eAppendix

Participating European, prospective cohort studies with data on long working hours and VTE were:

1. The Finnish Public Sector Study and
2. The Health and Social Support Study, Finland;
5. The Danish Work Environment Cohort Study and
6. - 7. The Copenhagen Psychosocial Questionnaire Studies I and II, Denmark;
8. The Whitehall II Study, UK.

All these studies providing individual participant data for our pooled analysis had obtained ethical approval. Baseline assessment varied between 1992 and 2000 depending on the study. Of the 77,291 full-time employees included in this analysis, 48,693 (63%) were women, the mean age of participants at baseline was 43.5 years (study-specific means range: 39.6 and 53.2), and 4,297 (6%) worked long hours. During 830,550 person-years at risk, 539 first-time VTE events were recorded, the incidence being 64.9 per 100,000 person-years.

For comparison, the estimated annual incidence rates of VTE in the general population of European ancestry range from 104 to 183 per 100,000 person-years. The lower incidence of VTE in our study of a working population is as expected given the young mean age and the exclusion of retired people (the incidence of VTE increases with age). In the general population, much of VTE events occur in older people secondary to other health disorders, such as cancer or trauma, or due to treatments, such as recent surgery or immobilization. Known as the healthy worker effect, by definition, working populations do not typically include those with major health conditions.

References

eFigure 1. Flow Chart for Derivation of Analytical Sample

Baseline cohort
Total N = 86,074

Venous thromboembolism (VTE) Deep vein thrombosis (DVT) Pulmonary embolism (PE)
Excluded: 387 prevalent VTE cases* 8682 part-time employees
Excluded: 334 prevalent DVT cases¶ 8690 part-time employees
Excluded: 72 prevalent PE cases¶ 8711 part-time employees

Analytic sample for VTE: 77,005 full-time workers
Analytic sample for DVT: 77,050 full-time workers
Analytic sample for PE: 77,291 full-time workers

*VTE includes DVT and PE.
¶19 participants had a history of both DVT and PE.