

## **Computer aided screening of secreted frizzled-related protein 4 (SFRP4): a potential control to diabetes mellitus**

### **ABSTRACT**

Diabetes mellitus is a life threatening disease and scientists are doing their best to find a cost effective and permanent treatment of this malady. The recent trend is to control the disease by target base inhibiting of enzymes or proteins. Secreted frizzled-related protein 4 (SFRP4) is found to cause five times more risk of diabetes when expressed above average levels. This study was therefore designed to analyze the SFRP4 and to find its potential inhibitors. SFRP4 was analyzed by bio-informatics tools of sequence tool and structure tool. A total of three potential inhibitors of SFRP4 were found, namely cyclothiazide, clopamide and perindopril. These inhibitors showed significant interactions with SFRP4 as compared to other inhibitors as well as control (acetohexamide). The findings suggest the possible treatment of diabetes mellitus type 2 by inhibiting the SFRP4 using the inhibitors cyclothiazide, clopamide and perindopril.

**Keyword:** Bioscreening; Clopamide; Cyclothiazide; Diabetes mellitus; Perindopril; SFRP4