



NEWS RELEASE

Novation Announces Availability of *Quest* Drug Discovery Assay for Identifying Small Molecule Inhibitors of IL-6

FOR IMMEDIATE RELEASE

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Vancouver, Canada: Novation Pharmaceuticals today announced that it can make available a *Quest* small-molecule drug-discovery assay directed at **IL-6**, a major cytokine involved in inflammation. The *Quest* **IL-6** assay is optimized for high-throughput screening of compound libraries and can rapidly identify potent and selective small-molecules that are able to inhibit IL-6 mediated inflammation.

About IL-6

IL-6 is a multifunctional cytokine secreted by cells to stimulate an immune response to trauma and tissue damage and gives rise to inflammation. High levels of IL-6 are associated with diseases such as Rheumatoid Arthritis, Psoriasis and Crohn's Disease. Aberrant levels of IL-6 have also been associated with certain cancers and Huntington's Disease.

Clinical validation of IL-6 as a therapeutic target has recently been achieved through the use of anti-IL-6 and IL-6 receptor antibodies that have demonstrated significant decrease in RA disease activity and associated joint destruction. Currently available therapies are all biological agents with the drawback of requiring injectable delivery. The *Quest* **IL-6** assay, however, is able to identify potent small molecule compounds that may be developed as orally active therapies. Compounds identified will modulate IL-6 mRNA levels, thereby reducing endogenous protein, without inhibiting the IL-6 receptor. Such compounds would present a significant advance for the treatment inflammatory diseases.

About Novation and the *Quest* Technology

Novation is a product focused Company using *Quest*, a breakthrough drug-discovery technology, harnessing a natural cellular control function, mRNA modulation, to identify new therapeutics for a broad range of diseases. Novation founding scientists were the first to report that it is possible to impact the stability (half-life) of mRNA with small molecules, which observation led to the development of *Quest*.

Messenger RNA (mRNA) links gene activity and subsequent protein expression and is thus an ideal target for therapeutic intervention. In normal cells, regulation of the abundance and stability of mRNA is a key mechanism that determines which proteins get made, how much is produced and for how long. The cell is able to exercise this effect through impacting specific Stability Control Elements (SCEs) present within each individual mRNA. Novation scientists are able to identify the SCEs responsible for



regulating the stability (half-life) of any target mRNA and extract and clone these into a high-throughput reporter gene assay system (the **Quest** technology).

Quest can identify both stimulatory and inhibitory small molecule compounds. Compounds that bring about an increase in stability of a target mRNA may be useful therapeutics for those diseases where there is lack of an essential protein (e.g. Parkinson's disease, anemia etc). Similarly, **Quest** can identify compounds that are able to inhibit the stability of a target mRNA thus causing a down-regulation of inappropriately high levels of proteins involved in certain diseases (e.g. chronic inflammation, cancer, etc).

Importantly, **Quest** can be applied to currently considered intractable or "non-drugable" targets, which have been estimated to make up almost 90% of known therapeutic targets.

The **Quest IL-6** assay is part of a suite of inflammation assays produced by Novation that can be employed to identify small-molecule inhibitors across a range of inflammation targets. Other **Quest** inflammation assays are available for **IL-1 β** and **TNF α** . Further assays are in development. Novation has also completed **Quest** assays for a number of targets of high interest in other disease areas such as cancer, angiogenesis, diabetes and neurodegeneration with other important areas in development. The Company is able to undertake drug discovery programs on behalf of partners, based on disease targets of interest (including non-drugable targets) and deliver potent and selective small molecule compounds which may become major new therapeutics.

The **Quest** technology has already been successfully used to identify potent and selective compounds for previously intractable targets in the areas of cancer and diabetes.

The **Quest** technology provides a completely new approach to drug discovery and opens up the possibility of finding new therapeutics for many diseases currently considered to be intractable. Novation is seeking collaborations in order to discover and advance new compounds for this and other important disease targets. Novation has strong intellectual property related to this approach and believes that it is a leader in the field.

This news release contains certain forward-looking statements. Actual results may differ materially from the statements made as a result of various factors, including, but not limited to, the inherent risks associated with drug discovery, research and development, difficulties or delays in development testing, changes in regulatory affairs, lack of therapeutic efficacy, unacceptable side-effects, the dependence on partners, the inability to raise sufficient finance, the appearance of competitors and other risks generally associated with the biopharmaceutical industry.

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