



## Arbutus and Roivant Launch Genevant Sciences with Industry-Leading Platform to Develop Broad Range of RNA Therapeutics for Genetic Diseases

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- Genevant aims to advance 5-10 product candidates into the clinic by 2020 across RNAi, mRNA, and gene editing modalities using Arbutus' LNP and ligand conjugate platforms
- Genevant will be led by Executive Chairman Paris Panayiotopoulos, former CEO of ARIAD Pharmaceuticals through its 2017 acquisition by Takeda, who is assembling a team of RNA experts
- Dr. Bo Rode Hansen, Global Head of RNA Therapeutics at Roche, will be joining Genevant as President, Chief Scientific Officer, and Head of R&D; Dr. Peter Lutwyche, who led the development of the Arbutus delivery platforms, will join as Chief Technology Officer; Dr. Konstantin Linnik, former Lead Patent Counsel for Oligonucleotide Therapeutics at Pfizer, will join as General Counsel; Dr. James Heyes, key inventor on Arbutus LNP and ligand conjugate patents, will join as SVP; additionally, a scientific team with decades of RNA development and delivery experience will be joining Genevant

CAMBRIDGE, Mass., VANCOUVER, British Columbia, and BASEL, Switzerland, April 11, 2018 (GLOBE NEWSWIRE) -- Arbutus Biopharma Corporation (Nasdaq:ABUS) and Roivant Sciences today announced that they have entered into an agreement to launch Genevant Sciences, a jointly-owned company focused on the discovery, development, and commercialization of a broad range of RNA-based therapeutics enabled by Arbutus' proprietary lipid nanoparticle (LNP) and ligand conjugate delivery technologies.

Arbutus will license exclusive rights to its LNP and ligand conjugate delivery platforms to Genevant for RNA-based applications outside of Hepatitis B virus. Through its expert team and dominant intellectual property in RNA delivery, Genevant plans to develop products in-house and pursue industry partnerships to build a diverse pipeline of therapeutics across multiple modalities, including RNAi, mRNA, and gene editing.

The industry-leading LNP platform developed by Arbutus is the only clinically-validated LNP delivery technology with safety and efficacy evaluated in over 400 patients across multiple clinical programs. It is the first and only LNP platform to enable an approved therapy, and has enabled a second NDA filing through its licensed use by Alnylam Pharmaceuticals for the delivery of patisiran, a therapy to treat patients with hereditary ATTR amyloidosis. This platform is protected by over 125 international patent families. Genevant will also receive a license to a proprietary ligand conjugate technology developed by Arbutus to enable subcutaneous delivery of RNA-based therapeutics.

Biopharmaceutical companies developing nucleic acid therapeutics today include companies singularly focused on individual treatment modalities. Through its proprietary delivery platforms, Genevant is able to pursue mRNA, RNAi, and gene editing modalities and select the optimal approach for any given disease. By 2020, Genevant aims to have 5 to 10 RNA programs in the clinic targeting a range of genetic disorders with limited or no treatment options.

Genevant's Executive Chairman will be Paris Panayiotopoulos. Mr. Panayiotopoulos most recently served as President and Chief Executive Officer and member of the Board of Directors of ARIAD Pharmaceuticals through its acquisition by Takeda Pharmaceuticals in 2017 for \$5.2 billion. Prior to joining ARIAD, Mr. Panayiotopoulos was President of the North American and Japanese biopharmaceutical businesses of Merck KGaA, and President of the Serono Research & Development Institute. Mr. Panayiotopoulos currently serves as a director of The Medicines Company and Corbus Pharmaceuticals, and has previously served on the boards of BIO, MassBio, and EFPIA.

Bo Rode Hansen, Ph.D., will be joining Genevant as President, Chief Scientific Officer, and Head of Research & Development. Dr. Hansen currently serves as Global Head of RNA Therapeutics at Roche and General Manager of the Roche Innovation Center Copenhagen. Dr. Hansen was Vice President for Drug Discovery and Alliance at Santaris Pharma A/S through its acquisition by Roche in 2014. Peter Lutwyche, Ph.D., will join Genevant as Chief Technology Officer and Vancouver Site Head. Dr. Lutwyche most recently served as Chief Technology Officer at Arbutus where he led the development of the company's delivery technologies. Konstantin Linnik, J.D., Ph.D., will join Genevant as General Counsel and Senior Vice President of Intellectual Property and Legal Affairs. Dr. Linnik formerly served as Lead Patent Counsel for Oligonucleotide Therapeutics at Pfizer and was a partner at Nutter McClennen & Fish LLP. James Heyes, Ph.D., will join Genevant as Senior Vice President of Technology Development. Dr. Heyes has 17 years of experience as a lipid chemist discovering and developing novel nucleic acid-delivery platforms. He most recently served as Vice President of Drug Delivery at Arbutus where he was a key inventor on a majority of the company's lipid chemistry and ligand conjugate patents.

Genevant intends to establish its US headquarters in Cambridge, Massachusetts and its principal operating company in Basel, Switzerland. Genevant will also establish its R&D Center of Excellence in Burnaby, British Columbia with a team of core scientists from Arbutus who will join Genevant as part of the transaction. This scientific team has decades of experience in developing RNA therapeutics and delivery technologies.

Under the terms of the agreement, Roivant will contribute \$37.5 million in transaction-related seed capital for Genevant. Roivant is committed to financially support Genevant in its aim to advance 5 to 10 product candidates into the clinic by 2020. Arbutus will retain all rights to the LNP and conjugate delivery platforms for HBV, and will be entitled to a tiered royalty from Genevant on future sales of products enabled by those delivery platforms. Arbutus will also retain the entirety of its royalty entitlement on the commercialization of Alnylam's patisiran, which could see regulatory approval as early as the second half of 2018.

### About RNA Therapeutics

RNA therapeutics, which include RNAi, mRNA, and gene editing approaches, have the potential to modulate and regulate gene expression by up-regulating, down-regulating, eliminating, or correcting disease-causing proteins. The successful application of such therapeutics requires safe and

efficacious intracellular delivery.

### **About Arbutus**

Arbutus Biopharma Corporation is a publicly traded (Nasdaq:ABUS) biopharmaceutical company dedicated to discovering, developing and commercializing a cure for patients suffering from chronic Hepatitis B (HBV) infection. Arbutus is developing multiple drug candidates, each of which have the potential to improve upon the standard of care and contribute to a curative combination regimen for HBV. For more information, visit [www.arbutusbio.com](http://www.arbutusbio.com).

### **About Roivant**

Roivant Sciences is a privately-held company dedicated to transformative innovation in healthcare. Roivant focuses on realizing the full potential of promising biomedical research by developing and commercializing novel therapies across diverse therapeutic areas. Roivant partners with innovative biopharmaceutical companies and academic institutions to ensure that important medicines are rapidly developed and delivered to patients. Roivant's long-range mission is to reduce the time and cost of the drug development process. For more information, please visit [www.roivant.com](http://www.roivant.com).

### **About the Arbutus Special Committee**

The Board of Directors of Arbutus approved the formation of a Special Committee of independent directors, (the "Special Committee") to ascertain whether it would be in the best interests of Arbutus to enter into these agreements with Roivant, and to provide a recommendation to the Board in that regard. MTS Health Partners served as financial advisor for the Special Committee of the Board of Directors of Arbutus and has provided a fairness opinion to the Special Committee.

Further details regarding the partnership with Roivant and Genevant are provided in Arbutus' Form 8-K to be filed with the Securities and Exchange Commission (SEC), and in a material change report being filed with Canadian securities regulators that includes supplementary information required under MI 61-101 – *Protection of Minority Security Holders in Special Transactions* ("MI 61-101"), which has been adopted by certain of the Canadian securities regulators.

### **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"), including, without limitation, statements containing the words "believes," "may," "plans," "will," "estimate," "continue," "anticipates," "intends," "expects," and similar expressions, and the negative of such expressions. These statements are only predictions.

Forward-looking statements should be considered carefully. Undue reliance should not be placed on forward-looking statements and information as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. By their nature, forward-looking statements and information involve numerous assumptions, known and unknown risks and uncertainties, both general and specific, which contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements and information will not occur and may cause actual results or events to differ materially from those anticipated in such forward-looking statements and information.

There are known and unknown risk factors which could cause Arbutus' or Genevant'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: Genevant may not produce the expected level of value for Arbutus and its shareholders, if at all; expected payments, financings, and royalties may not be as large or as timely as expected, if at all; anticipated pre-clinical and clinical trials may be more costly or take longer to complete than anticipated, and may never be initiated or completed, or may not generate results that warrant future development of the tested drug candidate; Arbutus and Genevant may not receive the necessary regulatory approvals for the clinical development of their products on a timely basis, if at all; key management personnel may become unavailable; Genevant may need to shift operating centres; economic and market conditions may worsen; and market shifts may require a change in strategic focus.

A more complete discussion of the risks and uncertainties facing Arbutus appears in Arbutus' Annual Report on Form 10-K and Arbutus' continuous disclosure filings, which are available at [www.sedar.com](http://www.sedar.com) and at [www.sec.gov](http://www.sec.gov). All forward-looking statements herein are qualified in their entirety by this cautionary statement, and Arbutus 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.

As closing of the transaction is contemplated as soon as practicable, this could result in Arbutus' material change report being filed with the Canadian securities regulators less than 21 days before completion of the transaction. In such a circumstance, Arbutus is required, under MI 61-101, to explain why a shorter period is reasonable or necessary in the circumstances. Arbutus believes that a shorter period is both reasonable and necessary given its assessment that closing of the transaction as soon as practicable is in the best interests of Arbutus.

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