



## **NapaJen Pharma and Astellas Pharma Establish Research Collaboration for Discovery and Development of Novel Oligonucleotides**

*Collaboration to Leverage NapaJen's Novel Delivery Technology to Overcome Challenges Associated with Delivery of Oligonucleotide-Based Therapies*

**BURLINGAME, CA AND TOKYO, JAPAN – March 18, 2019** – NapaJen Pharma, Inc., a biotherapeutics company leveraging its proprietary oligonucleotide delivery technology to develop novel agents, today announced that the company has entered into a research collaboration with Astellas Pharma Inc. for the discovery and development of novel oligonucleotide therapeutics. Under terms of the deal, NapaJen will receive an upfront payment and research funding upon execution of the agreement. NapaJen will also be eligible for payments associated with the achievement of key research milestones.

The companies will jointly collaborate on the discovery and creation of novel oligonucleotide drug candidates utilizing NapaJen's novel delivery technology. NapaJen will be responsible for providing Astellas with a therapeutic complex combining the novel oligonucleotide with NapaJen's proprietary schizophyllan delivery vehicle for further development.

“We are very pleased to collaborate with Astellas on the research and development of novel oligonucleotide drug candidates featuring our novel, oligonucleotide delivery technology. NapaJen believes that oligonucleotide-based drugs possess tremendous therapeutic potential and commits to unlock this potential by overcoming the key delivery challenges that have limited the class to date,” said Hironori Ando, co-founder, president and chief executive officer of NapaJen. “We believe that our proprietary delivery technology has the unique potential to efficiently and selectively deliver oligonucleotides to target cells, resulting in the desired therapeutic activity without troubling off-target effects.”

### ***About NapaJen Novel Immune Cell-Targeted Delivery Technology***

NapaJen's proprietary drug delivery platform is designed to overcome delivery limitations that continue to present challenges for the development of oligonucleotide-based therapeutics. The primary challenge in this area is the lack of delivery technologies of oligonucleotides. Due to the high instability, low bioavailability, and poor cellular uptake associated with oligonucleotides, efficient and selective delivery technologies are critical for the development of effective and safe oligonucleotide-based therapeutics. NapaJen's novel, proprietary delivery vehicle is built upon schizophyllan, a beta-glucan that specifically binds to Dectin-1, a cell surface receptor expressed on antigen presenting immune cells, namely dendritic cells and macrophages. By complexing oligonucleotides with schizophyllan, NapaJen's delivery platform uniquely enables the efficient and selective delivery of oligonucleotides to cells playing key roles in regulating immune responses.

### ***About NapaJen***

NapaJen Pharma, Inc. is a clinical-stage, biotherapeutics company leveraging its proprietary immune cell-targeted oligonucleotide delivery technology to develop novel immunotherapeutic agents. Founded in 2004 as a California-based biotech company, NapaJen has developed a proprietary platform technology in which oligonucleotide compounds are stably and selectively delivered to immune cells. Leveraging the versatility of the platform technology, NapaJen aims to create new oligonucleotide therapeutics in the area of immune-related conditions, such as autoimmune diseases, cancer, transplantation and vaccine, through collaborative work with industry and academia. The company's lead therapeutic candidate, NJA-730, is a siRNA drug targeting CD40 that is currently being evaluated in a Phase 1 first-in-human clinical study in healthy volunteers. The compound is initially being developed as a potential treatment for graft-versus-host disease (GVHD), though the company believes there are numerous inflammatory immunoreactive conditions against which the compound may hold therapeutic promise.

For more information, please visit [www.napajen.com](http://www.napajen.com)

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