

## **Post sepsis syndrome/Post ICU syndrome: Are they the same, overlapping or different**

### Purpose:

To determine differences in health-related quality-of-life (HRQoL), survival and health care resource use of critically ill adults with and without sepsis.

### Methods:

We conducted a propensity score matched analysis of patients with and without sepsis enrolled in a large clinical trial. Outcomes included HRQoL at six-months, survival to two years, length of ICU and hospital admission and cost of ICU and hospital treatment to two-years.

### Results:

We obtained linked data for 3442 (97.3%) of 3537 eligible patients and matched 806/905 (89.0%) patients with sepsis with 806/2537 (31.7%) without. There were no significant differences in the proportion of survivors with and without sepsis reporting problems with HRQoL. There was no significant difference in survival at two years: 482/792 (60.9%) vs. 485/799 (60.7%) (HR 1.01, 95% CI 0.86 to 1.18,  $p=0.94$ ). The initial ICU and hospital admission were longer for patients with sepsis;  $10.1\pm 11.9$  vs.  $8.0\pm 9.8$  days, ( $p<0.0001$ ) and  $22.8\pm 21.2$  vs.  $19.1\pm 19.0$  days, ( $p=0.0003$ ) respectively. The cost of the initial ICU admission was higher for patients with sepsis: A\$47,298 $\pm$ 53,730 vs. A\$38,952 $\pm$ 46,778,  $p=0.0009$ , as was the total cost of hospital treatment to two years: A\$74,120 $\pm$ 60,750 vs. A\$65,806 $\pm$ 59,856,  $p=0.005$ .

### Conclusions:

Critically ill patients with sepsis have similar survival and HRQoL compared to matched patients without sepsis. Illness severity, rather than sepsis, determines longer term outcomes.