Tekmira Announces Filing of Definitive Proxy Statement and Voluntary Delisting from the TSX

Special Meeting of Shareholders to be held March 3, 2015

FOR IMMEDIATE RELEASE: February 4, 2015

Vancouver, B.C. — Tekmira Pharmaceuticals Corporation (Nasdaq: TKMR, TSX: TKM), a leading developer of RNA interference (RNAi) therapeutics, announced today that it has filed a definitive proxy statement with the U.S. Securities and Exchange Commission (SEC) and the Canadian SEDAR filing system, regarding the Agreement and Plan of Merger and Reorganization ("the Merger Agreement") with OnCore Biopharma, Inc., a biopharmaceutical company dedicated to discovering, developing and commercializing an all-oral cure for patients suffering from chronic hepatitis B virus (HBV) infection. This transaction is expected to bring together the companies' broad expertise in antiviral drug discovery and development, Tekmira's Phase I TKM-HBV RNAi therapeutic and OnCore's multiple HBV therapeutic programs, to build a robust portfolio of compounds aimed at eradicating HBV. The merger will create a new global HBV company focused on developing a curative regimen for chronically infected hepatitis B patients by combining multiple therapeutic agents.

About the Merger

Under the Merger Agreement, OnCore will become a wholly-owned subsidiary of Tekmira Pharmaceuticals. In addition, Tekmira security holders will own 50% of the outstanding equity of the combined company, and OnCore security holders will own 50% of the outstanding equity of the combined company, calculated immediately prior to the effective time of the merger on a fully-diluted and as-converted basis using the "treasury stock method."

Special Meeting

The date for the special meeting of shareholders to approve the transaction is scheduled for Tuesday, March 3, 2015 at 10 a.m. Pacific Standard Time. The meeting will be held at the Terminal City Club, located at 837 Hastings Street, Vancouver, British Columbia, Canada, V6C 1B6.

How to Vote

All Tekmira shareholders of record as of the close of business on January 29, 2015 are entitled to vote their shares either in person at the meeting or by proxy, whether or not they attend the special meeting in person. Tekmira's shareholders are encouraged to read

Tekmira's definitive proxy materials in their entirety as they provide, among other things, a detailed discussion of the merger and the reasons behind the Board of Directors' unanimous recommendation to approve the Merger Agreement and the issuance of Tekmira common shares in the merger. If you have any questions or need assistance voting your shares, please contact Tekmira Investor Relations at (604) 419-3200.

Tekmira's Board of Directors has unanimously determined, at a meeting of the Tekmira Board, that the merger with OnCore is in the best interests of Tekmira and is fair to Tekmira's shareholders. **The Tekmira Board unanimously recommends that Tekmira shareholders vote "FOR" the approval of the Merger Agreement and the issuance of Tekmira common shares in the merger.**

The transaction remains subject to closing conditions set forth in the Merger Agreement including, among other conditions, approval of the Merger Agreement and the issuance of Tekmira common shares in the merger by Tekmira's shareholders.

Voluntary Delisting from the Toronto Stock Exchange (TSX)

Tekmira also announced today that it has provided written notice to the Toronto Stock Exchange ("TSX") regarding the voluntary delisting of its common shares. Tekmira anticipates that its common shares will be delisted from the TSX at the close of trading on or about Tuesday, March 3, 2015. Tekmira's listing on NASDAQ represents the primary market for the company's shares, and currently accounts for over 90% of average daily trading volume, providing adequate liquidity for shareholders. The Company believes the limited trading volume of its shares on the TSX no longer justifies the expense and administrative complexity of maintaining this dual listing. Tekmira's common shares will continue to be listed and trade on NASDAQ under the ticker symbol of "TKMR", and its Canadian shareholders will be able to continue to trade through their brokers on that exchange.

IMPORTANT ADDITIONAL INFORMATION WILL BE FILED WITH THE SEC

Tekmira filed a definitive proxy statement with the Securities and Exchange Commission (the "SEC") on February 4, 2015. The definitive proxy statement has also been filed on the Canadian SEDAR filing system at www.sedar.com. It is available on Tekmira's website at www.tekmira.com and is expected to be mailed to its shareholders on or about February 9, 2015. The definitive proxy statement contains important information about the proposed Merger and related matters. INVESTORS AND SHAREHOLDERS ARE URGED TO READ THE PROXY STATEMENT CAREFULLY IN ITS ENTIRETY. Investors and shareholders may obtain free copies of the proxy statement and other documents Tekmira has filed with the SEC through the SEC's website at www.sec.gov, and from Tekmira by contacting Investor

Relations by telephone at (604) 419-3200 or upon written request addressed to Tekmira's corporate secretary at Tekmira Pharmaceuticals Corporation, 100 – 8900 Glenlyon Parkway, Burnaby, BC, Canada, V5J 5J8 or by visiting the Investor section of Tekmira's corporate web site at www.tekmira.com.

Tekmira and its executive officers and directors may be deemed to be participants in the solicitation of proxies from the shareholders of Tekmira in connection with the proposed Merger. Information regarding the interests of these executive officers and directors in the transaction described herein is included in the proxy statement described above. Additional information regarding these executive officers and directors is also included in Tekmira's Annual Report on Form 10-K, which was filed with the SEC on March 28, 2014, and is supplemented by other public filings made, and to be made, with the SEC by Tekmira. The Annual Report on Form 10-K and other public filings are available free of charge through the SEC's website at www.sec.gov and from Tekmira by contacting Investor Relations by telephone at (604) 419-3200 or upon written request addressed to Tekmira's corporate secretary at Tekmira Pharmaceuticals Corporation, Tekmira Pharmaceuticals Corporation, 100 – 8900 Glenlyon Parkway, Burnaby, BC, Canada, V5J 5J8 or by visiting the Investor section on Tekmira's corporate web site at www.tekmira.com.

About RNAi and Tekmira's LNP

RNAi therapeutics have the potential to treat a number of human diseases by "silencing" disease causing genes. The discoverers of RNAi, a gene silencing mechanism used by all cells, were awarded the 2006 Nobel Prize for Physiology or Medicine. RNAi trigger molecules often require delivery technology to be effective as therapeutics. Tekmira believes its LNP technology represents the most advanced and widely adopted delivery technology for the systemic delivery of RNAi triggers. Tekmira's LNP platform is being utilized in multiple clinical trials in various disease areas by Tekmira and its partners. Tekmira's LNP technology (formerly referred to as stable nucleic acid-lipid particles or SNALP) encapsulates RNAi triggers with high efficiency in uniform lipid nanoparticles that are effective in delivering these therapeutic compounds to disease sites. Tekmira's LNP formulations are manufactured by a proprietary method which is robust, scalable and highly reproducible, and LNP-based products have been reviewed by multiple regulatory agencies for use in clinical trials. LNP formulations comprise several lipid components that can be adjusted to suit the specific application.

About Tekmira

Tekmira Pharmaceuticals Corporation is a biopharmaceutical company focused on advancing novel RNAi therapeutics and providing its leading lipid nanoparticle (LNP) delivery technology to pharmaceutical and biotechnology partners. Tekmira has been

working in the field of nucleic acid delivery for over a decade, and has broad intellectual property covering its delivery technology. Further information about Tekmira can be found at www.tekmira.com. Tekmira is based in Vancouver, Canada and Seattle, USA.

About OnCore

OnCore Biopharma, Inc. is a biopharmaceutical company dedicated to discovering, developing and commercializing an all-oral cure for patients suffering from chronic hepatitis B infection, a disease of the liver caused by hepatitis B virus, or HBV. OnCore's founding management team has significant experience developing and commercializing drug candidates targeting infectious liver diseases, including HCV. Leveraging this experience, OnCore is developing a portfolio of drug candidates with multiple mechanisms of action that OnCore believes will ultimately result in a combination therapy to develop a curative regimen for hepatitis B. Specifically, OnCore is seeking to effect a cure by aggressively suppressing HBV replication within liver cells, stimulating and reactivating the body's immune system so that it can mount an effective defense against the virus and, most importantly, eliminating the reservoir of viral genomic material known as covalently closed circular DNA, or cccDNA, that is the source of HBV persistence. OnCore is located at the Pennsylvania Biotechnology Center in Doylestown, Pennsylvania, which is also home to the Hepatitis B Foundation and the Foundation's research center, the Baruch S. Blumberg Institute. For more information, please visit www.oncorebiopharma.com.

Forward-Looking Statements and Information

This press release contains forward-looking statements within the meaning of the Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and forward-looking information within the meaning of Canadian securities laws (collectively, “forward-looking statements”). Forward-looking statements in this news release include statements about the proposed merger of Tekmira and OnCore; calling, holding and obtaining Tekmira shareholder approval for the merger; the anticipated closing of the merger, including receipt of all required regulatory approvals; the voluntary delisting of Tekmira’s common shares on the TSX; and developing a curative regimen for HBV.

With respect to the forward-looking statements contained in this news release, Tekmira has made numerous assumptions regarding, among other things: the ability to obtain required shareholder and regulatory approval for the merger and the timing thereof; the ability to satisfy all conditions for the closing of the merger, including receipt of required regulatory approvals; the subsequent integration of Tekmira and OnCore business and operations; and the effectiveness and commercial viability of the combined company’s products as a treatment for HBV. While Tekmira considers these assumptions to be

reasonable, these assumptions are inherently subject to significant business, economic, competitive, market and social uncertainties and contingencies.

Additionally, there are known and unknown risk factors which could cause Tekmira's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements contained herein. Known risk factors include, among others: the ability of the parties to consummate the proposed merger; satisfaction of closing conditions to the consummation of the proposed merger; the ability to obtain Tekmira shareholder approval for the merger; the ability to obtain any required regulatory approvals and the timing of such, and conditions that may be imposed on the merger; the impact of the announcement or the closing of the merger on Tekmira's or OnCore's relationships with its employees, existing or potential future customers and collaborators; the ability of Tekmira to successfully integrate OnCore's operations and employees in a timely and efficient manner; the ability to realize anticipated synergies and costs savings of the proposed merger; the combined company's HBV product pipeline may not prove to be effective or commercially beneficial in the treatment of HBV; the combined company may not be able to raise additional financing required to fund further research and development, clinical studies, and obtain regulatory approvals, on commercially acceptable terms or at all; and economic and capital market conditions.

A more complete discussion of the risks and uncertainties facing Tekmira appears in the section entitled "Risk Factors" in the definitive proxy statement filed with the SEC, Tekmira's Annual Report on Form 10-K and Tekmira's continuous disclosure filings, which are available at www.sedar.com and at www.sec.gov. All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Tekmira disclaims any obligation to revise or update any such forward-looking statements or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, except as required by law.

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