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Qlucore announces 3 year license from Europe's largest biopharmaceutical company

Software to help Actelion visualize and analyze “big data”

[Qlucore](#), a world leader in the development of bioinformatics software, has announced a three year license contract with Actelion, one of Europe’s leading biopharmaceutical companies.

Actelion is a leader in the science and medicine of pulmonary arterial hypertension (PAH), and its understanding of the complex pathways and molecular mechanisms of this disease has enabled the development of tailored medicines that can make a real difference to patient outcomes. With over 15 years of experience, Actelion’s Drug Discovery group, based in Allschwil, Switzerland combines state-of-the-art technology with human expertise and teamwork. Scientists use an inquisitive drug hunting approach to discover and develop novel medicines to improve patients' lives. Actelion has over 100 medicinal and process chemists creating low molecular weight compounds which go through a cyclical drug discovery process for optimization. These innovative compounds are then characterized by molecular biologists and biochemists in relation to the chosen molecular drug targets.

Actelion has been using Qlucore Omics Explorer for exploration and analysis of large data sets, mainly within Translation Science, since 2011. One of the most pressing challenges facing scientists today is what’s known as “big data” - complex datasets that have grown so large that they become nearly impossible to analyse using traditional tools.

“We are delighted that Actelion is making this long-term commitment to Qlucore with the multi-year license.” commented Carl-Johan Ivarsson, President of Qlucore **“This shows the confidence that Actelion has in our product and is an endorsement of not only of our software but the working relationship between our two companies.”**

For scientists and researchers the benefits of working with larger and larger data sets allows them to spot trends and ultimately help in the fight against human disease. However, faced with such large volumes of data, it is often very difficult – if not impossible – for scientists to derive any real biological meaning from their findings with the naked eye alone and researchers face big problems and delays trying to analyze the sheer quantity of data.

Qlucore Omics Explorer features the latest [data visualisation techniques](#) and presentation technologies which is making it much easier for researchers to examine enormous quantities of data, to test different hypothesis much more quickly, and to explore alternative scenarios within seconds, all without having to rely exclusively on the help of specialist bioinformaticians and biostatisticians.

Biologists within Actelion’s research organizations have become more active in data analysis and exploration by using Qlucore Omics Explorer. Actelion plans to increase its use of Qlucore’s software, extending to more research teams by placing this 3 years license order.

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About Qlucore

[Qlucore](#) was founded in 2007 as a collaborative research project at Sweden’s Lund University. The firm was supported by researchers from the Departments of Mathematics and Clinical Genetics to address the vast amount of high-dimensional data generated with microarray gene expression

analysis. It was recognized that an interactive software tool based on visualization was needed to conceptualize the ideas evolving from research collaboration.

The basic concept behind the software is to provide a tool that can take full advantage of the most powerful pattern recognition system that exists - the human brain. The result is an extremely fast core software engine which enables the user to handle and filter high dimensional data (big data) and instantly visualize it in 3D. This assists the user in identifying hidden structures and patterns.

The latest version of the software, [Qlucore Omics Explorer](#), is used by scientists in more than 20 countries and is a key tool among other biologists and medical doctors to creatively analyze their experiment data. The Company's customers are mainly from the Life-science and Biotech areas.

One of the key methods used by Qlucore Omics Explorer to visualize data is dynamic principal component analysis (PCA), an innovative way of combining PCA analysis with immediate user interaction. PCA analysis works by projecting high dimensional data down to lower dimensions. The specific projections of the high-dimensional data are chosen in order to maintain as much variance as possible in the projected data set. With Qlucore Omics Explorer, data is projected and plotted on the two dimensional computer screen and then rotated manually or automatically.

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