

## **CDRI, Lucknow and Zydus to develop drug for chronic kidney disease induced osteoporosis**

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**To develop oral medication through the discovery of small molecule inhibitors of Sclerostin**



Based on research conducted at Central Drug Research Institute (CDRI), Lucknow and data from antibody-based therapies (biologics), a protein Sclerostin, has emerged as a promising drug target for treating chronic kidney disease (CKD) induced osteoporosis as well as postmenopausal osteoporosis.

Studies suggest that the protein Sclerostin plays a key role in the dysregulation of bone metabolism. In patients with advanced stages of CKD and osteoporosis, Sclerostin levels are observed to be high.

To develop oral medication through the discovery of small molecule inhibitors of Sclerostin, a collaborative research agreement has been signed by Zydus Lifesciences, Ahmedabad and CDRI.

Under this agreement, CDRI and Zydus will jointly undertake preclinical research. Any drug candidate emerging from the efforts will be developed by Zydus for India and other markets.

CKD affects over 10% of the global population, posing significant health challenges. One of the major complications of CKD is disruption of mineral metabolism, increasing the risk of osteoporosis and fractures. Those above the age of 65, particularly women, are at higher risk. Unfortunately, most of the conventional anti-osteoporosis medications are contraindicated in patients with CKD, due to the risk of worsening renal function. Therefore, there is an urgent need to develop safe and effective drugs for osteoporosis that will reduce fracture risk without a deterioration of renal function.