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Pneumagen reveals preclinical proof-of-concept in oncology for Neumonco

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The study results demonstrate that Pneumagenâ??s oncology targeted mCBMs, known as Neumoncoâ?¢, significantly inhibits tumour growth in an orthotopic mouse xenograft model of human ovarian cancer



Pneumagen Ltd, focused on treating infectious disease and oncology by targeting the human glycome, has announced promising *in vivo* data in oncology from a novel Carbohydrate Binding Module (mCBM) generated from its proprietary GlycoTarge™ platform.

The study results demonstrate that Pneumagen's oncology targeted mCBMs, known as Neumonco™, significantly inhibits tumour growth in an orthotopic mouse xenograft model of human ovarian cancer. In this study Neumonco was administered intraperitoneally into mice for the first time and tumour growth was measured using bioluminescence imaging. Results demonstrated tolerability and efficacy, yielding a statistically significant inhibition in tumour mass compared to the control group. *In vitro* data has previously demonstrated that mCBMs target cancer cells directly, reducing cancer cell proliferation, migration, and altering metabolism.

Pneumagen's platform technology, GlycoTarge, has generated a portfolio of engineered oligomers of monomeric carbohydrate binding modules (CBMs), derived from carbohydrate-active enzymes. These CBMs are genetically linked in tandem, with a trimerisation domain, resulting in multivalent proteins (mCBMs) with greatly increased binding affinities for their respective glycan targets. Pneumagen is utilising this technology for a universal treatment of respiratory tract infections (RTIs) but has now shown this platform has direct utility in the emerging and exciting area of novel glycan-targeted cancer therapeutics.

Douglas Thomson, CEO of Pneumagen, said: "We are very excited by these results from our first *in vivo* oncology study demonstrating the efficacy of our platform. We now intend to progress our lead Neumonco candidate to the next stage of development as well as extending further the GlycoTarge platform in cancer."

Pneumagens' oncology research has been funded in part by a SMART: SCOTLAND grant from Scottish Enterprise. SMART:SCOTLAND awards aim to support ambitious R&D projects by SMEs based in Scotland.