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## How do the kidneys repair themselves?

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## **How do the kidneys repair themselves?**

Kidneys are among the most complex organs in the human body. Each kidney is made up of a million tube-like filters called nephrons that filter over 150 liters of blood per day! The complex architecture of the kidney enables most of the filtered water and substances to be recycled while excreting those in excess as urine. However, the kidneys are injured commonly, and this can be extremely messy. Imagine having millions of USB cables tangled up in your wallet, and you have to find the one that is broken. Luckily, kidney cells have a remarkable capacity to repair themselves by quickly removing any damaged cells. To study this important function, we simulated the injury state and identified signalling switches that can potentially regulate this process in kidney cells. Our knowledge will help you better understand the self-repairing function of the kidneys and potentially lead to novel therapeutics for kidney injuries.