

180 Life Sciences and University of Oxford Announce Publication of Positive Phase 2b Dupuytren's Disease Study Results in The Lancet Rheumatology

- *The study achieved the primary endpoint of reduction in nodule hardness at 12 months and secondary endpoint of reduction in nodule size at multiple time points including 12 months*
- *The treatment arm showed that nodules continued to soften and regress at the 18-month follow up, nine months after the final dose*
- *Trial funded by the Health Innovation Challenge Fund (Wellcome Trust, Department of Health and Social Care) and 180 Life Sciences, and sponsored by the University of Oxford*

PALO ALTO, Calif., April 29, 2022 (GLOBE NEWSWIRE) -- 180 Life Sciences Corp. (NASDAQ: ATNF) ("180 Life Sciences" or the "Company"), a clinical-stage biotechnology company focused on the development of novel drugs that fulfill unmet needs in inflammatory diseases, fibrosis and pain, in collaboration with the University of Oxford, today announced final results from its Phase 2b study in patients with Dupuytren's disease. The positive data results were published today in *The Lancet Rheumatology*.

"These results present the potential for an earlier treatment for patients with Dupuytren's disease, which is easy to diagnose at an early stage," said James Woody, M.D., Chief Executive Officer of 180 Life Sciences, who continued, "Treatment with anti-TNF injections could bring long lasting respite and prevent the disease from advancing to the stage that surgery is needed to maintain hand function. This study demonstrates that anti-TNF injections into the hand could have a durable response following treatment, potentially delaying or preventing the eventual progression to finger contractions and disability."

Fibrosis of the hand, known as Dupuytren's disease, is a common chronic, progressive condition that causes the fingers to curl irreversibly into the palm and can be very disabling. Approximately 20-35% of patients with a palmar nodule progress to finger contractures. Roughly 12 million patients in the U.S., 2.5 million in the U.K. and 22 million in the EU have Dupuytren's disease. Currently, there is no approved treatment for early-stage disease and patients must wait until the disease progresses with loss of hand function before undergoing surgery or treatment with collagenase. Unfortunately, the disease tends to recur after these treatments.

The Phase 2b trial was designed as a randomized, double-blind, placebo-controlled study to assess the efficacy of local injection of anti-TNF treatment, adalimumab, in participants with

early-stage Dupuytren's disease and was led by Professor Jagdeep Nanchahal, clinician-scientist at the University of Oxford and Chairman of the Clinical Advisory Board at 180 Life Sciences who said: "This trial represents the clinical translation of our laboratory findings where we identified of TNF as a therapeutic target^{2,3}, and the Phase 2a dose ranging clinical trial to identify the optimal dose and formulation⁴ effective in downregulating myofibroblasts." The trial recruited 140 patients from two sites in the U.K. Patients were randomized 1:1 to the treatment arm or placebo. Patients in the treatment arm received four injections of 40mg adalimumab in 0.4ml at baseline, which was determined to be most efficacious in the earlier Phase 2a study, at three, six and nine months. Patients were followed up at 12 and 18 months. Eligibility criteria included adults with early-stage Dupuytren's disease and a clinically distinct nodule with a clear history of progression in the preceding six months. The trial was funded by the Health Innovation Challenge Fund (Wellcome Trust, Department of Health and Social Care) and 180 Life Sciences, and sponsored by the University of Oxford.

The primary endpoint from the Phase 2b trial was nodule hardness at 12 months measured with a durometer. Nodule size, a key secondary endpoint, was measured using an ultrasound scan at 12 and 18 months. Key findings of the study were:

- Nodule hardness was lower in the anti-TNF treatment arm compared to placebo (-4.6AU; 95% CI -7.1 to -2.2; p=<0.0002) at 12 months and decreased further at 18 months (-5.8AU; 95% CI -8.7 to -3.0; p=<0.0001), 9 months after the last injection.
- Nodule size (area), measured using ultrasound scan, was also lower in the anti-TNF treatment arm compared to placebo at 12 months (-8.4mm²; 95% CI -13.8 to -2.9; p=<0.0025), and decreased further at 18 months (-14.4mm²; 95% CI -19.9 to -9.0; p=<0.0001).
- There were no treatment-related serious adverse events in the trial.
- Patient compliance was high, with 84% returning for all 4 injections.
- Fewer patients in the treatment group underwent or were awaiting surgery compared to placebo at 18 months. However, the overall numbers were small and longer-term follow up would be required to confirm this.

"We believe that these results herald a dramatic change in treatment options for Dupuytren's disease," said Professor Sir Marc Feldmann, Founder and Co-Chairman of 180 Life Sciences. "These results show that Anti-TNF injections into the hand can be effective in controlling the palmar nodule, potentially preventing or reducing disease progression and avoiding the need for much more invasive treatments."

In conclusion, the data showed that in patients receiving anti-TNF treatment, nodules continued to soften and regress at the 18-month follow up, which was nine months after the final dose. These results suggest that treatment of early-stage Dupuytren's disease with adalimumab can have a profound local biological effect and potentially provide a much-needed early therapeutic option for patients with a chronic, debilitating disease.

References

1. J. Nanchahal, Anti-Tumour Necrosis Factor Therapy for Early Stage Dupuytren's Disease (RIDD): a phase 2b randomised double blind, placebo-controlled trial. *The Lancet Rheumatology*. **Issue:** pages (2022).
2. L. S. Verjee, Unraveling the signaling pathways promoting fibrosis in Dupuytren's disease reveals TNF as a therapeutic target. *PNAS*. **110 (10)**, E928-E937 (2013).
3. D. Izadi, Identification of TNFR2 and IL-33 as therapeutic targets in localized fibrosis. *Science Advances*. **5(12)**, eaay0370 (2019).
4. J. Nanchahal, Anti-Tumour Necrosis Factor Therapy for Dupuytren's Disease: A Randomised Dose Response Proof of Concept Phase 2a Clinical Trial. *EBioMedicine*. **33**, (282-288) (2018).

About 180 Life Sciences Corp.

180 Life Sciences Corp. is a clinical-stage biotechnology company focused on the development of novel drugs that fulfill unmet needs in inflammatory diseases, fibrosis and pain by leveraging the combined expertise of luminaries in therapeutics from Oxford University, the Hebrew University and Stanford University. 180 Life Sciences is one of the leaders into solving one of the world's biggest drivers of disease – inflammation. The Company is driving groundbreaking studies into clinical programs, which are seeking to develop novel drugs addressing separate areas of inflammation for which there are no effective therapies. The Company's primary platform is a novel program to treat fibrosis using anti-TNF (tumor necrosis factor).

Forward-Looking Statements

This press release includes "forward-looking statements", including information about management's view of the Company's future expectations, plans and prospects, within the safe harbor provisions provided under federal securities laws, including under The Private Securities Litigation Reform Act of 1995 (the "Act"). Words such as "expect," "estimate," "project," "budget," "forecast," "anticipate," "intend," "plan," "may," "will," "could," "should," "believes," "predicts," "potential," "continue" and similar expressions are intended to identify such forward-looking statements. These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from the expected results and, consequently, you should not rely on these forward-looking statements as predictions of future events. These forward-looking statements and factors that may cause such differences include, without limitation, statements about the ability of our clinical trials to demonstrate safety and efficacy of our product candidates, and other positive results; the uncertainties associated with the clinical development and regulatory approval of 180 Life Science's drug candidates, including potential delays in the enrollment and completion of clinical trials; the potential that earlier clinical trials and studies may not be predictive of future results; 180 Life Sciences' reliance on third parties to conduct its clinical trials, enroll patients, and manufacture its preclinical and clinical drug supplies; the ability to come to mutually agreeable terms with such third parties and partners, and the terms of such agreements; estimates of patient populations for 180 Life Sciences planned products; unexpected adverse side effects or inadequate therapeutic efficacy of drug candidates that could limit approval and/or commercialization, or that could result in recalls or product liability claims; 180 Life Sciences' ability to fully comply with numerous federal, state and local laws and regulatory requirements, as well as rules and regulations outside the United States, that apply to its product development activities; the timing of filing, the timing of

governmental review, and outcome of, planned Investigational New Drug (IND) applications for drug candidates; current negative operating cash flows and a need for additional funding to finance our operating plans; the terms of any further financing, which may be highly dilutive and may include onerous terms; statements relating to expectations regarding future agreements relating to the supply of materials and license and commercialization of products; the availability and cost of materials required for trials; the risk that initial drug results will not be able to be replicated in clinical trials or that such drugs selected for clinical development will not be successful; challenges and uncertainties inherent in product research and development, including the uncertainty of clinical success and of obtaining regulatory approvals; uncertainty of commercial success; the inherent risks in early stage drug development including demonstrating efficacy; development time/cost and the regulatory approval process; the progress of our clinical trials; our ability to find and enter into agreements with potential partners; our ability to attract and retain key personnel; changing market and economic conditions; our ability to produce acceptable batches of future products in sufficient quantities; unexpected manufacturing defects; manufacturing difficulties and delays; competition, including technological advances, new products and patents attained by competitors; challenges to patents; product efficacy or safety concerns resulting in product recalls or regulatory action; changes in behavior and spending patterns of purchasers of health care products and services; changes to applicable laws and regulations, including global health care reforms; expectations with respect to future performance, growth and anticipated acquisitions; the continued listing of the Company on The NASDAQ Stock Market; expectations regarding the capitalization, resources and ownership structure of the Company; expectations with respect to future performance, growth and anticipated acquisitions; the ability of the Company to execute its plans to develop and market new drug products and the timing and costs of these development programs; estimates of the size of the markets for its potential drug products; the outcome of current litigation involving the Company; potential future litigation involving the Company or the validity or enforceability of the intellectual property of the Company; global economic conditions; geopolitical events and regulatory changes; the expectations, development plans and anticipated timelines for the Company's drug candidates, pipeline and programs, including collaborations with third parties; access to additional financing, and the potential lack of such financing; and the Company's ability to raise funding in the future and the terms of such funding. These risk factors and others are included from time to time in documents the Company files with the Securities and Exchange Commission, including, but not limited to, its Form 10-Ks, Form 10-Qs and Form 8-Ks, and including the Annual Report on Form 10-K for the year ended December 31, 2021. These reports and filings are available at www.sec.gov. All subsequent written and oral forward-looking statements concerning the Company, the results of the Company's clinical trial results and studies or other matters and attributable to the Company or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements above. Readers are cautioned not to place undue reliance upon any forward-looking statements, which speak only as of the date made, including the forward-looking statements included in this press release, which are made only as of the date hereof. The Company cannot guarantee future results, levels of activity, performance or achievements. Accordingly, you should not place undue reliance on these forward-looking statements. The Company does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement to reflect any change in its expectations or any change in events, conditions or circumstances on which any such statement is based, except as otherwise provided by law.

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