



News Release

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Dicerna Selected as Top Biotech to Watch for Windhover's 2010 Euro-Biotech Forum

Company Also to Present at SMI's 5th Conference on RNAi, siRNA and miRNA

WATERTOWN, Mass. – June 23, 2010 – Dicerna Pharmaceuticals, Inc. (Dicerna), a second generation RNA interference (RNAi) company developing novel therapeutics utilizing its proprietary Dicer Substrate Technology™ and Dicer Substrate siRNA (DsiRNA) molecules, today announced that it was named one of the Top Biotech Companies to Watch for Windhover's 17th Annual Euro-Biotech Forum, being held June 28-30, 2010 in Paris. Windhover's Top Biotech Companies to Watch winners will be honored on Tuesday, June 29 and Martin D. Williams, senior vice president and chief business officer, will present a company overview at 5:00 p.m. the same day.

“We are very pleased to be selected as a Top Biotech Company to Watch by Windhover, which recognizes companies with unpartnered preclinical or clinical stage assets that have applications in one or more specific therapeutic spaces of interest to pharmaceutical partners,” said Douglas Fambrough, Ph.D., chief executive officer at Dicerna. “We continue to build momentum on the partnering front with two strategic alliances announced earlier this year; the first with Kyowa Hakko Kirin for DsiRNA pharmaceuticals and drug delivery systems, and the second with Ipsen to research and develop novel DsiRNA therapeutics with targeted delivery in oncology and endocrinology. This nomination is a testament to the promise of RNAi therapeutics, and specifically to Dicerna's novel, second generation approach based on the company's Dicer Substrate Technology platform.”

Additionally, Roberto Guercioli, M.D., senior vice president of pharmaceutical development, will present on Dicerna's Dicer Substrate Technology and applications of DsiRNA molecules at SMI's 5th Conference on RNAi, siRNA and miRNA on Tuesday, June 29 at 9:50 a.m. in London. Dr. Guercioli will discuss the superior potency and specificity of DsiRNA compared to first generation RNAi approaches, results in *in vivo* tumor models, delivery options, and therapeutic applications of DsiRNA.

About Dicer Substrate RNAi

Dicer is a critical enzyme involved in the RNAi gene silencing cascade and acts as the natural initiation point for this pathway by processing double-stranded RNA so that it can be used for gene silencing. Dicer then delivers these modified small RNA molecules to the mature gene

silencing complex (RISC). Dicerna's synthetic Dicer Substrate siRNA (DsiRNA) molecules are 25 or more base pairs in length and are processed by Dicer. By utilizing this distinct early entry point into the pathway, DsiRNA molecules have greater potency and longer duration of action than other RNAi approaches. In addition, DsiRNA molecules have enhanced delivery potential because their structure creates a natural conjugation point for cellular targeting agents.

About Dicerna

Dicerna Pharmaceuticals is a private, venture-backed RNAi-focused biopharmaceutical company developing novel therapeutic agents and related drug delivery systems in multiple disease areas based on its proprietary Dicer Substrate Technology™ platform and Dicer Substrate siRNA (DsiRNA) molecules. Dicer Substrate Technology is a second generation RNAi approach that results in greater potency, longer duration of action and enhanced delivery potential, differentiating it from other RNAi approaches. Dicerna believes that its Dicer Substrate Technology is based on intellectual property that is both broadly enabling and distinct from other IP in the field. Dicerna has exclusive, worldwide rights to the Dicer Substrate Technology and has the sole right to grant sublicenses to the company's portfolio of Dicer Substrate Technology intellectual property. Dicerna has a major alliance with Kyowa Hakko Kirin for DsiRNA pharmaceuticals and drug delivery systems, initially focused on oncology. The company also has a partnership with Ipsen to research and develop novel DsiRNA therapeutics with targeted delivery in oncology and endocrinology. Dicerna is based in Watertown, Massachusetts. For more information, please visit www.dicerna.com.

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