

Company Announcement – No. 64

## Medical Prognosis Institute A/S – MPI's DRP for identification of patients who benefit from 5-FU treatment – data published in PLOS ONE

**Hoersholm, Denmark; May 12th, 2016 – Medical Prognosis Institute A/S announces that positive data on their Drug Response Predictor (DRP), has been published in the journal PLOS ONE with the title: “Cell line derived 5-FU and irinotecan drug-sensitivity profiles evaluated in adjuvant colon cancer trial data.” Data from a prospective randomized clinical trial was analyzed with the unique DRP tool. The DRP™ for 5-FU could identify which patients benefitted from treatment with 5-FU. When looking at overall survival the patients with the most positive predictor have twice the survival rate of the patients with poor prediction.**

*“The publication in PLOS ONE is another important mile stone documenting the solid data on the Drug Response Predictor – DRP™ – both demonstrated in prospective, retrospective and blinded clinical studies – this time in collaboration with an international well known academic group. All calculations were done by external researchers that are independent from MPI”*  
**said Adjunct professor Peter Buhl Jensen, M.D., DMSc and CEO of Medical Prognosis Institute.**

*“5-FU is one of the most important chemotherapeutics which is widely used around the world – and yet there is until now no biomarker in clinic to tell whether a patient is likely to benefit from the treatment or not. I believe that the specific 5-FU DRP™ has potential to increase the survival rate of cancer patients”* **Peter Buhl Jensen further added.**

In this international collaboration between MPI and two independent public science groups gene expression from tumors from 636 stage III colon cancer patients was evaluated. Conclusion was that “The 5-FU predictor was prognostic in stage III patients in PETACC-3 but not in stage II patients with no adjuvant therapy. This suggests a potential predictive ability of the 5-FU sensitivity profile to identify colon cancer patients who may benefit from 5-FU.”

Selected data from the publication shows that the 5-FU specific DRP™ in PETACC-3 showed a statistically significant association with relapse free survival (RFS) (hazard ratio (HR) = 0.54 (0.41-0.71),  $p < 1e-05$ ) and overall survival (HR = 0.47 (0.34-0.63),  $p < 1e-06$ ). The effect of the 5-FU profile remained significant in a multivariable model, adjusting for several relevant clinical and tissue specific parameters.

**Please find the full publication on: [PLOS ONE](https://doi.org/10.1371/journal.pone.0155881)**

### About MPI

Medical Prognosis is a publicly traded international company specialized in improving cancer patients lives by developing Personalized Medicine using its unique DRP™ technology. MPI's exceptional opportunity to personalize cancer treatment - begins with Breast Cancer moving on to Multiple Myeloma and Prostate Cancer as the first steps. MPI's DRP™ tool has shown its ability to separate patients who benefit and who do not benefit from a specific cancer treatment. This has been shown in as many as 29 out of 37 trials, and covers more than 80 anti-cancer treatments in a wide range of cancer indications. MPI has built a significant large database with over 1,000 screened breast cancer patients and is building up a database in Multiple Myeloma to be followed by Prostate cancer in collaboration with oncologists and hematologists throughout Denmark.

### About MPI's multiple biomarker called Drug Response Predictor - DRP™

MPI's DRP™ is a tool for developing tumor-derived genetic signatures to predict which cancer patients are high likely to respond to a given anti-cancer product. The DRP™ has been tested in 37 trials, where 29 trials showed that drug-specific DRP™ Biomarkers could predict which patients responded well to the treatment. The DRP™ platform has amongst others been externally validated and published in collaboration with leading statisticians at the MD Anderson Cancer Center. The DRP™ method can be used to design the Clinical Development Plan, i.e. to select which indications are relevant for a given anti-cancer drug. In addition to this, the individual genetic patterns of patients can be analyzed as part of a screening procedure for a clinical trial to ensure inclusion of patients with a high likelihood of response to the drug. DRP™ builds on comparison between sensitive and resistant human cancer cell lines, including genomic information from cell lines combined with clinical tumor biology and clinical correlates in a systems biology network. MicroRNA is used on certain products whereas the messengerRNA is more broadly useable and more validated. The DRP™ platform can be used in all cancer types, and has been patented for more than 60 anti-cancer drugs in the US.

### For further information, please contact

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