EP PerMed
European Partnership
for **Personalised Medicine**

pRCC-TREAT

Molecular-based stratification of metastatic papillary renal cell carcinoma to personalize treatment strategies

January 20th 2026, EP PerMed JTC2025 Kickoff Meeting, online

Cristina Rodriguez-Antona, Consejo Superior de Investigaciones Científicas (Spain), Coordinator

Clinical challenge

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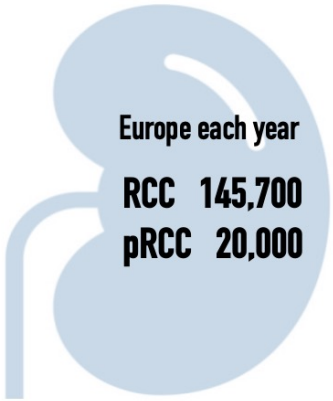
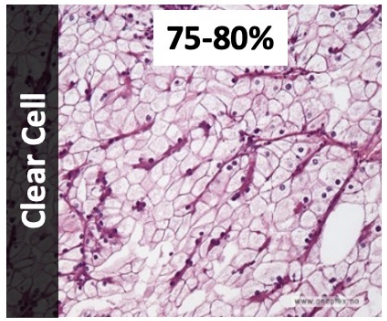
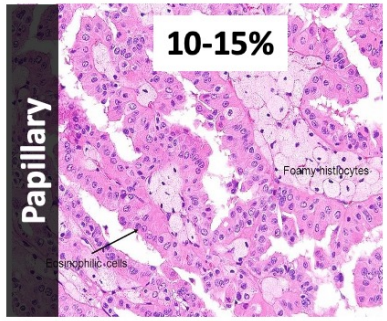
- **Papillary renal cell carcinoma (pRCC)** is 10-15% of RCC cases
- **Key problem:** Metastatic pRCC treated with *one-size-fits-all* approach
- Current treatments **lack biological rationale** (borrowed from ccRCC)
- **Result: variable, suboptimal outcomes in patients**





- **Clinic**
  ccRCC-centric therapies
  Antiangiogenic drugs and immunotherapy
- **Molecular**
  VHL mutation plus *PBRM1, SETD2, BAP1…*
  Pseudohypoxia, epigenetic changes



- **Clinic**
  Understudied disease
  ccRCC-based drugs with suboptimal outcomes
- **Molecular**
  Diverse: *MET, CDKN2A, SETD2, SMARCB1 …*
  Largely heterogenous

Not All pRCC Are the Same

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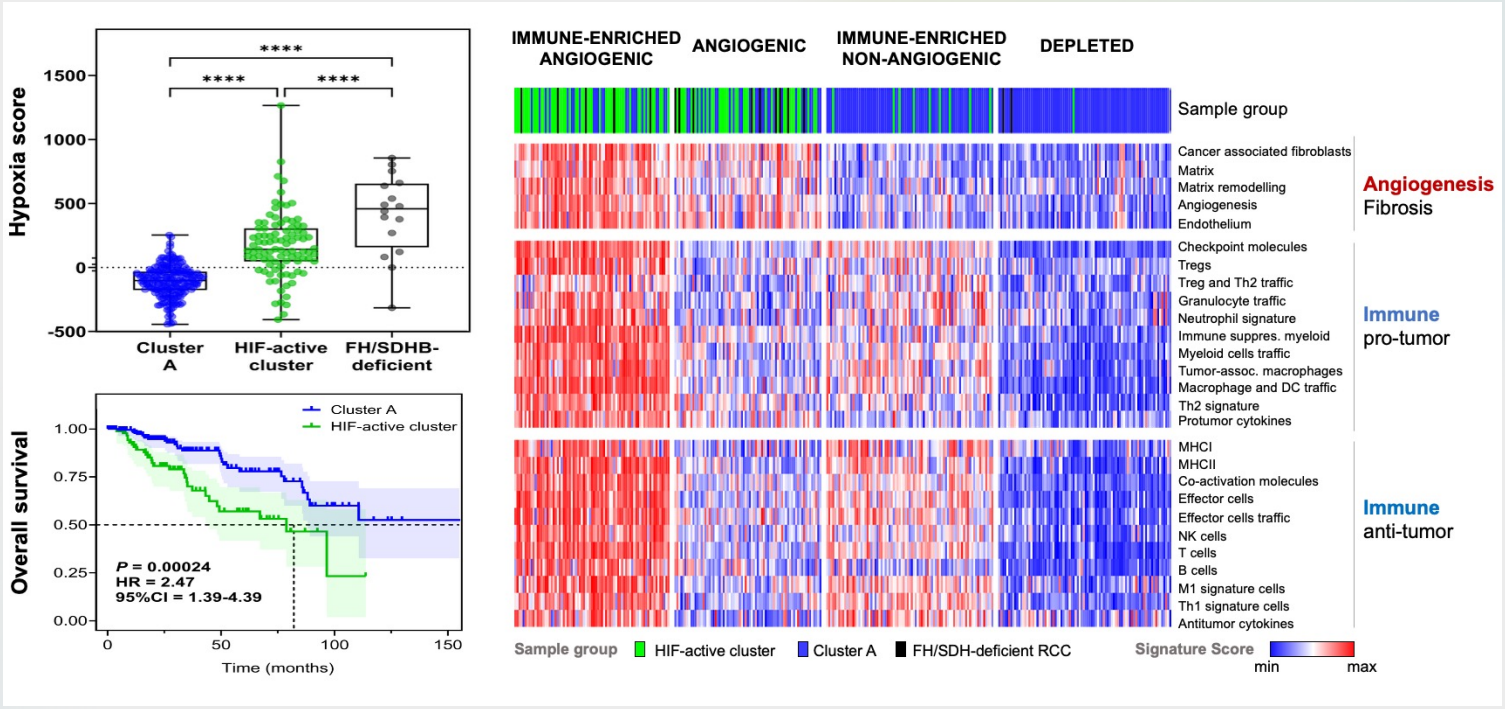
Our preliminary data

- **"HIF-active" pRCC** subgroup (30% of cases)
- **Key molecular features**
- Clinical significance: more **aggressive**, but potentiallyspecific **treatment-response**



de Nicolás *et al.* (please, do not post)

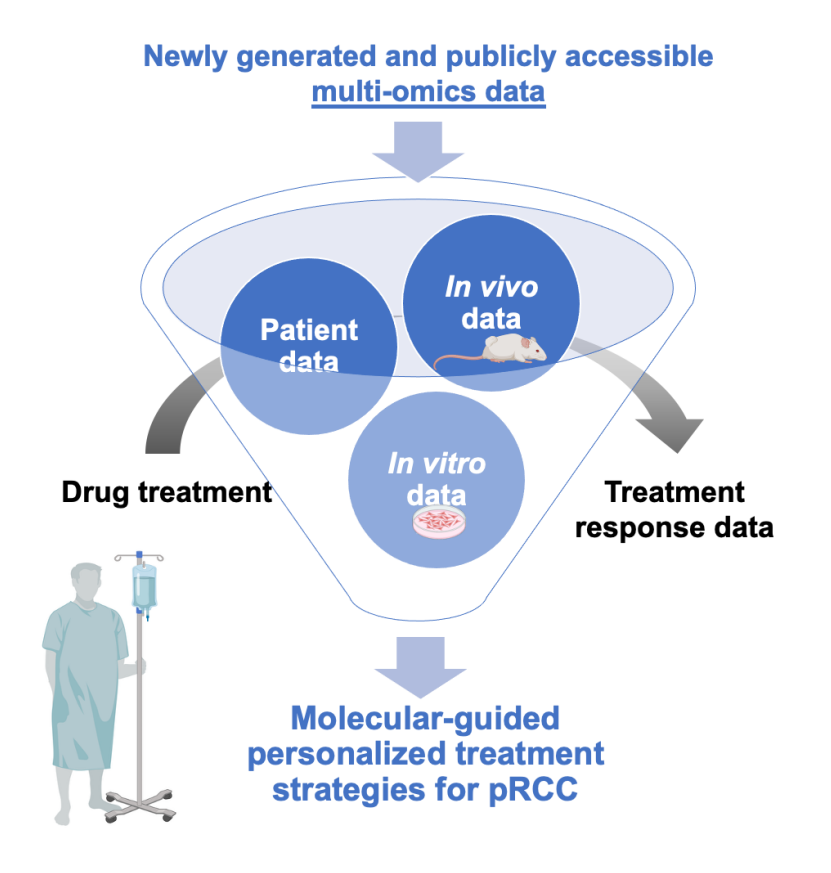
Project Vision & Objectives

Overall goal

Transform care for metastatic pRCC patients by **molecular-guided treatment selection**

Objectives

1. World's largest metastatic pRCC database
2. Multi-omic signatures for drug response prediction
3. Clinical implementation strategy



The pRCC-TREAT Strategy

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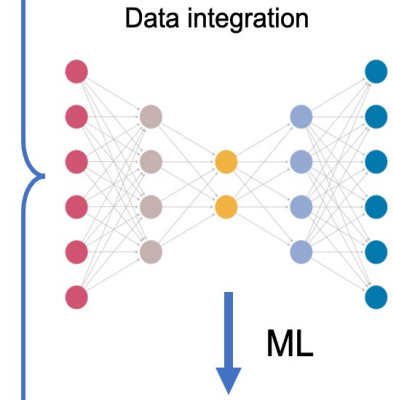
- **Multi-omic** integration approach (genomics, transcriptomics, proteomics, metabolomics)
- **Real-world** patient data & **preclinical models**
- **Machine learning** for signature discovery

Source	Treatment data	Genomics	Transcriptomics	Proteomics	Metabolomics	Histological data
Already available						
TCGA-KIRP	✗	✓	✓	✓	✗	✓
Retrosp. Spain series	✗	✓	✓	✗	✓	✓
Senor Study 240	✓	✓	✓	✗	✗	✓
AXIPAP	✓	✓	✓	✗	✗	✓
From project: patients						
Retrospective pRCC	✓	✓	✓	✓	✓	✓
Prospective pRCC	✓	✓	✓	✓	✓	✓
pRCC serum samples	✓	✗	✓	✗	✓	✗
From project: preclinical models						
pRCC tumor slices	✓	✓	✓	✓	✓	✓
pRCC-PDX	✓	✓	✓	✓	✓	✗
Syngeneic RCC model	✓	✗	✓	✓	✓	✗
pRCC cell lines	✓	✗	✓	✓	✓	✗

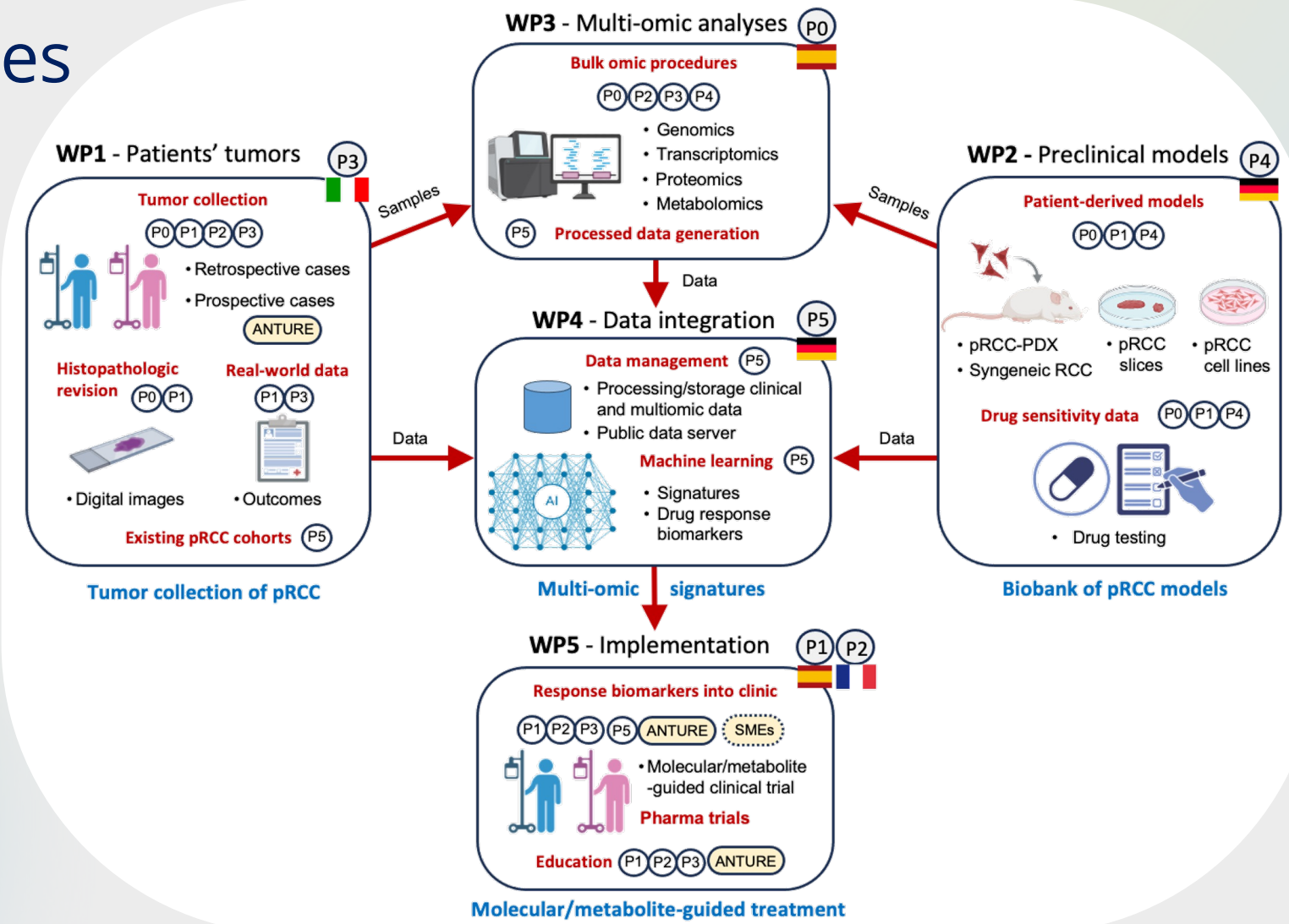


Molecular and metabolic signatures for treatment responses

Work Packages

Five WP across Europe.

- **WP1:** patient tumor samples and clinical data
- **WP2**: drug testing data from laboratory models
- **WP3:** molecular multi-omic analyses
- **WP4**: ML to identify drug response patterns and biomarkers
- **WP5:** implementation through molecular-guided clinical trial and education



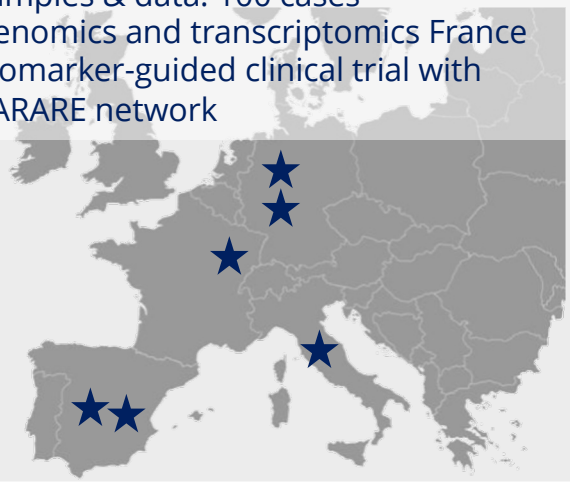
Consortium Strengths

6 partners across 4 countries with **complementary expertise.** Integrating **patient associations** and SME and pharmaceutical industry

P1 - H12O de Velasco
CLINICAL PARTNER
- Co-Leader WP5 clinical implementation
- Samples & data: 65 cases
- Preclinical: PDX-RCC platform
- Biomarker-guided clinical trial with GUARD network

P0 – CSIC Rodriguez-Antona
MOLECULAR HUB
- Coordinator and leader WP3 multi-omic analyses
- Genomics and transcriptomics in Spain
- Preclinical: Cell lines & syngeneic models

P2 – IGBMC Malouf
CLINICAL PARTNER
- Co-Leader WP5 clinical implementation
- Samples & data: 100 cases
- Genomics and transcriptomics France
- Biomarker-guided clinical trial with CARARE network



P5 – Heidelberg University Herrmann
COMPUTATIONAL HUB
- Leader WP4 data integration
- Bioinformatics: QC, harmonization and central data repository
- Machine Learning for biomarker discovery
- Public database creation

P3 – IRCCS Procopio
CLINICAL PARTNER
- Leader WP1 Real-world evidence and patient engagement (ANTURE)
- Samples & data: 40 cases
- Genomics and transcriptomics Italy
- Biomarker-guided clinical trial with MeetURO and FICOG network

P4 - Bielefeld University Bechmann
MOLECULAR HUB
- Leader WP2 of Preclinical pRCC models
- Centralized proteomics and metabolomics analyses
- Preclinical: Tumor slices drug treatment, cell lines

Expected Impact & Next Steps

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- ~4,200 metastatic pRCC patients/year in Europe
- Creating open-access database for research community
- Biomarker-guided clinical trial design
- Diagnostic kit design and commercialization
- Methodology potentially applicable to other rare cancers

The Value of Patient Involvement

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In pRCC-TREAT, patients are not only participants—they are partners shaping the future of personalized therapy

ANTURE
ASSOCIAZIONE NAZIONALE TUMORE DEL RENE

www.anture.it
Active Project Consortium Partner

Patient Partnership

- Review of informed consent documents to ensure clarity, readability, and a patient-centred approach.
- Active involvement of patients and caregivers in a dedicated working group participating in project meetings.
- Developing tools to capture QoL, ADRs, and other PROs.

Dissemination

- Design and support dissemination of multilingual materials from the patient perspective.
- Organize patient-centered events
- Support patient engagement and adherence in biomarker-guided trials, integrating their perspective and raising awareness of research opportunities

IKCC
International Kidney Cancer Coalition

www.ikcc.org ⟹ IKCC endorses this project and supports its dissemination

Makes a Difference: Integrating the **patient perspective** enhances **clarity, trust, participation**, and the **quality** of data.
Supports trial design, inclusivity, and clinical relevance.

Precision medicine is only real when patients help build it

Who We Are: ANTURE and IKCC

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ANTURE
ASSOCIAZIONE NAZIONALE TUMORE DEL RENE

Active Project Consortium Partner

IKCC
International Kidney Cancer Coalition

Endorsement

National Kidney Tumor Association, a non-profit **organization founded by patients affected by this disease.**

Founded on **2020**, we are a **point of reference** providing information on how to best **face the disease, guiding patients and advising them** through a path of knowledge toward the best diagnosis and treatment centers in Italy. We do not aim, nor should we, replace the advice of medical professionals.

Email: associazione@anture.it

WhatsApp: +39 347 191 4206

Website: www.anture.it

Global **collaboration of patient organizations** that empowers and represents the kidney cancer community through advocacy, awareness, information and research.

Initiated in 2009, we are **improving research, treatment, care and survivorship** through evidence-based education, awareness and advocacy programs that respond to the needs of people affected by kidney cancer.

Email: info@ikcc.org

Tel: +44 (0) 7973 777 202

Website: www.ikcc.org

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Thank You