

## United States Patent and Trademark Office upholds key Santaris Pharma A/S LNA patents in two re-examination cases brought by Isis Pharmaceuticals

- *United States Patent and Trademark Office (USPTO) rules in favor of Santaris Pharma A/S in patent re-examination cases for two key Santaris Pharma A/S “Imanishi” patents*
- *Patents cover the 2'-4' bicyclic nucleotides known as LNA (Locked Nucleic Acid) or BNA (Bicyclic Nucleic Acid) chemistry that Santaris Pharma A/S has successfully developed to generate effective RNA-targeted therapies for a wide range of diseases*
- *Santaris Pharma A/S LNA Drug Platform is rapidly becoming the technology-of-choice for partners interested in developing RNA-targeted medicines for unmet medical needs*

**Hoersholm, Denmark/San Diego, California, November 30, 2011** — Santaris Pharma A/S, a clinical-stage biopharmaceutical company focused on the discovery and development of RNA-targeted therapies, today announced that it has won two significant patent re-examination cases brought by Isis Pharmaceuticals, Inc. (Nasdaq: ISIS). The positive rulings by the United States Patent and Trademark Office (USPTO) cover two key Santaris Pharma A/S “Imanishi” patents, U.S. Pat. No. 6,268,490 (the “490 patent”) and U.S. Pat. No. 6,770,748, (the “748 patent”), which claim rights to the Locked Nucleic Acid (LNA) or Bicyclic Nucleic Acid (BNA) chemical structure used for developing antisense molecules.

The United States Patent and Trademark Office (USPTO) revoked the ex parte re-examination of the '490 patent and provided a Notice of Intent to Issue a Reexamination Certificate that confirms the patentability of all claims of the '490 patent owned by Santaris Pharma A/S and is not subject to appeal. In addition, the USPTO issued an Action Closing Prosecution in the inter-partes re-examination of '748 patent, which is a continuation-in-part of the '490 patent, confirming all of the original claims.

“As the leader in developing LNA-based drugs, Santaris Pharma A/S is very pleased that the USPTO has ruled in favor of Santaris Pharma A/S and upheld the company’s “Imanishi” patents,” said Søren Tulstrup, President and CEO of Santaris Pharma A/S. “The USPTO rulings affirm the strong intellectual property position of Santaris Pharma A/S as it continues to develop effective RNA-targeted therapies with high affinity, target specificity and remarkable potency for a range of diseases both internally and with its partners.”

Santaris Pharma A/S LNA Drug Platform combines the company’s proprietary LNA chemistry with its highly specialized and targeted drug development capabilities to rapidly deliver potent single-stranded LNA-based drug candidates across a multitude of disease states including infectious and inflammatory diseases, cardiometabolic disorders, cancer, and rare genetic disorders. The unique combination of pharmaceutical properties, small size and very high affinity of LNA-based drugs allows this new class of antisense drugs to potently and specifically inhibit RNA-targets in many different tissues without the need for complex delivery vehicles.

“The positive USPTO rulings are very important as the Imanishi patents are one of the cornerstones of Santaris Pharma A/S significant patent estate, which broadly covers the 2'-4' bicyclic nucleotide universe,” said Henrik Ørum, PhD, Vice President and Chief Scientific Officer of Santaris Pharma A/S. “Santaris Pharma A/S has dedicated its scientific know-how and expertise to advance LNA-based chemistries into a versatile LNA Drug Platform for the development of new RNA-targeted drugs for human diseases.”

Santaris Pharma A/S has substantial intellectual property rights that includes ownership of more than 60 patent families which cover the LNA chemistry, manufacturing, therapeutic uses in patients and animals and optimal drug designs and drug formats.

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### **About Locked Nucleic Acid (LNA) Drug Platform**

The LNA Drug Platform and Drug Discovery Engine developed by Santaris Pharma A/S combines the company's proprietary LNA chemistry with its highly specialized and targeted drug development capabilities to rapidly deliver LNA-based drug candidates against RNA targets, both mRNA and microRNA, for a range of diseases including infectious and inflammatory diseases, cardiometabolic disorders, cancer and rare genetic disorders. LNA-based drugs are a promising new class of therapeutics that are enabling scientists to develop drug candidates that target previously inaccessible clinical pathways. The LNA Drug Platform overcomes the limitations of earlier antisense and siRNA technologies to deliver potent single-stranded LNA-based drug candidates across a multitude of disease states. The unique combination of small size and very high affinity allows this new class of drug candidates to potently and specifically inhibit RNA targets in many different tissues without the need for complex delivery vehicles. The most important features of LNA-based drugs include excellent specificity providing optimal targeting; increased affinity to targets providing improved potency; and favorable pharmacokinetic and tissue-penetrating properties that allow systemic delivery of these drugs without complex and potentially troublesome delivery vehicles.

### **About Santaris Pharma A/S**

Santaris Pharma A/S is a privately held clinical-stage biopharmaceutical company focused on the discovery and development of RNA-targeted therapies. The LNA Drug Platform and Drug Discovery Engine developed by Santaris Pharma A/S combine the company's proprietary LNA chemistry with its highly specialized and targeted drug development capabilities to rapidly deliver potent single-stranded LNA-based drug candidates across a multitude of disease states. The company's research and development activities focus on infectious diseases and cardiometabolic disorders, while partnerships with major pharmaceutical companies include a range of therapeutic areas including cancer, cardiovascular disease, infectious and inflammatory diseases, and rare genetic disorders. The company has strategic partnerships with miRagen Therapeutics, Shire PLC, Pfizer, GlaxoSmithKline, and Enzon Pharmaceuticals. As part of its broad patent estate, the company holds exclusive worldwide rights to manufacture, have manufactured and sell products that contain LNA as an active ingredient for studies performed with a view to obtaining marketing approval. Santaris Pharma A/S, founded in 2003, is headquartered in Denmark with operations in the United States. Please visit [www.santaris.com](http://www.santaris.com) for more information.

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