The Importance of Hsp27 for Cancer Patients

Hsp27 is expressed in response to a wide variety of physiological and environmental insults including anticancer chemotherapy, allowing tumor cells to survive lethal conditions.

Several mechanisms are thought to account for the cytoprotective effect of Hsp27:

* In cancer cells, the expression of Hsp27 is abnormally high, and Hsp27 may participate in oncogenesis and in chemoresistance.
* In rodent models, Hsp27 over-expression increases tumor growth and metastatic potential.
* The depletion or inhibition of Hsp27 frequently reduces the size of tumors and can even cause their complete regression.

These observations have led to Hsp27 becoming a novel target in cancer biology and its inhibition a new strategy in the development of innovative therapeutics like RP101.