BRUSSELS—The European Society of Intensive Care Medicine (ESICM) is calling for new research into how to improve the surgical outcomes of patients, including better ways of monitoring and preventing complications in those at highest risk of death. This call follows publication of the European Surgical Outcomes Study (EuSOS), a project partly funded by ESICM and published today (Friday, September 21) in The Lancet.

EuSOS showed that in some European countries, non-cardiac surgical mortality was higher than previously thought. “What was both surprising and disconcerning is that the study reveals that critical care resources do not appear to be allocated to the patients at highest risk of death,” says Chair of ESICM’s Perioperative Intensive Care (POIC) Section and EuSOS Chief Investigator, Rupert Pearse.

The study reveals startling differences in non-cardiac surgical mortality across European countries—in many cases higher than previous national estimates. For example, surgical mortality is 3.6% in the United Kingdom compared with previous national estimates of 1–2%. Alarmingly, 73% of those who died had never been admitted to critical care wards after their surgery. Of those that were admitted to critical care after surgery, 43% then died after being transferred to a regular ward. ESICM says these findings raise questions over the allocation of these vital facilities in hospitals across Europe. Furthermore, the overall European surgical mortality figure of 4% contrasts sharply with the 2% mortality following emergency cardiac surgery, in which admission to critical care is generally standard.

“Simply calling for more intensive care unit (ICU) beds will not solve the problem. No health system in Europe can afford to transfer all surgical patients routinely to an ICU or intermediate care, as it is current practice in cardiac surgery and most neurosurgery,” says Professor Andreas Hoeft, co-author of The Lancet paper. “New, cost–effective ways of identifying and monitoring patients at risk must be developed. These findings provide further evidence that current clinical practice fails to identify patients at risk at an early stage and to detect and treat complications early enough. We might need such cost–effective monitoring and alarm systems on regular wards in the future,” he adds.

Data from EuSOS will be presented October 17 at LIVES 2012, the annual congress of ESICM. The study was funded through a joint research grant from ESICM and the European Society of Anaesthesiology (ESA). EuSOS is a supported project under ESICM’s European Critical Care Research Network (ECCRN)—an initiative launched by the Society to provide an infrastructure for clinicians and scientists who wish to work collaboratively across international borders to improve the care of critically ill patients and their families.

ESICM initially funded this study with an unrestricted research grant. The ESA then awarded a grant to match what had been offered by ESICM. “It’s important to note that all the centres involved in EuSOS gave their data voluntarily for the good of anaesthesiology,” concludes Hoeft. “ESICM and ESA will strive to advance research in this area in the future, but the extent to which we can rely on voluntary contributions of the enthusiastic researchers may in future be limited, and we will need some solid funding from public sources such as Member State and European Governments to answer the questions raised by the EuSOS data.”

BACKGROUND INFORMATION

EUROPEAN SOCIETY OF INTENSIVE CARE MEDICINE ESICM is a non–profit international association of more than 6,000 members, founded in March 1982 in Geneva, Switzerland. The advancement and promotion of...
knowledge in intensive care medicine is the core mission of ESICM—to encourage the highest standards of multidisciplinary care of critically ill patients and their families through education, research and professional development. ESICM promotes and coordinates scientific and educational activities, fosters and supports research projects and organises international congresses to serve to connect professionals from differing specialties within the field of intensive care medicine.

**ESICM RESEARCH** ESICM launched the European Critical Care Research Network (ECCRN) to provide an infrastructure for clinicians and scientists who wish to work collaboratively across international borders to improve the care of critically ill patients and their families. Critical care research networks in Canada, the US, and Australia and New Zealand have demonstrated the advantages of collaboration between large numbers of intensive care units to answer clinically important research questions. ECCRN aims to provide a research infrastructure for the future to help foster long-term collaborative relationships linking research, education and clinical practice across the entire critical care community.

Some other studies and projects which are currently supported and/or endorsed by ESICM / ECCRN are FENICE (Fluid ChalENges in Intensive Care); DALI (Defining Antibiotic Levels in Intensive care patients); SDD (Selective Decontamination of the Digestive track study); SARI study (Severe Acute Respiratory Infection).

For more information on EuSOS:
[http://eusos.esicm.org](http://eusos.esicm.org)

For a PDF of the EuSOS study (Embargoed as above) see:

To arrange an interview with Rupert Pearse or for further information on ESICM please contact Sherry Scharff, ESICM Communications, +32 (0) 2 559 0377 / [editor@esicm.org](mailto:editor@esicm.org)

To arrange an interview with Professor Hoeft, please contact Tony Kirby PR Ltd +44 (0) 7834 385827 / [tony@tonykirby.com](mailto:tony@tonykirby.com)