# Indian Chronic Kidney Disease (ICKD) study

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### Facts

- About 8-11% of Indians have early stages of CKD.
- The rate of progression of CKD and risk of developing CVD is heterogeneous.
- Identification of high risk subjects will allow targeted application of prevention steps.

## **Partners:**

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# Supporters:

Department of Biotechnology, Government of India

## Background:

- Economic development and changing lifestyle habits are increasingly having a significant impact on public health in developing nations, like India there is an increasing prevalence of Chronic Kidney Disease (CKD) due to an increase in risk factors such as diabetes, high blood pressure and obesity.
- CKD increases patient morbidity and mortality mainly due to progression to end-stage renal disease and a disproportionate increase in the risk of cardiovascular disease (CVD).

#### Aims:

• This study aims to evaluate the predictive power of nontraditional risk factors and biologically important biomarkers on clinically relevant health outcomes in the Indian CKD population.

## Methods:

• The ICKD study will establish a large cohort of Indian patients with moderate kidney failure (40-60% reduction in kidney function) by enrolling 5000 patients cared for at 8 centers nationwide, who will be prospectively followed for a minimum of five years.



#### Impact:

- The study will be fundamental to enhancing our understanding of the causes of CKD-associated illness as well as the design and implementation of effective therapies. It will facilitate exploration of markers of kidney disease severity, progression, and elevated risk for CVD.
- Apart from opportunities for gene expression profiling and genotyping, the study will also include additional approaches of modern technologies such as proteomics and metabolomics to identify yet unknown biochemical and genetic biomarkers of CKD progression and CVD complications.

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#### Contact

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