



News Release

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Dicerna Pharmaceuticals Announces Appointment of Industry Veteran David Madden as Chairman of the Board

WATERTOWN, Mass., July 8, 2009 – Dicerna Pharmaceuticals, Inc., a second generation RNA interference (RNAi) company developing novel therapeutics utilizing its proprietary Dicer Substrate Technology™ and dicer substrate RNA (DsiRNA) molecules, today announced the appointment of pharmaceutical industry veteran David M. Madden as Dicerna's independent chairman of the Board. The appointment was confirmed during the Company's most recent Board of Directors meeting and is effective immediately. Douglas M. Fambrough, Ph.D., general partner with Oxford Biosciences Partners, and previous chairman, remains on the now six-person Dicerna Board.

"I'm very pleased to welcome Mr. Madden as an independent director and chairman of the Board," said James C. Jenson, Ph.D., Dicerna's chief executive officer and co-founder. He added, "David's breadth of experience in the life sciences industry – from the capital markets to corporate leadership – will be an asset to Dicerna as we advance our work to develop next-generation RNAi therapies for cancer and metabolic diseases, utilizing our proprietary Dicer Substrate Technology™ platform." He added, "Doug Fambrough, our prior chairman and Dicerna co-founder and investor, remains on our Board of Directors. Dr. Fambrough is a valuable member of the Board and the Company will continue to benefit from his ongoing contributions."

Mr. Madden has held leadership positions in the biopharmaceutical industry for over 15 years. Most recently, he served as interim chief executive officer for Adolor Corporation, a publicly traded pharmaceutical company with a focus on pain management. Prior to Adolor, Mr. Madden served as co-chief executive officer for Royalty Pharma AG, an investment company focused on intellectual property rights to ethical drugs. Before joining Royalty Pharma, he was president, chief executive officer and director for Selectide Corporation, a drug discovery company focused on combinatorial chemistry. During his tenure there, Selectide was acquired by Marion Merrill Dow and is now part of Sanofi-Aventis. In addition, Mr. Madden is a founder and principal with Narrow River Management, LP, an investment management company with a focus on equity investments in emerging pharmaceutical companies, and he also spent a number of years as vice president with PaineWebber Development Corporation in the biotechnology funding group. Mr. Madden currently serves as chairman of the Board for

Adolor, and is a member of the Board of Trustees for New York City's Hospital for Special Surgery. He holds a B.S. in Electrical Engineering from Union College and a M.B.A. from Columbia University.

Mr. Madden commented, "I look forward to chairing Dicerna's distinguished Board, and contributing to the forward momentum being built by the company in pioneering new and improved targeted therapeutics and drug delivery systems based on gene silencing via RNA interference. Dicerna's unique and proprietary Dicer Substrate Technology™ offers compelling advantages, including significantly greater potency and duration of action against specific targets compared to other RNAi approaches, and the ability to covalently link to a variety of targeting agents to facilitate delivery. I believe Dicerna has what it takes to realize the true potential of this still nascent and very exciting area of drug development."

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. Dicerna is based in Watertown, Massachusetts. For more information, please visit www.dicerna.com.

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