



DD*in*

DRUG DISCOVERY INSIGHTS

EVOTEC AND BAYER PARTNER TO FIGHT KIDNEY DISEASES

Tremendous medical need
with limited treatment options

Moving forward to become a global leader in nephrology

Mission

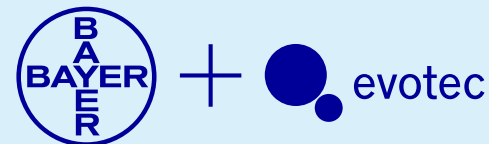
- ▶ Goal of developing multiple clinical candidates for the treatment of kidney diseases within five years
- ▶ Both parties will contribute innovative drug targets and a comprehensive set of high-quality technology platforms

Background

- ▶ No disease-modifying drug available
- ▶ There are not nearly enough kidneys for all the transplants that are needed in patients

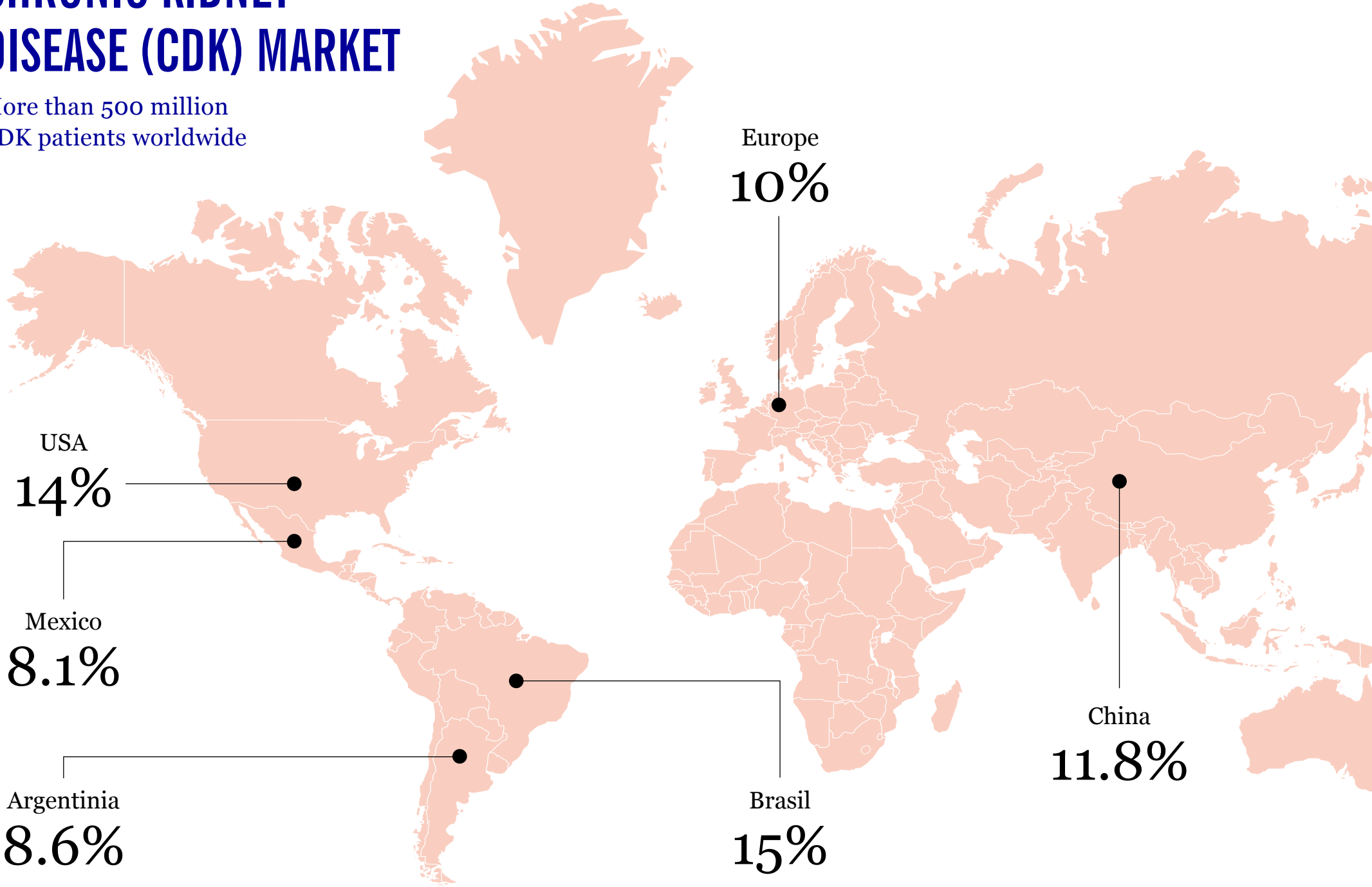
Agreement with Bayer

- ▶ Minimum of €14 m including research payments and an undisclosed licence fee
- ▶ Potential pre-clinical, clinical and sales milestone payments of potentially over €300 m; tiered royalties of up to a low double-digit percentage of net sales
- ▶ Integrated collaboration with substantial efforts from both partners
- ▶ Strategic five-year collaboration



CHRONIC KIDNEY DISEASE (CDK) MARKET

More than 500 million CDK patients worldwide

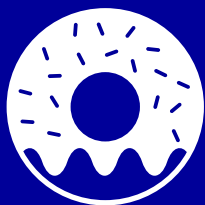


DID YOU KNOW?

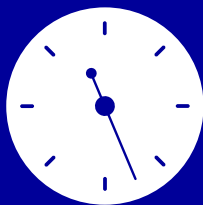
FACTS ABOUT THE KIDNEY



OUR KIDNEYS FILTER
180 LITERS
OF PRIMARY
URINE
**PER
DAY**



THE TWO MAIN CAUSES OF
CHRONIC KIDNEY DISEASE
ARE **DIABETES** AND
HIGH BLOOD PRESSURE



EACH KIDNEY HAS ROUGHLY
1.25 MILLION NEPHRONS



MARCH 9 IS WORLD KIDNEY DAY
INFORMATION ON WORLDKIDNEYDAY.ORG

Global facts about chronic kidney disease (CKD)

- ▶ **10% of the population worldwide** is affected by CKD
- ▶ According the 2013 Global Burden of Disease study, **CKD was ranked 27th** in the list of causes of total number of deaths worldwide in 1990, but rose to **13th in 2013**. According to the US CDC, kidney disease is the **9th** leading cause of death in the US.
- ▶ **Over 2 million people worldwide** currently receive treatment with dialysis or a kidney transplant to stay alive, yet this number may only represent 10% of people who actually need treatment to live.

Huge economic burden

- ▶ In the US, treatment of CKD is likely to exceed **\$48 billion** per year.
- ▶ In Australia, the cost of treating all current and new cases of ESKD to 2020 is estimated at **\$12 billion**. The annual cost of dialysis per patient per year varies between 50,000 and 80,000 AUD depending on the type of treatment.
- ▶ In England, according to a recent report published by NHS Kidney Care, chronic kidney disease costs more than breast, lung, colon and skin cancer combined.

Sources

<https://www.kidney.org/kidneydisease/global-facts-about-kidney-disease>
http://www.cdc.gov/diabetes/projects/pdfs/ckd_summary.pdf

2010 Global Burden of Disease study

<http://www.dgfn.eu/patienten/basisinformationen-zur-nephrologie.html>
<http://www.thelancet.com/campaigns/kidney/updates/chronic-kidney-disease-impact-on-global-burden-of-mortality-and-morbidity>

CHRONIC KIDNEY DISEASE (CKD) END STAGE RENAL DISEASE (ESRD) ACUTE KIDNEY INJURY (AKI)

CKD is a devastating disease with limited treatment options driven by diabetes and hypertension

PREVALENCE OF DIABETES

29 million
patients in the USA

422 million
patients worldwide

More than
35%
of adults with
diabetes suffer from CKD

PREVALANCE HYPERTENSION

70 million
patients in the USA

According to WHO
nearly **40%** of adults aged
25 and over had **raised**
blood pressure in 2008

Every year, hypertension
causes more than
25.000
new cases of kidney
failure in the USA

Early stage CKD usually goes undiagnosed as patients do not feel any symptoms. CKD almost always develops into ESRD, which necessitates renal replacement therapy. Survival rates for ESRD are very poor, about 50% of patients starting on dialysis today will be dead by the end of 3 years!

CKD/ESRD/AKI – FATAL DISEASES HAVE THREE THINGS IN COMMON:

- ▶ NO CURE OR DISEASE MODIFYING DRUGS
- ▶ HUGE ECONOMIC BURDEN
- ▶ DRUGS WHICH FIGHT THE CAUSES ARE URGENTLY NEEDED

In end-stage kidney disease, kidney functions can be replaced only by dialysis or by kidney transplantation. The planning for dialysis and transplantation is usually started in Stage 4 of chronic kidney disease.



CureNephron

A broad portfolio of assets and possibilities and multiple approaches

The initiative was initiated in January 2012 with Harvard and Brigham and Women's Hospital, aimed at discovering and developing new biomarkers and treatments in the field of kidney disease.