

RP101 Mode Of Action Elucidated: Heat Shock Protein Hsp27

RESprotect Elucidates The Mode Of Action Of Its Anti-Cancer Drug RP101: Binding To Heat Shock Protein Hsp27

Dresden, Germany – March 31, 2009 – RESprotect GmbH today announced that its anti-cancer drug RP101 is the first small molecule known to bind to heat shock protein Hsp27 and modulate its effect. High levels of Hsp27 have recently been detected in leukemias, osteosarcomas, malignant melanomas, and cancers of pancreatic, breast, ovarian, colon, liver, kidney, gastric, lung, endometrial, and prostate origin. Especially high levels of Hsp27 are observed in metastatic tissues compared to non metastatic tissues. Hsp27 is known to play a role in the following tumour cell functions:

- * Resistance to treatment with cytotoxic drugs
- * Development of metastases
- * Prevention of apoptosis

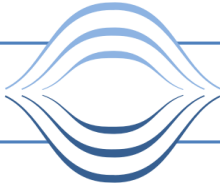
The number of reports that describe the importance of Hsp27 in pathologies is increasing exponentially and the need for drugs that modulate the activity of this target is rising fast. The discovery of appropriate drugs is made challenging by the fact that the tri-dimensional structures of human Hsp27 is still not known.

"We are delighted to present data highlighting RP101 as the first small molecule to modulate Hsp27. The impressive effects of RP101 co-treatment seen in our two previous studies in patients with pancreatic cancer are now better understood. RP101 appears to enhance not only the sensitivity of responders, but sensitizes non-responders to chemotherapy, as well" said Prof. Rudolf Fahrig, Chief Executive Officer and founder of RESprotect GmbH.

About RP101

RP101 is a nucleoside analogue which has been evaluated in pre-clinical and clinical studies for its potential to prevent induction of chemo-resistance and enhance chemo-sensitivity. RP101 co-treatment has been shown to rapidly induce cell death, or apoptosis, and suppresses the expression of genes associated with drug resistance. RP101 has shown biological activity in pre-clinical and clinical studies for various cancer indications suggesting broad activity.

To date, in two separate, unrelated small clinical trials RP101 was used in combination with gemcitabine (the current standard of care) or gemcitabine + cisplatin to treat patients with late-stage pancreatic cancer. The results published (Fahrig, et al., *Anti-Cancer Drugs* 17, 2006, 1045-56), demonstrated that RP101 co-treatment approximately doubled median survival. Moreover, in patients with stage IV disease and far



metastases who received co-treatment, the one year survival rate was 67% or 40% compared to 13% or 7% for patients treated with chemotherapy alone. RP101 has also been shown to be very well tolerated, with no known side effects.

About RESprotect

RESprotect GmbH is a privately owned Biotech Company located in Dresden, Germany. Research at RESprotect is focusing on unique approaches that inhibit both chemoresistance and the enhancement of chemosensitivity in combination. RESprotect is looking for an appropriate partner(s) to develop RP101 in Europe, South America and Asia and its follow-on compounds worldwide.

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