Title: Recent Advances in Developmental Signaling

Pathway Inhibitors for the Treatment of Cancer

Aims & Scope:

During the last ten years, the development of inhibitors that target the hedgehog (Hh), Wnt/β-catenin, and notch pathways has received significant interest in both industry and academia. Recent discoveries, such as the rise of resistant forms of Hh signaling and the identification of porcupine and tankyrase 1 and 2 as targets for Wnt inhibition, have fueled the continued development of small molecule inhibitors of these pathways. More recently, the bone morphogenic protein (BMP) and hippo signaling pathways have emerged and drug discovery/medicinal chemistry efforts to target these pathways are on the rise.

Keywords:

Cancer, Hh signaling pathway, tumor.

Subtopics:

1. Hh signaling pathway and tumor development and progression.
2. The development of hedgehog pathway inhibitors that target Smoothened.
3. Hedgehog pathway inhibitors that function upstream or downstream of Smoothened.
4. Wnt/β-Catenin signaling in cancer.
5. Small molecule inhibitors of Wnt signaling as cancer chemotherapeutics
6. The current state of notch inhibition as an anti-cancer therapeutic strategy.
8. The emergence of hippo signaling as a therapeutic strategy for cancer drug development.

Schedule:

Submission deadline: March, 2015