

**Citation (summary) on the outstanding research work on which award is claimed**

Dr. Rimesh Pal is an Assistant Professor in the Department of Endocrinology at the Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh. His epidemiological work on sarcopenia and bone and mineral metabolism is pioneering. Working with his team, Dr. Pal has conducted an epidemiological survey in Chandigarh (Chandigarh Urban Bone Epidemiological Study, Acronym: CUBES). After having recruited nearly 900 ostensibly healthy subjects, the database has been used to generate the long-awaited normative data on metabolic bone profile (serum calcium, inorganic phosphate, alkaline phosphatase), bone mineral density, bone turnover markers and muscle mass/muscle strength in ostensibly healthy community-dwelling North Indian adults. In addition, for the first time ever, Dr. Pal have derived indigenous cut-offs of low muscle mass/muscle strength for defining sarcopenia and using these cut-offs, they have found out the prevalence of sarcopenia and sarcopenic obesity in apparently healthy adult Indian population. It is noteworthy that using Caucasian cut-offs to define sarcopenia/sarcopenic obesity and osteoporosis/osteopenia in Indians leads to overestimation of these clinical entities as Indians have lower muscle mass/strength and bone mineral density compared to Caucasians, respectively.

The aforementioned indigenous normative data is of paramount importance and will pave the way for further research in the field of sarcopenia and sarcopenic obesity, which is hitherto lagging in the country. In fact, the cut-offs have been recommended by the Research Society for the Study of Diabetes in India (RSSDI) for the diagnosis of sarcopenia and sarcopenic obesity in Indian adults in their clinical practice recommendations published in 2022.

