

# KIDNEY STEM CELL PRODUCTS FOR PRE-CLINICAL APPLICATIONS

VENTURE OF THE INSTITUTE FOR STEM CELL RESEARCH AND REGENERATIVE MEDICINE, UNIVERSITY HOSPITAL DUESSELDORF

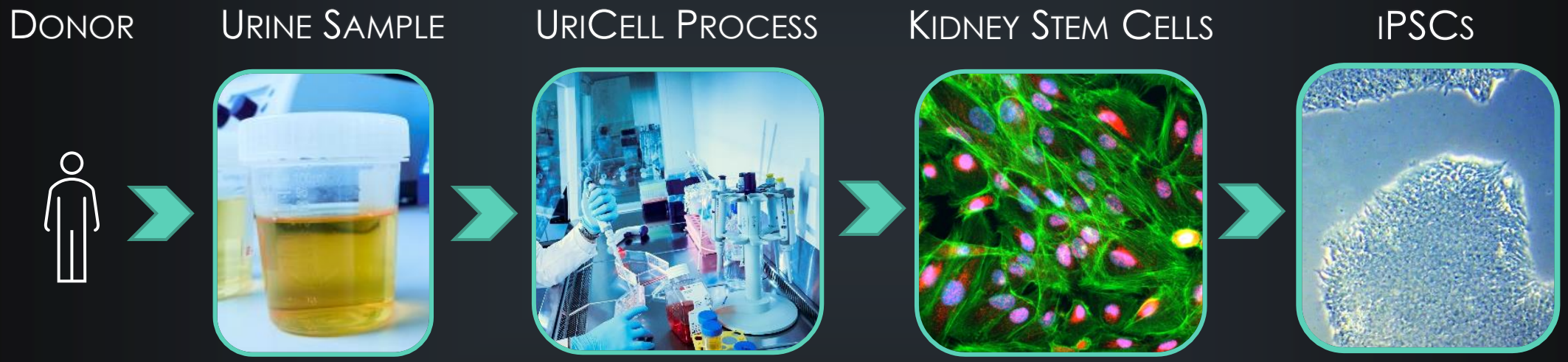


# PROBLEM: SUB-OPTIMAL PRE-CLINICAL MODELS RESULT IN INEFFICIENT DRUG DEVELOPMENT

- PRE-CLINICAL STUDIES ARE LONG AND COSTLY
- EARLY ORGAN-SPECIFIC ANALYSIS ARE CRUCIAL
- METABOLITES CAN CAUSE KIDNEY DAMAGE
- HUMAN KIDNEY CELLS ARE ONLY AVAILABLE FROM PATIENTS (VIA BIOPSY)



# SOLUTION: KIDNEY STEM CELLS FROM HUMAN URINE SAMPLES







Kidney Toxicology  
Disease Modelling  
Cell Therapy

✓ NO BIOPSY. JUST PEE.



# URICELL IS FIRST MOVER AND AIMS TO SET A NEW STANDARD



	Urine-derived	Kidney-Biopsy Cells	Cell Lines	Animal Cells
Provider				
Healthy Human Material	Yes	No	Yes	No
Customer-specific Cells	Yes	No	No	No
Broad Donor Availability	Yes	No	No	No
Reproducibility	Moderate*	Low	High	High
Risks/Ethical Issues	Low	High	Moderate	High
Associated Data	High	Low	Moderate	Moderate
Stem Cell Features	Yes	No	No	No

\*Donor-specific

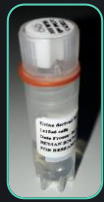


# CUSTOMER-ORIENTED ADVANTAGES ENABLE MORE EFFICIENT R&D

- ✓ CELL ISOLATION FROM EVERY INDIVIDUAL
- ✓ IDEAL FOR PERSONALIZED RESEARCH/MEDICINE
- ✓ CUSTOMER-SPECIFIC CELL ISOLATION
- ✓ BROAD DONOR PORTFOLIO (IN VITRO DIVERSITY)
- ✓ EARLY KIDNEY-SPECIFIC ANALYSIS CAN SPEED UP R&D
- ✓ PERFECT SOURCE FOR INDUCED PLURIPOTENT STEM CELLS (IPSCs)
- ✓ HIGH UNDERLYING CLINICAL POTENTIAL



# CELL PRODUCTS AND CELL-SERVICES FOR PRE-CLINICAL APPLICATIONS



## Cell Products & Services

## Customers

## Applications

Kidney Stem Cells

iPSC lines

Off-the-shelf & on-demand

CROs

Pharma

Research Institutes

Kidney Toxicology (PoC)

Disease Modelling (PoC)

Clinical applications possible

\*PoC: Proof-of-Concept established



# URICELL ALIGNS WITH CURRENT GLOBAL MARKET GROWTH TRENDS



## Market Figures

Drug Discovery: 53 Bio. €, CAGR: 8%  
Stem Cells: 11 Bio. €, CAGR: 9%



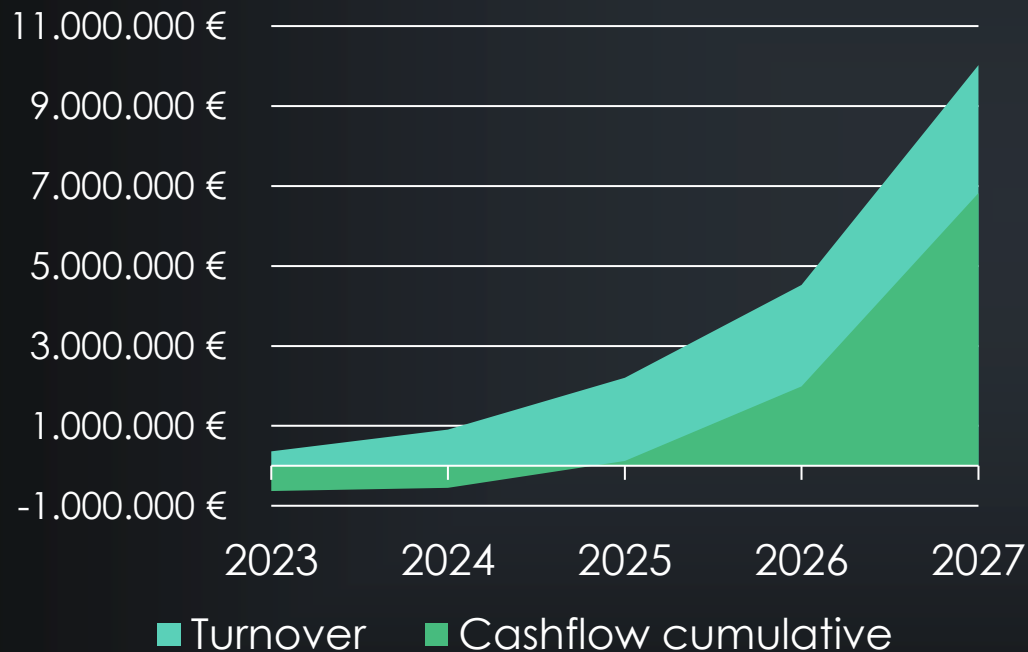
## Business Case

More than 200 potential customers identified in DACH region  
Customer need: up to 100 Mio.  
Cells per project (value of 200.000€)

- SUBSTITUTION OF ANIMAL MODELS WITH MORE HUMAN RELEVANT MODELS
- TREND OF PERSONALIZED RESEARCH/MEDICINE
- INCREASING IMPORTANCE OF STEM CELLS IN R&D AND THERAPY

# COME SIT WITH US AT THE CAP TABLE!

## TOTAL INVESTMENT NEED: 630.000€



- ✓ CURRENTLY EXIST-FT FINANCED
- ✓ 630K € TO ENABLE PREDICTED GROWTH IN PRE-CLINICAL AREA
- ✓ BREAK EVEN WILL BE REACHED IN 2024
- ✓ 180K € EXIST-FT II CAN BE UNLOCKED
- ✓ 450K € EXTERNAL INVESTMENT NEEDED



# DEVELOPMENTAL STAGE WILL ALLOW FAST MARKET ENTRY

- MARKET LAUNCH OF CELL PRODUCTS & SERVICES
- PATENT APPLICATION

- SALES OF 100.000€
- MARKET LAUNCH iPSCs

**Q2 2022**

**Q3 2022**

**Q4 2022**

**Q1 2023**

- FOUNDATION OF URICELL GMBH
- ASSET-TRANSFER FROM UNIVERSITY
- OPERATIONAL & LEGAL SETUP

- SALES OF 50.000€
- FIRST FINANCING ROUND



# PIONEERS IN URINE-DERIVED KIDNEY STEM CELLS



**Dr. Lucas Spitzhorn**  
Founder, Scientist



**Audrey Ncube**  
Founder, Scientist



**Prof. Dr. James Adjaye**  
Founder, Institute Director



**Lea May**  
Leading Lab Tech

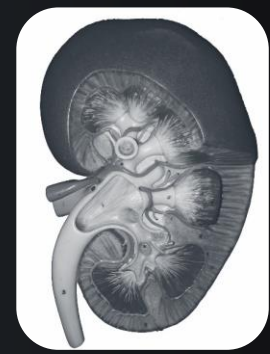
# URICELL: KIDNEY STEM CELL PRODUCTS FOR PRE-CLINICAL APPLICATIONS

Urine as a Source for Kidney Stem Cells

Enabling of more efficient R&D processes

[www.uricell.de](http://www.uricell.de)

[info@uricell.de](mailto:info@uricell.de)



UKD Universitätsklinikum Düsseldorf  
hhu Heinrich Heine Universität Düsseldorf  
ISRM Institut für Stem Cell Research und Regenerative Medizin  
Startup 4MED  
cedus CENTER FOR ENTREPRENEURSHIP DÜSSELDORF  
Gefördert durch:  
Bundesministerium für Wirtschaft und Energie  
aufgrund eines Beschlusses des Deutschen Bundestag  
eXIST Existenzgründungen aus der Wissenschaft  
ESF Europäischer Sozialfonds für Deutschland  
Europäische Union  
Zusammen. Zukunft. Gestalten.