Amino acid chions: a tool for asymmetric steroidal and nonsteroidal in quest for anticancer agents

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The amino acids have been utilized for the construction of steroidal and non-steroidal architectures in quest for steroidomimetics. Chirality derived from amino acid based architectures provides a new avenue to incorporate chiral chemical space within steroids which is otherwise obtained through several synthetic steps. The interesting ligand-receptor interactions arise from the use of either enantiomer of amino acids that have been introduced in chiral steroidal and nonsteroidal backbone. The ring D of steroidal architectures can be mimicked with proline and phenyl group of amino acid tyrosine in quest for anti breast cancer agents. Diverse synthetic approaches along with their mechanism of action will be discussed.

References