PRESS RELEASE

NicOx' naproxcinod shows differentiated 24-hour blood pressure profile after 13 weeks treatment

The results of the 112 Ambulatory Blood Pressure Monitoring (ABPM) study complete an extensive database in more than 3,000 patients

December 19, 2008. Sophia Antipolis, France. www.nicox.com

NicOx S.A. (Euronext Paris: COX) today announced positive results from the 112 clinical pharmacology study in 299 patients with osteoarthritis (OA) and hypertension, which was designed to characterize the 24-hour blood pressure profile of naproxcinod in comparison to the two most widely used non-steroidal anti-inflammatory drugs (NSAIDs). At week 13, naproxcinod 750 mg bid showed a reduction in systolic blood pressure (SBP) of 2.7 mmHg compared to naproxen 500 mg bid and 3.8 mmHg compared to ibuprofen 600 mg tid, in the ABPM compliant population. Naproxcinod 375 mg bid showed a reduction in SBP of 1.1 mmHg compared to naproxen 250 mg bid and 4.2 mmHg compared to ibuprofen 600 mg tid.

Naproxcinod is the most advanced compound in the new Cyclooxygenase-Inhibiting Nitric Oxide Donator (CINOD) class. COX-2 inhibitors and traditional NSAIDs, such as ibuprofen and naproxen, are widely used as symptomatic treatments for OA. However, there is increasing concern in the medical community over their tendency to raise blood pressure and destabilize previously controlled hypertensive patients.

William B. White, MD, Professor of Medicine in the Cardiology Center at the University of Connecticut School of Medicine, Farmington, commented: *"The risks of developing hypertension in patients with OA and the potential for destabilizing blood pressure control in treated hypertensive patients who receive NSAID therapy are of substantial clinical concern. A new drug for the treatment of OA which is less likely to increase blood pressure would be a useful and welcome therapy for OA patients, particularly those with hypertension."*

"The results from the 112 study demonstrate important differential effects of naproxcinod's 24-hour ABPM profile at 13 weeks, compared to ibuprofen and naproxen, two of the most commonly used NSAIDs," continued **Professor White.** *"Both cardiovascular specialists and rheumatologists place great importance on the additional level of detail provided by the ABPM technique, a method which has become a gold standard in blood pressure measurement in clinical trials and practice. Furthermore, these new results should provide support to the findings from the pooled blood pressure data from the phase 3 program."*

Naproxcinod showed positive efficacy results in a program of three pivotal phase 3 studies in OA patients (301, 302 and 303). Moreover, a pre-specified pooled analysis of the Office Blood Pressure Measurements (OBPMs) collected in 2,734 patients in these trials showed a significant reduction in SBP and diastolic blood pressure (DBP) for both doses of naproxcinod (375 and 750 mg bid) over the whole 13 week period, compared to naproxen 500 mg bid. NicOx plans to submit a New Drug Application (NDA) for naproxcinod to the US Food and Drug Administration (FDA) in mid-2009.

Both doses of naproxcinod showed a blood pressure reduction compared to naproxen and ibuprofen

The 112 study was a 16-week clinical pharmacology trial, with a double-blind, parallel group design, in which 299 OA patients with controlled hypertension were enrolled at 60 clinical sites in the United States (see NOTE 1). Patients were randomized to receive naproxcinod 375 mg bid, naproxcinod 750 mg bid, naproxen 250 mg bid, naproxen 500 mg bid, or ibuprofen 600 mg tid (three times daily) for 13 weeks. The study was not designed to show statistical significance between the treatment arms but rather aimed to explore the 24-hour blood pressure profile of the two naproxcinod doses, in comparison to different NSAIDs. No formal sample size computations were performed in the 112 protocol.

The 24-hour blood pressure monitoring was conducted at baseline and at week 13 using a validated ABPM device. The primary parameter was the mean 24-hour ambulatory SBP as measured by ABPM at week 13. Compared to naproxen 500 mg bid, naproxcinod 750 mg bid lowered SBP by 2.7 mmHg and DBP by 1.4 mmHg, in terms of the mean change from baseline at week 13. Naproxcinod 375 mg bid decreased SBP by 1.1 mmHg and DBP by 0.8 mmHg compared to naproxen 250 mg bid.

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Naproxcinod 750 mg bid showed a 3.8 mmHg decrease in SBP and a 0.7 mmHg decrease in DBP compared to ibuprofen 600 mg tid, in terms of the mean change from baseline at week 13. Naproxcinod 375 mg bid showed a reduction in SBP of 4.2 mmHg and a reduction in DBP of 1.7 mmHg, compared to ibuprofen 600 mg tid.

Naproxcinod 375 mg bid was the treatment with the lowest percentage of patients experiencing at least one adverse event. There were no treatment-related serious adverse events in the study. Far more patients in the ibuprofen arm discontinued due to an adverse event compared to the other treatments.

The 112 results were consistent with those of previous studies and complete an extensive database describing naproxcinod's differentiated blood pressure profile

The 112 study is the last in a program of three clinical pharmacology trials using the ABPM technique in a total of 548 subjects (see NOTE 2 on the 111 and 104 studies) and its results complete a detailed picture of naproxcinod's 24-hour blood pressure profile. In particular, the 112 results complement and confirm the recently reported data from the 111 study, as the 112 study tested corresponding doses of naproxcinod and naproxen in parallel groups, while the 111 study tested escalating doses of naproxcinod and naproxen. The extensive blood pressure data from these three ABPM studies suggest an effect of nitric oxide donation on blood pressure.

Further analyses on the 111 and 112 studies will form the basis of presentations at leading medical conferences and peer reviewed scientific publications during 2009 and 2010.

Pascal Pfister MD, Chief Scientific Officer and Head of Research and Development at NicOx, said: *"With these results we have successfully finalized our extensive program of clinical studies specifically designed to characterize the blood pressure profile of naproxcinod. The 112 results complete a positive and consistent package of OBPM and ABPM data in over 3,000 patients. We have great confidence in this robust clinical database which shows naproxcinod's differentiated blood pressure profile across the dose range and at multiple time points up to 26 weeks."*

NOTE 1: In the 112 study, eligible patients were 40 years and older and had been suffering from osteoarthritis for at least three months, with at least one hip or knee involved. In addition to OA, all patients were diagnosed with controlled essential hypertension (i.e. systolic blood pressure (SBP) <140 mmHg and diastolic blood pressure (DBP) <90 mmHg) and were treated with stable doses of up to two different classes of antihypertensive agents. Patients with uncontrolled hypertension were excluded.

NOTE 2: In the 111 ABPM study, 118 OA patients with controlled hypertension were randomized on a 1:1 basis to receive naproxcinod or naproxen, with escalating doses every three weeks (375, 750 and a supra-therapeutic dose of 1125 mg bid for naproxcinod; 250, 500 and 750 mg bid for naproxen). Naproxcinod showed a statistically significant decrease in SBP of 3.8 mmHg (p=0.011) compared to naproxen over the whole study period. The 104 trial was a cross-over ABPM study in 131 hypertensive volunteers, which was designed to compare the 24-hour blood pressure profiles of naproxcinod 750 mg bid and naproxen 500 mg bid following two weeks of administration.

NicOx (Bloomberg: COX:FP, Reuters: NCOX.PA) is a product-driven biopharmaceutical company dedicated to the development and future commercialization of investigational drugs for unmet medical needs. NicOx is applying its proprietary nitric oxide-donating technology to develop an internal portfolio of New Chemical Entities (NCEs) in the therapeutic areas of inflammatory and cardio-metabolic disease.

Resources are focused on the development and pre-commercialization activities for naproxcinod, a proprietary NCE and the first compound in the Cyclooxygenase-Inhibiting Nitric Oxide-Donating (CINOD) class of anti-inflammatory agents for the treatment of the signs and symptoms of osteoarthritis. Naproxcinod has completed three pivotal phase 3 studies with positive results and the submission of a New Drug Application (NDA) to the US Food and Drug Administration (FDA) is projected for mid-2009.

Beyond naproxcinod, NicOx has a pipeline containing multiple nitric oxide-donating NCEs, which are in development internally and with partners, including Pfizer Inc and Merck & Co., Inc., for the treatment of prevalent and underserved diseases, such as atherosclerosis, hypertension, widespread eye diseases and Chronic Obstructive Pulmonary Disease (COPD).

NicOx S.A. is headquartered in France and is listed on the NYSE Euronext Paris (Compartment B: Mid Caps).

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This press release contains certain forward-looking statements. Although the Company believes its expectations are based on reasonable assumptions, these forward-looking statements are subject to numerous risks and uncertainties, which could cause actual results to differ materially from those anticipated in the forward-looking statements.

For a discussion of risks and uncertainties which could cause actual results, financial condition, performance or achievements of NicOx S.A. to differ from those contained in the forward-looking statements, please refer to the Risk Factors ("Facteurs de Risque") section of the Document de Reference *filed with the AMF, which is available on the AMF website (*http://www.amf-france.org*) or on NicOx S.A.'s website (*http://www.nicox.com*).*

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