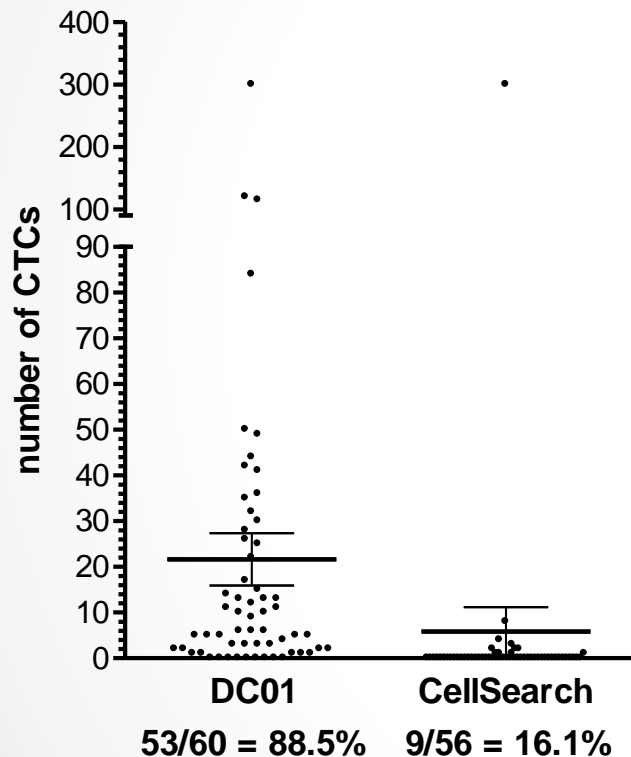
	DC01 CANCER	CellSearch CANCER
Number of values	212	126
Minimum	0.0	0.0
25% Percentile	0.0	0.0
Median	3.000	0.0
75% Percentile	12.00	0.0
Maximum	515.0	300.0
Mean	15.85	3.587
Std. Deviation	48.63	27.65
Std. Error	3.340	2.464
Lower 95% CI of mean	9.270	-1.289
Upper 95% CI of mean	22.44	8.463
Sum	3361	452.0

Results of CTC enumerations with the Detektor CANCER01 compared to the CellSearch® method

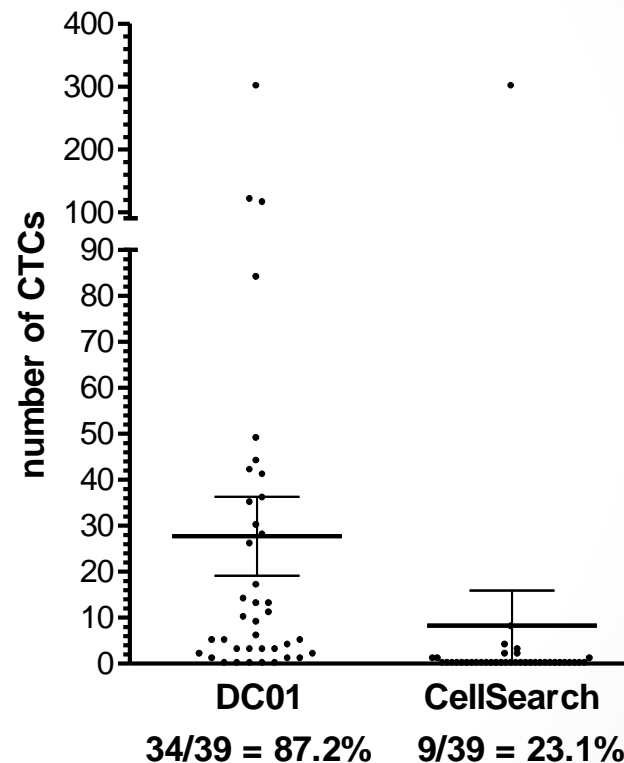
# Summary of CTC enumerations in lung cancer patients with

## the Detektor CANCER01

All analyzed samples



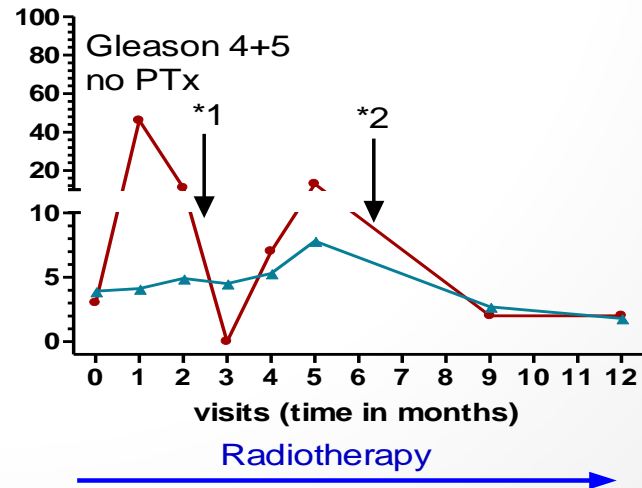
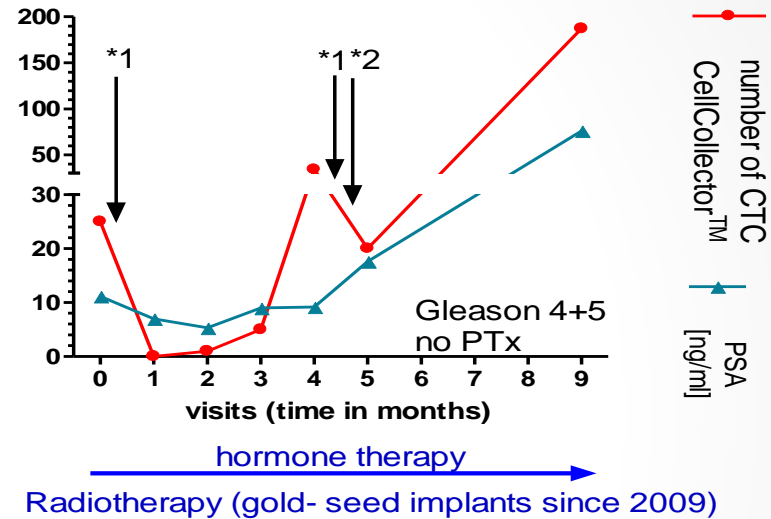
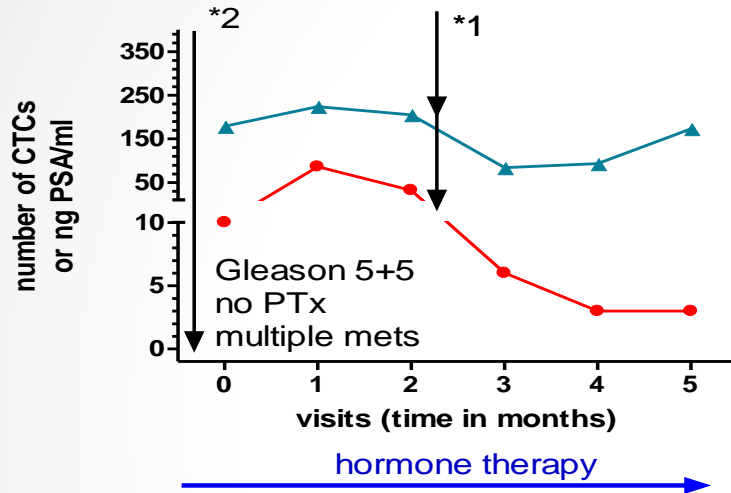
direct methodological comparison



Results of CTC enumerations with the Detektor CANCER01 compared to the CellSearch® method of samples received of our lung cancer studies without data of the follow-up visits. Shown are results of the early and late stage cancer patients.

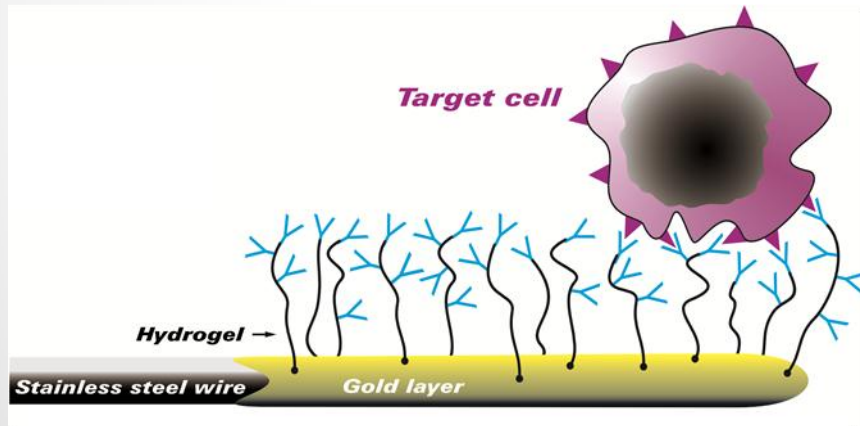


# clinical data of metastasized PCa patients up to 12 months

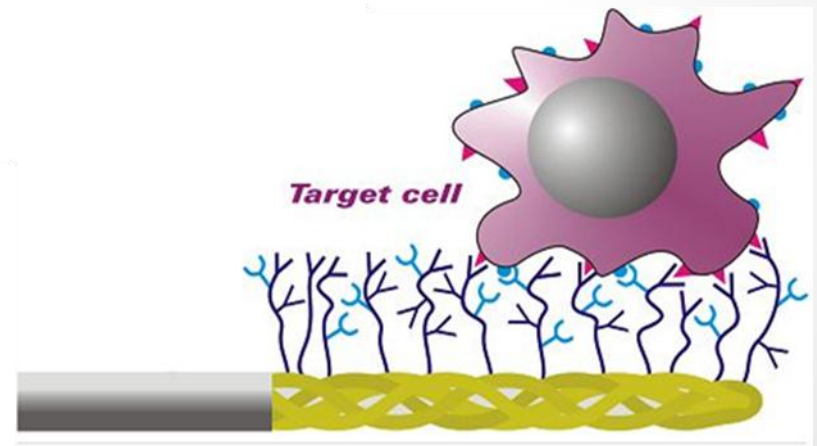


# New developments of the CellCollector:

- Modified surface structure by spiralization
  - increased surface
  - better hemodynamics
- Attached are several tumor specific antibodies



**CANCER01**



**CANCER02**