Clustering and Summarizing MEDLINE Abstracts

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The QCS Information Retrieval Engine

Query – Retrieve exact matches & related abstracts.
Cluster – Group abstracts by topic.
Summarize – Present a summary of each cluster.
C-kit proto-oncogene product (KIT, CD117) is a tyrosine kinase growth factor receptor for stem cell factor. Loss-of-function mutations of the c-kit receptor tyrosine kinase (KIT) result in depletion of mast cells and interstitial cells of Cajal (ICCs). Mutations of c-KIT causing spontaneous activation of the KIT receptor kinase are associated with sporadic adult human mastocytosis (SAHM) and with human gastrointestinal stromal tumors. Six indolamine tyrosine kinase inhibitors were characterized for their ability to inhibit Kit kinase and for their effects on the growth of small cell lung cancer (SCLC) cell lines. **Mean Score: 85**  **Number of documents: 19**

There were c-kit mutations in 66.6% of benign GISTs (14/21), 83.3% of the malignant (5/6), and 40% of the cases of intermediate malignancy (2/5). In vitro studies suggest that GISTs with regulatory-region KIT mutations are more likely to respond to STI-571 than are GISTs with enzymatic-region mutations. In both Exons 9 and 13, single mutations could be identified, whereas no mutations were found in Exon 17. A minority of GISTs lack demonstrable KIT mutations, but KIT is nonetheless strongly activated. A low frequency of mutations in benign GISTs, as reported previously by other researchers, could not be observed in our panel. **Mean Score: 62**  **Number of documents: 20**

DNA was amplified by polymerase chain reaction, using primers designed to amplify a segment of the KIT gene exon 11 and sequenced on an ABI Prism 377 DNA sequence analyzer (Applied Biosystems, Indianapolis, Indiana, U.S.A.). Immunohistochemical staining for CD117 (the KIT gene product) was performed on sections from 12 cell blocks and 7 surgical resections. A family with multiple gastrointestinal stromal tumors (GISTs), a new type of germline mutation of KIT gene, and dysphagia is reported. DNA was extracted from cytologic preparations from all patients (15 cell blocks, 1 alcohol-fixed smear) and seven subsequent resection specimens. **Mean Score: 62**  **Number of documents: 12**
Enter a query

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