The LANCET published ENDORSE, the largest multinational study showing that the majority of hospitalized patients surveyed are at risk for VTE and many do not receive recommended VTE prophylaxis

ENDORSE global findings highlight the need to urgently implement hospital-wide strategies to optimize VTE management: systematically assess patient risk for VTE and provide appropriate prophylaxis to prevent VTE

WORCESTER, Mass. — ENDORSE multinational study (Epidemiologic International Day for the Evaluation of Patients at Risk for Venous Thromboembolism in the Acute Hospital Care Setting) published today in the LANCET\(^1\) demonstrates the high prevalence of patients at risk for VTE (according the ACCP guidelines) in the world: 52% of hospitalized patients surveyed were at risk for VTE, corresponding to 64% of surgical patients and 42% of medical patients. ENDORSE demonstrates as well, that recommended prophylaxis is only prescribed to 50% of at-risk patients throughout the world, corresponding to 59% of surgical and 40% of medical patients.

With more than 60,000 patients studied in more than 32 countries encompassing 6 continents the scope of ENDORSE is unprecedented. With a wide range of racial, social, economic and health care environment, ENDORSE gives a unique global and local picture about the extent of the hospitalized patient population at risk for VTE and how these patients are managed.
Doctor Fred Anderson, Director of the Center for Outcomes Research at the University of Massachusetts Medical School who conducted the study commented "ENDORSE shows that a substantial proportion of hospitalized patients are at risk for VTE in each of 32 participating countries. Despite these objective data that VTE risk is important on a global scale, the use of recommended prophylaxis is sub-optimal. This is a complex problem, which will require multiple solutions, including local and national programs of education, guideline development, increased reimbursement for prophylaxis, and addition of VTE prevention to the health-care agenda in every country".

VTE is a major public health issue and easily preventable disease among patients hospitalized for acute medical and surgical illnesses. Deep vein thrombosis (DVT) and pulmonary embolism are common manifestations of VTE and can contribute significantly to morbidity and mortality.

Commenting on the study, Doctor Ander Cohen, Co-chair of the ENDORSE Steering Committee, said "ENDORSE findings are important from national heath care perspectives since they allow estimation of both the patient welfare and economic benefits of fully applying evidence based VTE prophylaxis among hospitalised medical and surgical patients. If we want to improve hospital patient outcomes, we urgently need to implement hospital-wide strategies to identify all surgical and medical patients at risk for VTE and improve the use of appropriate prophylaxis to prevent VTE."

Despite International and local guidelines on VTE management, ENDORSE results illustrate clearly that there is a gap between guidelines evidence and practice in the hospital setting throughout the world. Lack of awareness and uncertainty about the prevalence of patients at risk of VTE are among the major reasons accounting for this gap.

As highlighted by Doctor Victor Tapson, Co-chair of the ENDORSE Steering Committee: "ENDORSE clearly shows that VTE is a critical safety issue in hospitalized patients, as the majority of them are at risk for VTE. The increased use of prophylaxis in the surgical setting for which the benefits of prophylaxis have been accepted for many years compared with medical setting for which trials and guidelines are more recent, shows that we have to increase physician awareness on the benefits of prophylaxis particularly in medical patient".

**About venous thromboembolism (VTE)**

Venous thromboembolism is a general term used to describe the formation of a blood clot (thrombus) that blocks a vein. This may occur in any part of the venous system, but the most
common manifestations are deep-vein thrombosis (DVT), usually in the leg, and pulmonary embolism (PE).

VTE is a common complication among patients hospitalized for major surgery or with a severe medical illness such as cancer or cardiopulmonary disease, particularly when accompanied by prolonged bed rest, age over 60, or a previous history of VTE.

**About ENDORSE**

To date, ENDORSE is the first study performed in hospitals around the world to evaluate VTE risk and prophylaxis practice. Patients were enrolled at 358 randomly selected hospitals in 32 countries in Europe, North America, South America, Middle East, Asia, Australia, and North Africa.

The primary objectives of ENDORSE were to identify patients at risk for VTE among patients hospitalized in representative hospitals throughout the world and determine the proportion of at-risk hospitalized patients who receive effective VTE prophylaxis by using the definition of patients at risk of VTE and prophylaxis recommendations provided by the American College of Chest Physicians (ACCP) evidence-based consensus guidelines. The secondary objectives of ENDORSE were to define the global rate of medical and surgical patients at risk for VTE, define the overall rate of patients receiving appropriate prophylaxis in medical vs surgical populations and carry out analysis by country and region.

The study included two categories of hospitalized patients: patients in medical wards 40 years of age or older, and patients in surgical wards, 18 years or older. All hospital wards with acute medical or surgical patients were eligible for the survey.

**About COR (Center for Outcomes Research)**

The Center for Outcomes Research (COR) serves as the scientific coordinating center for a number of national and international disease-focused outcomes registries. COR’s responsibilities include maintaining patient and physician confidentiality, design of data collection instruments, data analysis and publication development.

Established in 1994, COR is an outgrowth of the Worcester Deep Vein Thrombosis Study, a five-year NIH-supported program, which demonstrated that physicians are more likely to improve patient management practices if they are provided with valid data on their own practices and outcomes along with regional and national benchmarks.

**About the University of Massachusetts Medical School**

The University of Massachusetts Medical School, one of the fastest growing academic health centers in the country, has built a reputation as a world-class research institution, consistently producing noteworthy advances in clinical and basic research. The Medical School attracts more than $174 million in research funding annually, 80 percent of which comes from federal funding sources. For more information, visit [www.umassmed.edu](http://www.umassmed.edu).
ENDORSE study funding

The Center for Outcomes Research (COR) at the University of Massachusetts Medical School received an unrestricted grant from sanofi-aventis to support this work.

Reference