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## **PRESS RELEASE**

### **AVESTHAGEN moves towards Clinicals of its biosimilar AVENT™**

**Bangalore. June 1, 2010:** AVESTHAGEN announced that it has successfully completed the pre-Clinical efficacy trial for one of its biosimilar drugs AVENT™ at Biomedcode Hellas S.A. The results indicate that AVENT™ developed by Avesthagen is effective in addressing arthritic conditions. The global sales of the commercially available reference drug were around \$ 6.58 billion in 2009.

AVENT™ is the biosimilar version of a fully humanized soluble tumor necrosis factor (TNF) receptor. AVENT™ is indicated for reducing signs and symptoms, in patients with moderate to severe Rheumatoid Arthritis, ankylosing spondylitis, plaque psoriasis, psoriatic arthritis and Juvenile Idiopathic Arthritis.

Pre-Clinical Efficacy of AVENT™ was carried out in a USFDA accredited human TNF transgenic murine model for Rheumatoid Arthritis. In these mice, the human TNF $\alpha$  gene is over-expressed which results in a progressive arthritic phenotype that is similar to that observed in humans. The results show that Avesthagen's biosimilar AVENT™ was effective in preventing the arthritic pathology developing in the transgenic mice when compared to control mice. Marked improvement was also evident in the group of mice treated with AVENT™ in comparison to control group of mice, in all scores measured, namely statistically significant arthritis inhibition of ~60% in histopathology and ~80% with in-life clinical measurements.

Avesthagen has successfully developed a proprietary expression vector technology pAVGEN™ to generate high protein yielding mammalian cell lines. The AVENT™ cell line have been developed using this proprietary technology. This product is currently being scaled up for Clinical Trials at Inno Biologics facility in Malaysia.

The bioPharmaceutical division at Avesthagen has developed a pipeline of biosimilars using mammalian expression systems, four of which have been granted regulatory approval by the RCGM for initiating pre-clinical toxicity and efficacy studies. Avesthagen's biosimilars address a wide range of areas including autoimmune disease, cancer, sepsis, anemia, cardiovascular disorders and bone health. At present four molecules are in advanced stage of development. Avesthagen has initiated the manufacture of its biosimilars in Malaysia for clinical studies.

As per Dr.Viloo Morawala Patell, CMD, Avesthagen Limited, "Avesthagen is making progress in its biosimilars program as per schedule to provide cost effective healthcare solutions."

**About Avesthagen:**

AVESTHAGEN LIMITED ([www.avesthagen.com](http://www.avesthagen.com)) is an integrated systems biology platform company that focuses on achieving convergence of food, pharma and population genetics leading to predictive preventive and personalized healthcare. It employs 400 people worldwide and is headquartered in Bangalore. It began business operations in 2001. Since its inception Avesthagen has grown into one of India's innovative biotech companies that in addition to its agri-biotechnologies product pipeline has developed scientifically validated botanical bioActives derived from Indian medicinal plants. Avesthagen has developed a pipeline of bio-similar drugs. Avesthagen Limited has four strategic business units: bioPharmaceuticals, bioNutrition, bioAgriculture and Science & Innovation and collaborates at every stage in the value chain with appropriate partners, both public and private.

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