Proteome Sciences plc

CK1D Development Update

7th August, 2012 Proteome Sciences has achieved further milestones in the development of inhibitors of the casein kinase 1 delta (CK1d) target in its Alzheimer's disease portfolio. A second round of structure activity relationship (SAR) modelling of the most active and selective CK1d inhibitors has produced a marked improvement in activity and selectivity against the main anti-target.

Following successful in silico modelling and screening of CK1d a panel of over 600 candidate compounds were identified. To date, around half of these have been tested in an in vitro assay with a good percentage of those tested showing strong activity. After the first round of SAR two compounds PS110 and PS278 were shown to knock down levels of Tau phosphorylation in a recently published human neuronal cell line model over-expressing Tau protein, as measured using proprietary pTau 2.0 & 3.0 assays that are only available through PS Biomarker Services.

In the latest round of SAR analysis we have significantly improved the anti-Ck1d activity of both compounds and for PS278 also substantially improved its selectivity by over seven-fold against the main anti-target. Further profiling of the developed SAR compounds including in vitro and in vivo pharmacokinetic studies will be completed during the summer and evaluation of biological activity assessed in a whole organism model with results expected in the autumn.

"The extensive CK1D in vitro testing programme has been matched with innovative modelling software and has led to new areas of synthetic interest. Molecules from this programme are being tested and early data suggests greater potency and selectivity. Confirmation of these studies will allow selection of the molecules to enter the key in vivo studies in Q3/4 2012." Professor Bill Dawson, non-executive director of Proteome Sciences said, adding "I am delighted to see the successful interaction between the biological modelling and informatics programmes. It is key to explore the chemical space effectively and quickly so that these interesting series may be rapidly exploited."

Ends

For further information please contact:

Proteome Sciences plc
Christopher Pearce, Chief Executive Officer — Tel: +44 (0)1932 865065
Dr. Ian Pike, Chief Operating Officer

Nominated Adviser
Cenkos
Stephen Keys/Camilla Hume — Tel: +44 (0)20 7397 8900

Public Relations
FTI Consulting
Ben Atwell / Simon Conway / Mo Noonan
Tel: +44 (0)20 7269 7116

IKON Associates
Adrian Shaw
Tel: +44 (0)1483 271291

Notes to Editors:

About Proteome Sciences
Proteome Sciences is a global leader in applied proteomics and peptidomics offering high sensitivity, proprietary technologies for protein and peptide biomarker discovery, validation and assay development.

Its PS Biomarker Services™ uses isobaric and isotopic Tandem Mass Tag® (TMT®) workflows developed on the latest Orbitrap Velos and TSQ Vantage mass spectrometers to deliver rapid, robust and reproducible biomarker assay development for customers in the pharmaceutical, diagnostic and biotechnology sectors. Services are provided from its ISO 9001: 2008 accredited facilities in Frankfurt, Germany. By combining Selected Reaction Monitoring (SRM) and TMT workflows highly multiplexed assays can be developed rapidly and are suitable for screening hundreds of candidate biomarkers in larger validation studies and can be transferred for immunoassay development. The Company's own research has discovered a large number of novel protein biomarkers in key human diseases and is focused mainly in neurological/neurodegenerative conditions and in cancer. It has discovered and patented blood biomarkers, including Alzheimer's disease, stroke, brain damage and lung cancer for diagnostic and treatment applications that are available for license or are already outlicensed. Proteome Sciences, based in Cobham, UK, with facilities in London and Frankfurt, delivers outsourced proteomics services and proprietary biomarkers/biomarker assays to pharmaceutical, biotechnology and diagnostics companies.

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