July 3, 2019

Algernon Pharmaceuticals' NP-120 Reduced Fibrosis in an Idiopathic Pulmonary Fibrosis Study by 56% Outperforming USFDA Approved Treatments Nintedanib and Pirfenidone

Algernon to seek a USFDA Orphan Drug Designation

VANCOUVER, British Columbia, July 03, 2019 (GLOBE NEWSWIRE) -- Algernon Pharmaceuticals Inc. (CSE: AGN) (FRANKFURT: AGW) (OTCB: BTHCF) (the "**Company**" or "**Algernon**"), a clinical stage pharmaceutical development company, is pleased to announce that NP-120, its repurposed lead candidate for treatment of idiopathic pulmonary fibrosis (IPF), showed superiority in reducing fibrosis over two globally approved therapies for IPF, Pirfenidone and Nintedanib, in a well-established *in vivo* animal model study of IPF.

Data from this recent study demonstrated a statistically significant improvement in established fibrosis in a 21-day bleomycin mouse model (treatment began on Day 7):

- Pirfenidone (100 mg/kg, BID), both a positive control and comparator arm in the study, showed a 44% reduction in fibrosis vs untreated controls (not statistically significant) as measured by Trichrome staining and modified Ashcroft scoring.
- Nintedanib (40 mg/kg, QD), a second positive control and comparator arm, and NP-251 (30 mg/kg, TID) both showed a 51% reduction in fibrosis vs untreated controls ($p<0.05$).
- **NP-120 (20 mg/kg, TID) showed a 56.0% reduction in fibrosis vs untreated controls ($p=0.015$).**
- In an earlier experiment, NP-121, which shares the same target and similar pharmacology as NP-120, also reduced fibrosis to a similar level as NP-120 at the same dose, suggesting a class effect of the pharmacophore.
- NP-120 is a drug currently used for neurological indications in Japan, and was originally developed by a global top 10 pharmaceutical company. NP-121 is a repositioned drug that has undergone extensive Phase II and III testing.

"We have now completed two studies from an independent laboratory, confirming that NP-120 is an effective anti-fibrotic agent for IPF," said Christopher J. Moreau, CEO of Algernon Pharmaceuticals. "We believe NP-120 could represent a novel approach to treat IPF and we look forward to advancing our lead into a Phase II clinical trial as quickly as possible to establish human efficacy. We also intend to pursue discussions with the firms responsible for the development of NP-120 and NP-121, and to seek an orphan designation with regulatory authorities."

About IPF

Idiopathic pulmonary fibrosis, an orphan disease, is a type of chronic lung condition characterized by a progressive and irreversible decline in lung function and scarring (fibrosis) of the lungs. There is no cure for IPF and there are currently no procedures or medications that can remove the scarring from the lungs.

According to research and consulting firm GlobalData's latest report, the idiopathic pulmonary fibrosis (IPF) market will rise substantially from just over $900 million in 2015 to $3.2 billion by 2025, representing a projected compound annual growth rate (CAGR) of 13.6%.

About Algernon Pharmaceuticals Inc.

Algernon Pharmaceuticals is a clinical stage pharmaceutical development company focused on advancing its lead compounds for non–alcoholic steatohepatitis (NASH), chronic kidney disease (CKD) inflammatory bowel disease (IBD) and idiopathic pulmonary fibrosis (IPF).

CONTACT INFORMATION

Christopher J. Moreau
CEO
Algernon Pharmaceuticals Inc.
604.398.4175 ext 701

info@algernonpharmaceuticals.com
investors@algernonpharmaceuticals.com
www.algernonpharmaceuticals.com.

The CSE does not accept responsibility for the adequacy or accuracy of this release.

Neither the Canadian Securities Exchange nor its Market Regulator (as that term is defined in the policies of the Canadian Securities Exchange) accepts responsibility for the adequacy or accuracy of this release. The Canadian Securities Exchange has not in any way passed upon the merits of the proposed transaction and has neither approved nor disapproved the contents of this press release.

CAUTIONARY DISCLAIMER STATEMENT: No Securities Exchange has reviewed nor accepts responsibility for the adequacy or accuracy of the content of this news release. This news release contains forward-looking statements relating to product development, licensing, commercialization and regulatory compliance issues and other statements that are not historical facts. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expects" and similar expressions. All statements other than statements of historical fact, included in this release are forward-looking statements that involve risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include the failure to satisfy the conditions of the relevant securities exchange(s) and other risks detailed from time to time in the filings made by the Company with securities regulations. The reader is cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result

of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company. The reader is cautioned not to place undue reliance on any forward-looking information. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are made as of the date of this news release and the Company will update or revise publicly any of the included forward-looking statements as expressly required by applicable law.

Source: Algernon Pharmaceuticals