The Lancet Publishes PREVAIL Study Results Showing Lovenox® Superiority Over Unfractionated Heparin For Reducing The Risk Of Venous Thromboembolism In Patients With Acute Ischemic Stroke

--- Risk of having a Venous ThromboEmbolism (VTE) is reduced by a significant 43% in acute ischemic stroke patients treated with Clexane®/Lovenox® ---

Paris, France, April 20, 2007 – Sanofi-aventis announced the publication of the PREVAIL (Prevention of VTE after Acute Ischemic Stroke with LMWH Enoxaparin) trial in the April issue of The Lancet journal. The results of the trial showed that once daily administration of Clexane®/Lovenox® (enoxaparin sodium injection) 40 mg was more effective than UnFractionated Heparin (UFH) 5000 IU twice a day for the prevention of VTE in patients who suffered an acute ischemic stroke, a group of medically-ill patients at an increased risk for developing VTE.

Among medically-ill patients, stroke patients are at an increased risk for developing VTE. Without VTE prophylaxis, up to 75% of patients with hemiplegia following stroke develop deep-vein thrombosis (DVT) and 20% develop pulmonary embolism (PE)\(^1\,^2\).

PREVAIL study showed a significant 43% relative risk reduction in VTE events was observed with Clexane®/Lovenox® vs. UFH for the primary efficacy endpoint, the composite of symptomatic or asymptomatic DVT, symptomatic and/or fatal PE during the treatment period (10.2% vs. 18.1%; \(p=0.0001\)).

Importantly, the reduction in VTE risk was also observed in patients presenting different levels of ischemic stroke severity, without significant difference in clinically important bleedings as well.

The significant reduction of VTE risk with Clexane®/Lovenox® versus UFH was maintained when therapy was initiated within 24 hours or 24 hours-48 hours after stroke onset.

The incidence of the composite of symptomatic intracranial and major extracranial haemorrhage was small with no difference between groups (enoxaparin 1.3%, UFH 0.7%; \(p=0.2275\)). No difference was observed for symptomatic intracranial haemorrhage between groups (0.5% vs 0.7%, respectively; \(p=0.5466\)). The rate of major extracranial bleeding, mainly gastrointestinal bleeding, was higher with enoxaparin (0.8% vs 0.0%, \(p=0.0154\)) but did not lead to increase mortality. There was no difference in all cause mortality between groups.

In conclusion the authors said that “enoxaparin is preferable to unfractionated heparin for venous thromboembolism prophylaxis in this high-risk medically ill patient in view of its better clinical benefits to risk ratio and convenience of once daily administration”
About PREVAIL
The PREVAIL trial is the first large-scale, multinational, prospective, randomized, open-label study, which enrolled 1,762 stroke patients (stratified by NIH Stroke Scale Score) in over 15 countries.

Patients confirmed with an acute ischemic stroke, were randomized within 48 hours of stroke symptoms to receive enoxaparin 40 mg SC or UFH 5000 IU SC Q 12 treatment for 10 days +/- 4 days with a follow up period of 90 days and stratified by NIH Stroke Scale Score (severe = 14 and less severe <14).

The primary efficacy endpoint was the composite of symptomatic or asymptomatic DVT, symptomatic or fatal PE during the treatment period. The primary safety endpoints included symptomatic intracranial bleeding, major extracranial bleeding and all-cause mortality.

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 also a common complication among individuals who have experienced an acute ischemic stroke (AIS), a population of medically-ill patients at particularly high-risk for VTE.

About Enoxaparin
Enoxaparin is an anticoagulant of the low molecular weight heparin (LMWH) class. Its clinical applications are linked to its antithrombotic properties. It is used to inhibit clot formation in venous or arterial vessels to avoid potential acute or chronic complications of venous or arterial thrombosis such as pulmonary embolism, myocardial infarction or death of cardiovascular origin. As with all anticoagulants, the most frequently reported side effect for enoxaparin is bleeding. Clinical indications for enoxaparin may vary from one country to another.

About sanofi-aventis
Sanofi-aventis is one of the world leaders in the pharmaceutical industry, ranking number one in Europe. Backed by a world-class R&D organisation, sanofi-aventis is developing leading positions in seven major therapeutic areas: cardiovascular, thrombosis, oncology, metabolic diseases, central nervous system, internal medicine and vaccines. Sanofi-aventis is listed in Paris (EURONEXT: SAN) and in New York (NYSE: SNY).

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