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Dicerna Pharmaceuticals Secures Exclusive Worldwide Right to Sublicense the Dicer Substrate Technology™ RNAi Platform

Watertown, Mass., March 18, 2009 –Dicerna Pharmaceuticals, Inc. (www.dicerna.com), a second generation RNA interference company developing novel therapeutics utilizing its proprietary Dicer Substrate Technology™, announced today that the company has secured the exclusive, worldwide right to grant sublicenses to the Dicer Substrate RNAi (DsiRNA) intellectual property estate in-licensed by Dicerna. This technology was invented by Dicerna's scientific co-founders John Rossi, Ph.D., professor in the Division of Molecular Biology and dean, Graduate School of Biological Sciences at City of Hope's Beckman Research Institute and Mark Behlke, M.D., Ph.D., vice president of molecular genetics and biophysics, and chief scientific officer at Integrated DNA Technologies.

“We are very pleased to announce that Dicerna has obtained the sole, exclusive right to grant sublicenses to the full portfolio of Dicer Substrate Technology intellectual property, which simplifies the previous license structure for our RNAi technology platform. Going forward, Dicerna is the only company that can grant sublicenses to DsiRNA for pharmaceutical use,” said James Jenson, Ph.D., chief executive officer and co-founder, Dicerna Pharmaceuticals. “Dicer Substrate Technology represents a second generation of gene silencing that can generate drug candidates with greater potency and longer duration of action than earlier RNAi approaches, because of the distinct way in which it engages this important biological pathway. The exclusive right to sublicense the full portfolio of Dicer Substrate Technology puts us in an even stronger position to leverage the development of RNAi-based therapeutics and advance our business strategy.”

Dicerna's pipeline of RNAi-targeted drugs and delivery systems is focused primarily in the therapeutic areas of oncology and metabolic diseases. In addition to these internal focus areas, Dicerna expects to broadly utilize its Dicer Substrate Technology in several other therapeutic areas, such as inflammation, immunology, cardiovascular diseases, and others, through collaborations with pharmaceutical and biotechnology companies.

About RNAi

First described in plants and then in worms, flies and higher organisms, RNA interference (RNAi) is a key cellular mechanism regulating gene expression in both normal and disease processes. Dicer is a critical enzyme involved in the gene-silencing cascade. Dicer processing of double-stranded RNA oligonucleotides of 25 or more base pairs and hand-off to the gene-silencing complex (RISC) results in a five-to-10-fold more potent activity and longer duration of action.

About Dicerna

Dicerna Pharmaceuticals is a private, venture-backed RNAi-focused biopharmaceutical company developing novel therapeutic agents in multiple disease areas based on its proprietary Dicer Substrate Technology platform. Dicerna is developing novel RNAi-based therapies, and related drug delivery systems, that use the engagement of the enzyme Dicer, which is an earlier step in the gene silencing process and a natural initiation point for the RNAi cascade. This distinct biological pathway demonstrates greater potency and a longer duration of action differentiating it from other RNAi approaches and results in the knockdown of expression of a targeted gene in a way that is highly selective and specific. The company 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 full portfolio of Dicer Substrate intellectual property for pharmaceutical use. Dicerna is based in Watertown, Massachusetts. For more information, please visit www.dicerna.com.

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