

Competitive Advantage of RP101

A number of reports have described the growing recognition of Hsp27 in multiple pathologies and there has been a concurrent, exponential increase in the search for drugs that modulate the activity of this target. However the discovery of such drugs is made challenging by the fact that the tri-dimensional structures of human Hsp27 is still unknown.

The only drug in development is an antisense molecule. Antisense molecules interact with complementary strands of nucleic acids, modifying expression of genes. Although the theory of antisense is elegant, in practice antisense molecules have not proved particularly effective in the past. Therefore, antisense molecules are not competitive to a small molecule binding directly with a disease-causing protein molecule especially if this can be given orally like RP101.

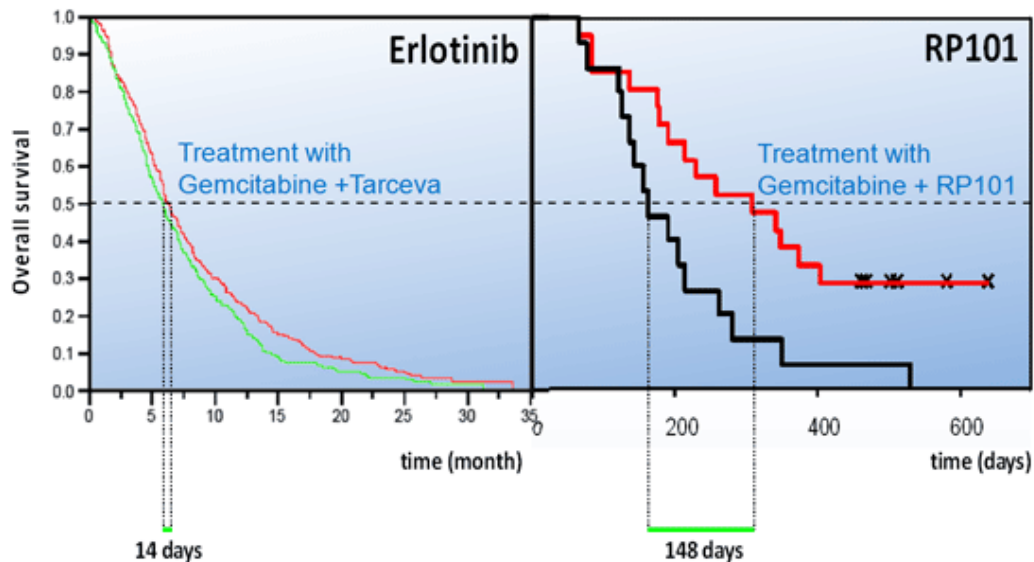
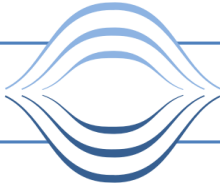
RP101 is the first small molecule known to bind to Hsp27 and to modulate its effect.

- * RP101 is given as co-treatment to chemotherapy.
- * RP101 is no competitor to chemotherapeutics.
- * It is no competitor to any drug on the market - it enlarges the market.

Efficiency

- * RP101 + gemcitabine appear to be some 10 fold more effective in pancreatic cancer patients than Tarceva + gemcitabine.

The competitors: Tarceva (Erlotinib) phase III study. Result of comparison: RP101 is ten times more effective than Tarceva:



The Figure shows the comparison of effects: Probability of survival according to Kaplan-Meier. Left: Red line = Tarceva co-treatment group; green line = chemotherapy alone group; Right: Red line = RP101 co-treatment group; black line = chemotherapy alone group. Every step presents a deceased patient, every -x- a living patient. The dashed line shows the median survival of the patients. The green lines (bottom) represent the enhancement of median survival either by Tarceva (14 days) or by RP101 co-treatment (148 days).

Other observations of our studies are:

RP101 + gemcitabine appears to be some fivefold more effective in patients with metastatic disease than gemcitabine alone.

RP101 + gemcitabine + cisplatin appears to be some fourfold more effective in patients with metastatic disease than gemcitabine + cisplatin.

All patients respond to the co-treatment with RP101.