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*Contact:  
Paul Edwards, President and CEO  
617-520-1000*

### **Icosystem Announces Successful Lead Optimization Proof-of-Concept Project**

(May 23, 2004, Cambridge, MA) -- Overall pharmaceutical productivity may soon increase as Icosystem – the leader at applying research from Complexity Science to real world problems – today announced the success of a project aimed at making the drug discovery process more efficient.

In a project originally unveiled in December 2003, Icosystem collaborated with an unnamed major pharmaceutical company to develop a proof-of-concept platform that applies Icosystem's proprietary technology to the Lead Optimization phase of a specific development project, helping the company identify its strongest drug candidate molecules.

Icosystem scientists developed a platform to enable the application of a number of proprietary technologies to the identification of alternative Lead Series for a retrospective cardiovascular project.

Prior to the partnership with Icosystem, the pharmaceutical company was able to identify possible candidates, although it required several years of synthesis and activity centered on a limited number of series structures.

However, when using Icosystem's platform, the collaborator's chemistry staff were able to quickly and efficiently identify several new potential series, all considered to be chemically reasonable and worthy of investigation.

According to Eric Bonabeau, founder of Icosystem and its Chairman and Chief Scientist, the Icosystem platform assists pharmaceutical companies by improving their ability to identify additional viable candidates during the more uncertain stages of research and development operations.

“There are many aspects of the Lead Optimization phase of drug discovery that render classic optimization approaches inappropriate,” Bonabeau said. “For example, the space of possible solutions is vast, the priorities between different criteria are highly dynamic, and human intuition and experience play a very significant role in the evaluation of potential solutions.”

With an extensive background in artificial intelligence and software development, Dr. Ihsan Ecemis led the Icosystem project team. Ecemis had high praise for all involved.

“Producing a robust platform that would enable the combination of computational and medicinal chemistry expertise to address this specific problem within the tight timeframe was a considerable challenge,” said Ecemis. “However, we had a first rate team involved, both from Icosystem and from our collaborator.”

Icosystem is currently evaluating alternative directions for the further development and commercial exploitation of its environment.

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Based in Cambridge, MA, Icosystem uses the tools of complexity science and advanced computational techniques to provide a highly flexible and cost-effective technology platform for exploring business issues and discovering or designing strategies that have significant potential impact. Icosystem's approach uses realistic models of complex business environments and evolutionary and distributed computational techniques to validate new business ventures or improve the performance of existing enterprises.

More information on Icosystem can be obtained by contacting [info@icosystem.com](mailto:info@icosystem.com) or by calling 617-520-1000.