



Investigation of Z-E Isomerism in Sunitinib Anticancer drug

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ABSTRACT

Z-E isomerization in sunitinib, an important anticancer drug, has been investigated. The influence of light, heat and solvent was studied and the isomerizations were monitored by HPLC. As expected, the extent of Z-E isomerization (conversion of the Z-isomer into the undesired E-isomer) is found to depend on these parameters. In addition, both reversible and irreversible isomerizations were observed when the solutions were kept in dark following the exposures to light. These observations have implications in the analysis of sunitinib samples using HPLC methods.

Keywords: Sunitinib, Z-E isomerism, photo-isomerization and thermal-isomerization.
