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## Press Release

### Antisense Pharma GmbH sticks to its Policy: Classical Antisense PTOs against Key Multimodal Targets

REGENSBURG, GERMANY – September 4th, 2003. Antisense Pharma clearly focuses on the drug development for cancer treatment by combining precise selection of key cancer target molecules and DNA based phosphorothioate oligonucleotides (PTO). This policy is confirmed by the positive data from phase I/II high-grade glioma clinical trials of the company's lead product, AP 12009.

"Most of the antisense drugs currently under development target tumor factors that do not play a central role in tumor progression. Thus, their inhibition can be easily compensated by tumor defense mechanisms" said Dr. Gerhard Stauder, Chief Scientific Officer of Antisense Pharma. "This might be the main reason for the unsatisfactory results of clinical trials with an anti-PKC- $\alpha$  molecule". In contrast, the drugs of Antisense Pharma target key tumor factors, such as the most potent immunosuppressor Transforming Growth Factor-beta (TGF- $\beta$ ), thus reversing the tumor induced immunoblockade as well as inhibiting tumor proliferation and metastasis. Antisense Pharma believes, that choosing the right target for antisense drugs is as important for the clinical success as for therapeutic antibodies.

Antisense Pharma found no benefit using so-called 2<sup>nd</sup> or 3<sup>rd</sup> generation chemistry against its targets and is convinced that DNA based PTOs are still the best choice. RNA based antisense oligonucleotides (siRNA or Ribozymes) lack essential properties. Since they are double-stranded there is no cellular uptake in vivo. Thus they did not show any therapeutical potential so far. Dr. Reimar Schlingensiepen, Chief Operating Officer, adds: "Due to the enormous development and manufacturing costs of the second and third generation of PTOs, for example 2'-O-methylethoxy oligos, morpholinos and peptide nucleic acids, only the so-called first generation provides an optimal cost-benefit ratio." At present PTOs are the only antisense substance class with a validated drug chemistry and an already proven clinical efficacy.

The combination of both antisense technology and key multimodal targets constitutes the unique therapeutic approach of the anti-cancer drugs developed by Antisense Pharma.

This press release contains forward-looking statements with respect to the future business of Antisense Pharma GmbH. By their nature, forward-looking statements and forecasts involve risks and uncertainties because they relate to events and depend on circumstances that could occur in the future. There are a number of factors that could cause actual results and developments to differ materially. Antisense Pharma GmbH disclaims any intent or obligation to update any of these forward-looking statements.