

## **Avecia launches Toolkit for production of Antibody Fragments**

**Tees Valley, 08 May 2009** : Avecia Biologics has announced it has created a 'toolkit' of technologies to meet the production challenges for the next generation of antibody-based therapeutics.

The toolkit consists of four elements, bringing together Avecia's high yield microbial expression system - pAVEway™ - with innovative downstream technologies for purification, refold and PEGylation. Using Avecia's expertise in these areas, the company offers its clients rapid process development, combined with tested and well understood platforms applicable to a wide range of antibody fragment types and alternative scaffolds.

The first element of the 'toolkit' is Avecia's award-winning pAVEway™ technology, comprising innovative vectors, selected host strains and highly optimised production systems, giving rapid and efficient antibody fragment expression and scale up.

Purification technology forms the second part of the package, with Avecia's recent development of two complementary purification technologies for use with antibody fragments produced in microbial systems. The first - a universal platform – offers optimised screening for rapid selection and has been demonstrated on a range of antibody fragments. The second is an affinity platform, and has high selectivity for antibody fragments, even at low concentration.

The third element of the 'toolkit' is a Refold platform, where Avecia has developed a rapid optimisation procedure for protein refolding. The company's experience includes the successful use of refolding in the clinical manufacture of over 25 different products.

The final part of the offering is PEGylation technology. PEGylation is the method of choice for improving the pharmacokinetic properties and immunogenicity profiles of proteins, including antibody fragments. Avecia has a track record of success with maleimide PEGylation and is now also collaborating with PolyTherics, a company specialising in precision engineering of protein half-life, to apply its proprietary technologies to antibody fragments.

Dr Mark Carver, Chief Scientific Officer at Avecia Biologics, said: "Packaging our capabilities for antibody fragment production together in this way will enable our customers to choose the elements most applicable to the development of their molecule. We are committed to being at the forefront of technologies which will help deliver robust and reliable production processes rapidly to our clients, thereby reducing their time to clinic".

**About Avecia**

*Avecia is a privately owned biotechnology group of companies with recognised leading positions in the process development and manufacture of biopharmaceutical and oligonucleotide medicines. The Group's Biologics Business, based in Tees Valley, UK has been developing processes and making protein-based biologics to cGMP since 1998. Products currently being worked on include medicines targeted at forms of cancer, heart conditions, stroke, growth and blood disorders. In Milford, MA, the group's OligoMedicines business carries out process development and the manufacture of oligonucleotide therapeutics by sequential solid state synthesis to produce pharmaceuticals comprised of short strands of DNA or RNA. Customers range from some of the world's largest pharmaceutical companies to small innovative biotech start-up businesses.*

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