

# Nanox Announces AI Software Increases Identification of Patients with Vertebral Compression Fractures, an early sign of Osteoporosis, Up to Six-Fold

March 12, 2024

 According to early findings in the ADOPT study, Nanox.AI software improves detection of key risk factor for osteoporosis, outperforming UK National Health Service national average

- Findings demonstrate real-world impact of integrating AI technology in routine chest and abdomen CT scans to improve detection of spine fracture, an early sign of osteoporosis

PETACH TIKVA, Israel, March 12, 2024 (GLOBE NEWSWIRE) -- NANO-X IMAGING LTD ("Nanox" or the "Company," Nasdaq: NNOX), an innovative medical imaging technology company, and its deep-learning medical imaging analytics subsidiary, Nanox AI Ltd. (Nanox.AI), today announced that early findings from the AI-enabled Detection of OsteoPorosis for Treatment (ADOPT) study, which uses a Nanox.AI artificial intelligence solution, HealthVCF, to review routine CT scans, have identified up to six times more patients with vertebral compression fracture than the national average at National Health Services (NHS) hospitals in the UK, which include University of Oxford and other healthcare centers.

Results from the NHS Falls and Fragility Fracture Audit Programme (FFFAP) show that across ADOPT sites, such as the University Hospital Southampton NHS Foundation Trust, where the HealthVCF bone solution has been deployed, there has been a substantial increase in the rate of patient identification based on spine fractures, surpassing the national average with a remarkable up to sixfold increase in the number of patients identified and included for follow-up in the Fracture Liaison Service (FLS) database.

Thus far in the study, the Nanox.AI algorithm has identified over 2,400 patients with VCF from routine CT scans that were not known to the NHS's hospitals, and have since been flagged for follow-up assessments. The study will continue through February 2025.

"My colleagues and I are encouraged by these findings, which show the potential of an AI-directed pathway for identifying vertebral compression fractures in patients who can then be checked for osteoporosis and start treatments that significantly reduce their fracture risk with benefits to the patient, their family, healthcare system and wider society," said Professor Kassim Javaid, who is leading the research at the Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences (NDORMS), University of Oxford. "Leveraging AI-powered population health solutions presents an effective and efficient avenue for early identification of patients at very high risk of fractures, facilitating timely intervention and care. Proactively identifying and intervening in potential health risks not only preserves well-being but also contributes to significant cost savings and return on investment for the healthcare system."

Osteoporosis is a common progressive bone disease among adults over 50 years of age that causes the bones to weaken, leading to fractures after falls. Unfortunately, certain kinds of fractures, such as VCFs of the spine, are commonly ignored<sup>i</sup> despite being a strong risk factor for osteoporosis, leaving patients untreated, worsening bone health and even higher fracture risk. According to the World Congress of Osteoporosis, an estimated 66% of vertebral compression fractures go undetected or unreported in osteoporosis cases.<sup>II</sup> As modern treatments for osteoporosis lead to rapid improvements in bone strength, they reduce fracture risk and thereby contribute to improved independence in patients with lower healthcare needs.

As such, there have been efforts to introduce FLS into public health systems. An FLS is a proven and internationally recommended healthcare model of a small team of healthcare professionals who follow a patient pathway to deliver systematic identification, assessment, treatment recommendations and monitoring to adults with a recent osteoporotic fracture.<sup>iii</sup>,<sup>iv</sup> A recent systematic review demonstrated that FLS programs yield a positive return on investment in 86.9% of cases with a mean ROI of over ten-fold.<sup>v</sup> These findings underscore the importance of identifying early signs of fracture and implementing preventive care measures, as well as the economic impact of such initiatives.

"Early findings from the ADOPT study not only demonstrate the potential to improve outcomes for individuals with VCFs, but also show potential cost-savings for major health systems that come from early detection and intervention of a life-altering condition like osteoporosis," said Orit Wimpfheimer, Chief Medical Officer at Nanox. "We look forward to upcoming data analysis from additional sites participating in the ADOPT study in the coming year."

Since the ADOPT study's initiation, Nanox.AI has developed an updated version of HealthVCF called HealthOST, which has the ability to highlight low bone mineral density and measure the severity level of detected vertebral compression fractures. The next-generation HealthOST received FDA 510(K) clearance in April 2022.

## About ADOPT

The <u>ADOPT study</u> (Al-enabled **D**etection of **O**steo**P**orosis for **T**reatment), a collaboration between University of Oxford, Nanox.Al, Cambridge University Hospitals NHS Foundation Trust (CUH) and the Royal Osteoporosis Society, and funded by the National Institute for Health and Care Research (NIHR) and National Health Service England (NHSE), is studying the performance of Nanox.Al's HealthVCF artificial intelligence (Al) software to identify vertebral compression fractures (VCF) compared with NHS radiology reports. HealthVCF automatically detects VCFs from routine chest and abdominal CT scans, providing clinicians with actionable information to address potential osteoporosis at an early stage and reduce the risk of complications.

## About Nanox Al

Nanox.AI is the deep-learning medical imaging analytics subsidiary of Nanox. Nanox.AI solutions are developed to target highly prevalent chronic and acute diseases affecting large populations around the world. Leveraging AI technology, Nanox AI helps clinicians extract valuable and actionable clinical insights from routine medical imaging that otherwise may go unnoticed, potentially initiating further medical assessment to establish individual

preventative care pathways for patients. For more information, please visit https://www.nanox.vision/ai.

#### **About Nanox**

Nanox (NASDAQ: NNOX) is focused on applying its proprietary medical imaging technology and solutions to make diagnostic medicine more accessible and affordable across the globe. Nanox's vision is to increase access, reduce costs and enhance the efficiency of routine medical imaging technology and processes, in order to improve early detection and treatment, which Nanox believes is key to helping people achieve better health outcomes, and, ultimately, to save lives. The Nanox ecosystem includes Nanox.ARC— a multi-source Digital Tomosynthesis system that is cost-effective and user-friendly; an Al-based suite of algorithms that augment the readings of routine CT imaging to highlight early signs often related to chronic disease (Nanox.AI); a cloud-based infrastructure (Nanox.CLOUD); and a proprietary decentralized marketplace, through Nanox's subsidiary, USARAD Holdings Inc., that provides remote access to radiology and cardiology experts; and a comprehensive teleradiology services platform (Nanox.MARKETPLACE). Together, Nanox's products and services create a worldwide, innovative, and comprehensive solution that connects medical imaging solutions, from scan to diagnosis. For more information, please visit <u>www.nanox.vision</u>.

#### **Forward-Looking Statements**

This press release contains historical information and forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995 with respect to the business, financial condition and results of operations of Nanox. All statements that are not historical facts contained in this press release are forward-looking statements. Such statements include, but are not limited to, any statements relating to the initiation, timing, progress and results of the Company's research and development, manufacturing, and commercialization activities with respect to its X-ray source technology and the Nanox.ARC, the ability to realize the expected benefits of its recent acquisitions and the projected business prospects of the Company and the acquired companies. In some cases, you can identify forward-looking statements by terminology such as the words "will," "believe," "expect," "intend," "plan," "should," "estimate", "might", "may", "should", "anticipate", "expect", "predict" "potential" and similar expressions which are intended to identify forward-looking statements. Forward-looking statements are based on information the Company has when those statements are made or management's good faith belief as of that time with respect to future events and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Factors that could cause actual results to differ materially from those currently anticipated include: risks related to (i) Nanox's ability to complete development of the Nanox System; (ii) Nanox's ability to successfully demonstrate the feasibility of its technology for commercial applications; (iii) Nanox's expectations regarding the necessity of, timing of filing for, and receipt and maintenance of, regulatory clearances or approvals regarding its technology, the Nanox.ARC and Nanox.CLOUD from regulatory agencies worldwide and its ongoing compliance with applicable quality standards and regulatory requirements; (iv) Nanox's ability to realize the anticipated benefits of the acquisitions, which may be affected by, among other things, competition, brand recognition, the ability of the acquired companies to grow and manage growth profitably and retain their key employees; (v) Nanox's ability to enter into and maintain commercially reasonable arrangements with third-party manufacturers and suppliers to manufacture the Nanox.ARC: (vi) the market acceptance of the Nanox System and the proposed pay-per-scan business model; (vii) Nanox's expectations regarding collaborations with third-parties and their potential benefits; (viii) Nanox's ability to conduct business globally; (ix) changes in global, political, economic, business, competitive, market and regulatory forces; (x) risks related to the current war between Israel and Hamas and any worsening of the situation in Israel; (xi) risks related to business interruptions resulting from the COVID-19 pandemic or similar public health crises, among other things; and (xii) potential litigation associated with our transactions.

For a discussion of other risks and uncertainties, and other important factors, any of which could cause Nanox's actual results to differ from those contained in the Forward-Looking Statements, see the section titled "Risk Factors" in Nanox's Annual Report on Form 20-F for the year ended December 31, 2022, and subsequent filings with the U.S. Securities and Exchange Commission. The reader should not place undue reliance on any forward-looking statements included in this press release.

Except as required by law, Nanox undertakes no obligation to update publicly any forward-looking statements after the date of this press release to conform these statements to actual results or to changes in the Company's expectations.

### CONTACTS:

Media Contact: Ben Shannon ICR Westwicke NanoxPR@icrinc.com

Investor Contact: Mike Cavanaugh ICR Westwicke mike.cavanaugh@westwicke.com

<sup>i</sup> https://www.ndorms.ox.ac.uk/research/adopt

<sup>ii</sup> Kutsal FY, Ergin Ergani GO. Vertebral compression fractures: Still an unpredictable aspect of osteoporosis. *Turk J Med Sci.* 2021;51(2):393-399. Published 2021 Apr 30. doi:10.3906/sag-2005-315.

<sup>iii</sup> Javaid MK. Efficacy and efficiency of fracture liaison services to reduce the risk of recurrent osteoporotic fractures. Aging Clin Exp Res. 2021 Aug;33(8):2061-2067. doi: 10.1007/s40520-021-01844-9. Epub 2021 May 28. PMID: 34047929; PMCID: PMC8302543.

<sup>iv</sup> Pinedo-Villanueva R, Burn E, Maronga C, Cooper C, Javaid MK. Expected Benefits and Budget Impact From a Microsimulation Model Support the Prioritization and Implementation of Fracture Liaison Services. J Bone Miner Res. 2023 Apr;38(4):499-511. doi: 10.1002/jbmr.4775. Epub 2023 Jan 31. PMID: 36662166.

<sup>v</sup> Xu L, Zhao T, Perry L, Frost SA, Di Tanna GL, Wang S, Chen M, Kolt GS, Jan S, Si L. Return on investment of fracture liaison services: a systematic review and analysis. Osteoporos Int. 2024 Feb 1. doi: 10.1007/s00198-024-07027-2. Epub ahead of print. PMID: 38300316.