ABSTRACT:
The antedrug concept was introduced by Lee and Soliman in 1982. Antedrug is defined as an active synthetic
derivative that is designed to undergo biotransformation to the readily excretable inactive form upon entry in the
systemic circulation, thus minimizing systemic side effects and increasing the therapeutic indices. A hybrid of
prodrug and antedrug concepts came out as the pro-antedrug. The cost, complexity and length in development
of a new therapeutic drug, in addition to the adverse drug reactions, the potential risk factors causing the
withdrawal of the drugs from the market, have made the approach of antedrug design unique and attractive to
the scientists involved in drug design. Since its first introduction, the antedrug concept is well accepted by the
Pharmaceutical industries like Glaxo Wellcome Inc., who is actively pursuing development of steroidal anti-
inflammatory antedrug and Johnson & Johnson, who is developing cytokine inhibiting antedrugs. In this
seminar, the development of three types of antedrugs and a brief application of pro-antedrug will be presented.

References: