Osteoarthritis Biomarkers Project May Lead to Better Quality of Life for Those with Osteoarthritis

Bethesda, MD (February 14, 2012) – The Foundation for the National Institutes of Health (FNIH) announces the launch of a new research study designed to improve clinical outcomes for those living with osteoarthritis (OA) of the knee or who are at risk of developing the disease. The study will be conducted over the next two and a half years by an international team of leading OA scientists and clinicians under the auspices of the FNIH Biomarkers Consortium, a public-private partnership that combines expertise from the National Institutes of Health (NIH), the Food and Drug Administration (FDA), biotech and pharmaceutical companies, academia, and disease-focused non-profit organizations.

The biomarkers to be analyzed in the FNIH study were selected after a series of meetings sponsored by the Osteoarthritis Research Society International (OARSI), the leading professional society in this field. Two world-renowned scientists from OARSI, Dr. David Hunter at the University of Sydney and Dr. Virginia Byers Kraus at Duke University, will lead the effort.

“This project has incredible potential to improve our ability to accurately monitor the progression of OA, could lead to early intervention, and decrease the debilitating, life-altering effects of this disease,” says Drs. Hunter and Byers Kraus. “Early therapeutic intervention can lead to a better quality of life.”

OA, the most common form of arthritis, involves cartilage loss and bone restructuring resulting in abnormally shaped joint bones, loss of function, and pain. Knee OA is the leading source of disability in older adults, and is expected to become more prevalent given trends such as increased participation in sports, improved longevity, and the worldwide upsurge in obesity. Early medical intervention for those with OA is currently hampered by a lack of well-defined clinically-relevant physical or biological measures (or “biomarkers”) that can be used to evaluate its onset and progression. The FNIH study seeks to evaluate multiple biochemical and imaging biomarkers in hopes of finding more precise ways to measure both the progression of the disease and, potentially, the effectiveness of new treatments.

An advantage of this project is that it will make use of the NIH Osteoarthritis Initiative (OAI), a public-domain repository of medical images, patient data and biosamples funded by a public-private partnership including seven NIH institutes and centers and four pharmaceutical companies and led by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) and the National Institute on Aging. Results from the FNIH study will be made available to the public through appropriate peer-reviewed journal publications and public websites.

“The Osteoarthritis Initiative was developed to enable the discovery of biomarkers and new treatment targets for knee osteoarthritis,” says Dr. Gayle Lester, NIAMS Program Officer for the OAI. “NIH is pleased to see the use of this research resource in a biomarker project funded by the FNIH Biomarkers Consortium, and led by a team of international experts. Results from these investigations hold promise for the development of new therapies for this debilitating disease.”
The FNIH Biomarkers Consortium team includes experts from the NIH, FDA, pharmaceutical industry and non-profit sector. Scientific and financial contributions to support the study have been provided by: Abbott; Amgen Inc.; Arthritis Foundation; Bioiberica S.A.; DePuy Mitek, Inc.; Flexion Therapeutics, Inc.; GlaxoSmithKline; Merck Serono; Rottapharm | Madaus; Sanofi; and Stryker. In-kind donations to support biochemical tests have been provided by: Alere Inc.; ARTIALIS S.A.; BioVendor – Laboratorni medicina a.s.; IBEX Pharmaceuticals Inc.; Immunodiagnostic Systems Ltd; and Quidel Corporation.

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**About the Biomarkers Consortium**

The Biomarkers Consortium is a public-private biomedical research partnership managed by the [Foundation for the National Institutes of Health](http://www.fnih.org) that endeavors to discover, develop, and seek regulatory approval for biological markers (biomarkers) to speed the development of medicines and therapies for detection, prevention, diagnosis and treatment of disease and improve patient care. For additional information about the Biomarkers Consortium, please visit [www.biomarkersconsortium.org](http://www.biomarkersconsortium.org).