

# Pancreatic Cancer Unit

Prof. Martin Schindl

Department of Surgery

Dr Paola Martinelli

Institute of Cancer Research  
Clinic for Internal Medicine I



## What we have gained so far

### Busy clinical interdisciplinary unit

Weekly Tumorboard with 500 case presentations / year

60 – 80 major pancreatic resections / year

Hundreds of chemotherapy applications, endoscopic interventions, staging and follow up imaging procedures, histopathological work-up,...

### Comprehensive database (RDA)

with more than 1400 patients with pancreatic malignancies operated over the last 23 years

Increasing RDA data about chemotherapy and radiotherapy over the past few years

Initiation and participation in national network – Task Force Pankreas



# Translational research projects

# Identification of prognostic and predictive biomarkers for pancreatic cancer patients

Collaboration between IKF, Surgery, and Pathology dept. (P.Martinelli, M.Schindl, K. Sahora, K. Brendel)

## Retrospective

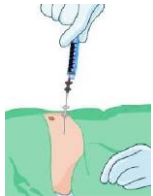
~200 resected tumors (2010-2015)



FFPE  
clinical data  
follow up

## PROGNOSTIC BIOMARKERS

~80 primarily non-resectable tumors  
Patients treated with neoadjuvant CT



Biopsy

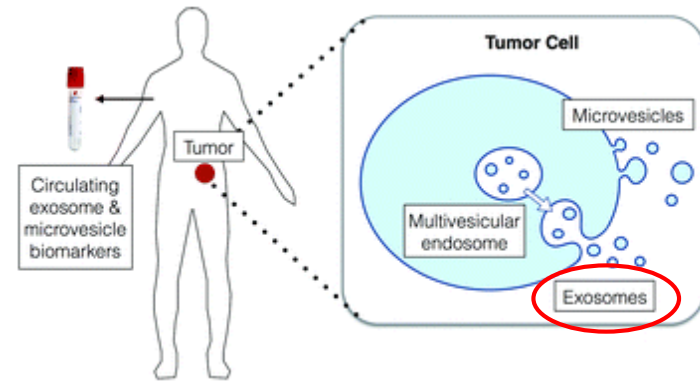


Resection  
specimen

## PREDICTIVE BIOMARKERS

## Prospective/discovery

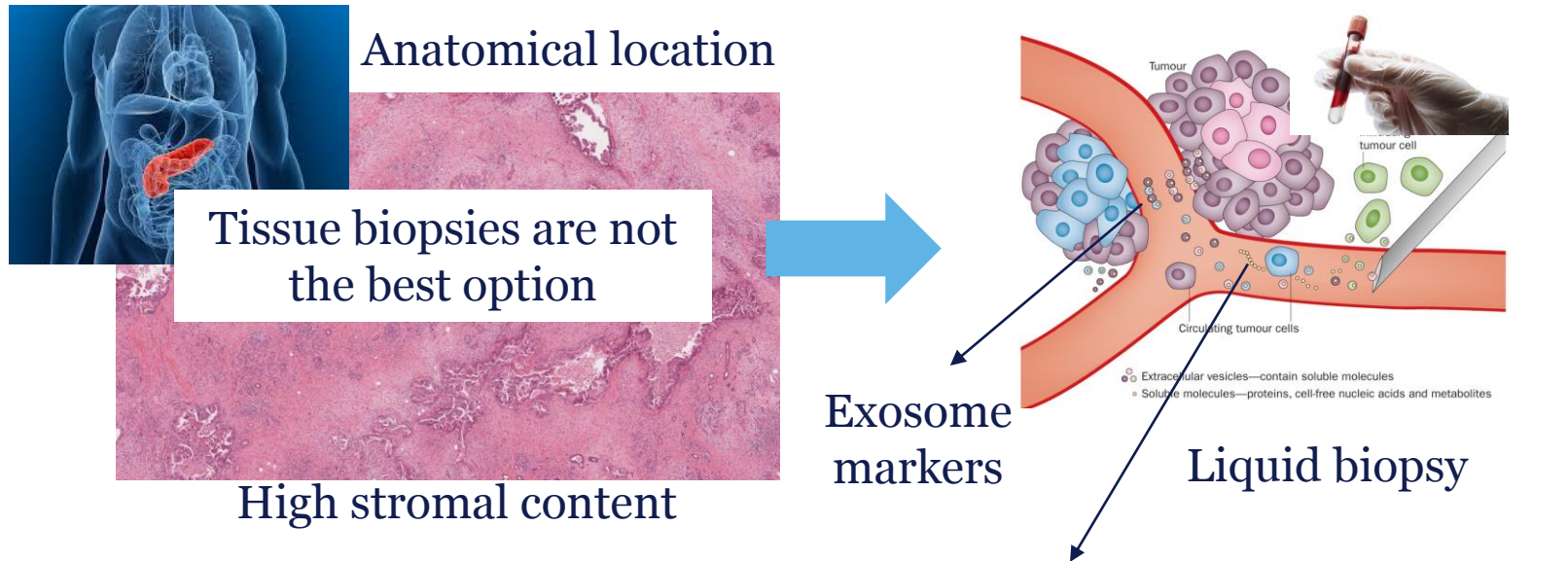
**ABCSG-P02** phase II trial  
FOLFIRINOX vs FOLFIRINOX+CRT



Exosome-based

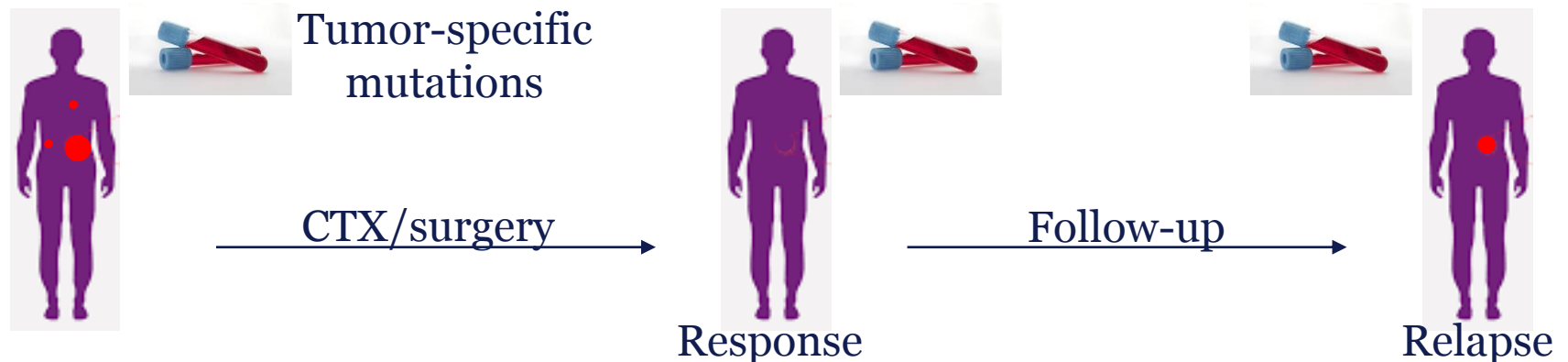
## PREDICTIVE BIOMARKERS

# Use of liquid biopsies for pancreatic cancer

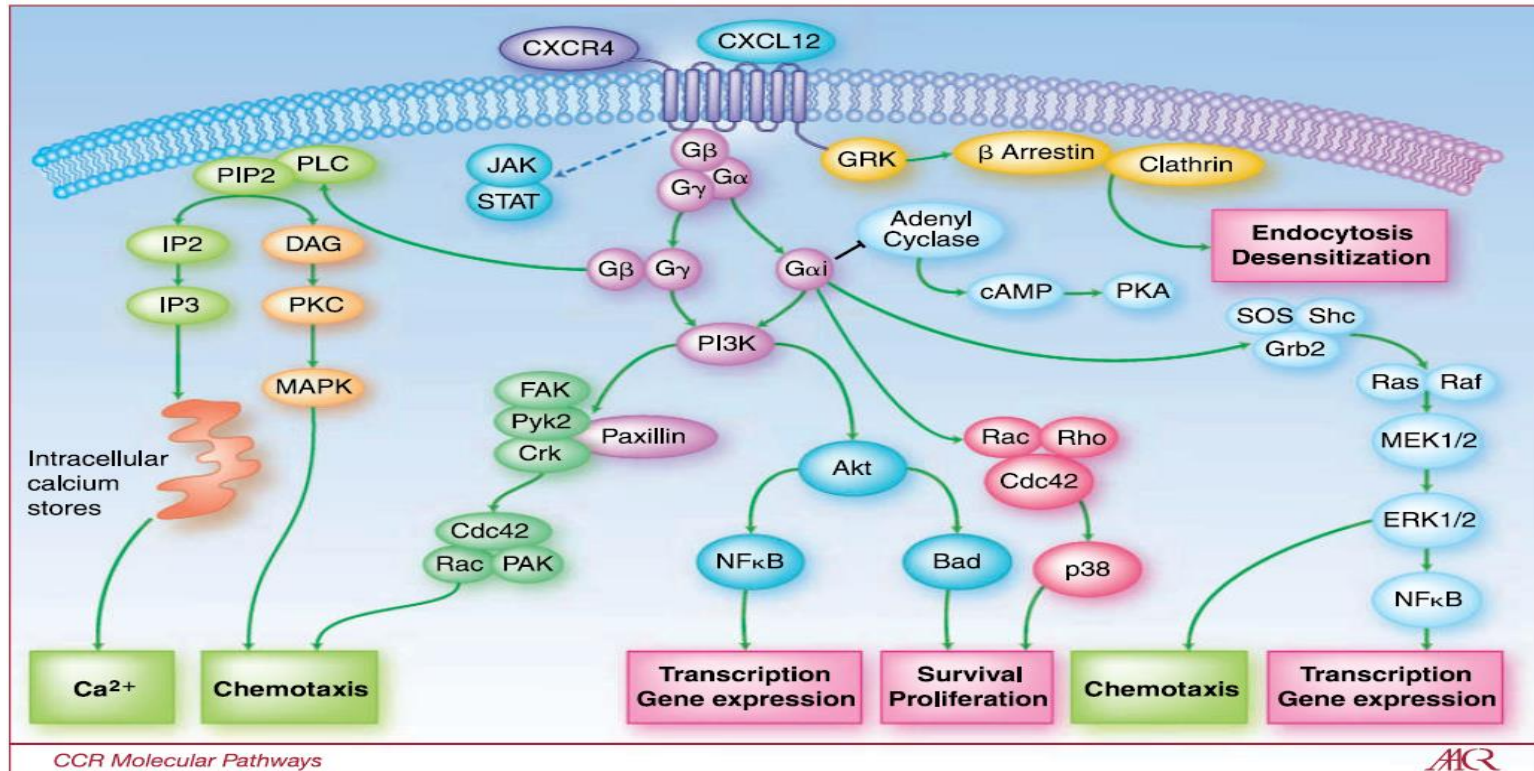


Circulating cell-free tumor DNA (ctDNA)

Collaboration between KIM1/Oncology, and Pathology dept. (G.Prager, M.Kieler, B.Streubel)



# CXCR4 imaging in pancreatic cancer



Teicher et al., CCR 2010



# CXCR4 imaging in pancreatic cancer

- Mobilization and recruitment of proangiogenic cells (endothelial and smooth muscle precursor cells)
- Supporting neoangiogenetic niches and revascularization of tumor growth
- CXCR4 expression prognostic for: OS, Response to CTX

## Study design:

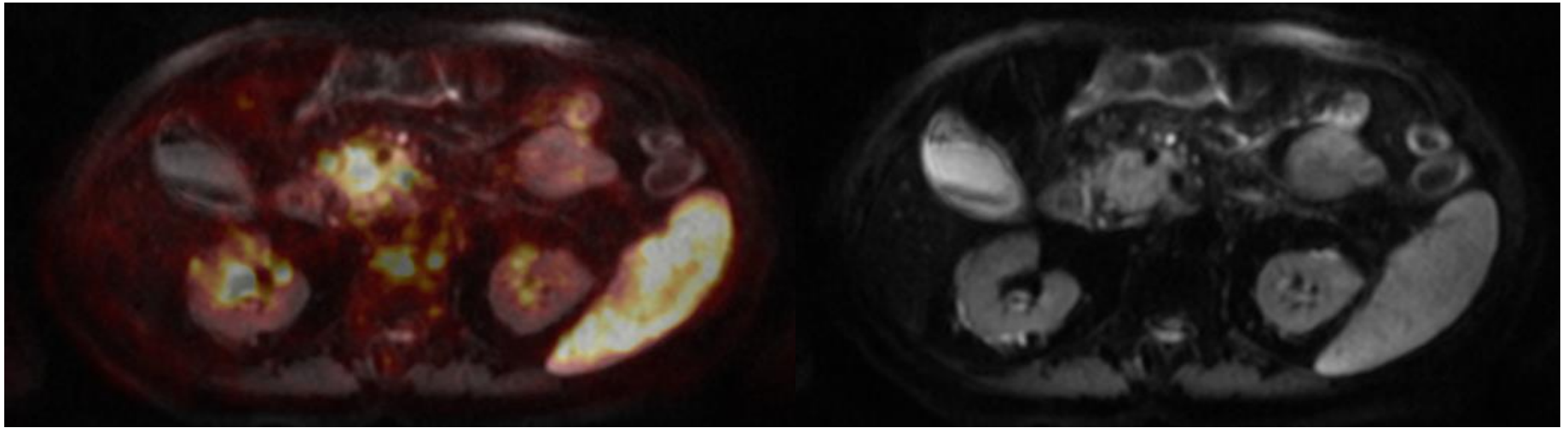
- 42 Patients with resectable PDAC → [68Ga] Pentixafor PET/MRI before resection
  - Endpoints: DFS, OS
- 66 Patients prior to 1st-line CTX → [68Ga] Pentixafor PET/MRI before therapy
  - Endpoints: PFS, OS

CCR Molecular Pathways

CCR

Teicher et al., CCR 2010

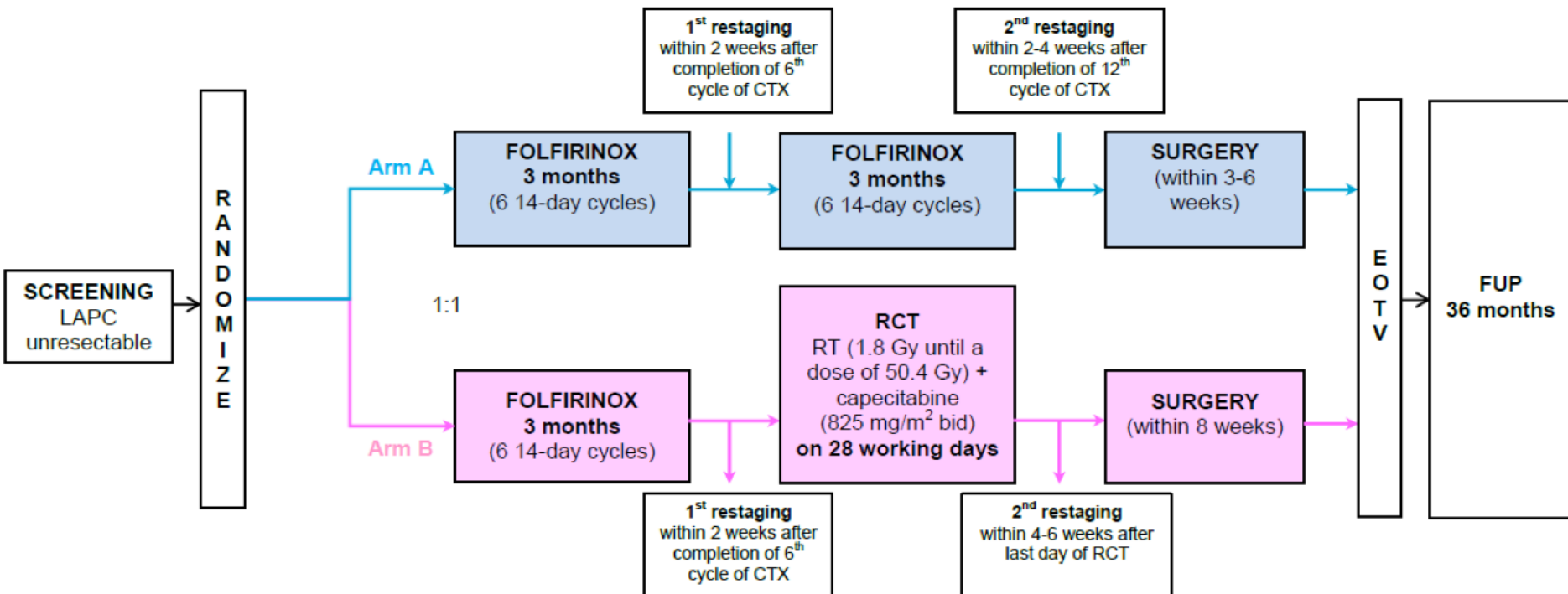
# CXCR4 imaging in pancreatic cancer





# ABCSG-P02

FOLFIRINOX alone versus FOLFIRINOX+Radiochemotherapy  
in patients with locally advanced, primarily inoperable pancreatic cancer





## Vision

Leading Comprehensive Clinical Unit

Clinical applied studies

Intensified collaboration with translational research

Comprehensive, up to date interdisciplinary database



## Support

Tumorboard administration (ok)

Human resources for database and clinical applied study organization

Infrastructure for clinical and translational studies: office, assessment room

Blood and tissue handling and storage

Promotional initiatives

Funding (charity concept?)