A257 – Outcome Following Burns from 1985 to 2004 in the Centre for Severely Burned Patients, Ghent University Hospital, Belgium.

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BACKGROUND. Mortality in burn patients can be estimated by 3 major risk factors for death: age >60 years, total burned surface area (TBSA) >40% and presence of an inhalation injury (1). The formula developed by Ryan predicts 0.3%, 3%, 33% and 90% mortality when 0, 1, 2 or 3 risk factors are present.

OBJECTIVE. A retrospective evaluation of the prognostic value of these 3 risk factors in patients admitted to our burn unit over a 20-year period (5/85-11/04)(n=1385).

RESULTS. Mean age was 32+/-23 years. The mean %TBSA was 19+/-18%. Inhalation injury was present in 166 patients (12%). Overall mortality was 7%. When zero, one, two or three risk factors were present, mortality was respectively 0.5%, 10%, 48% and 91%. Risk factors and related mortality rates are in the table.

CONCLUSION. Global mortality following burns is low. Nearly all patients who died had at least 1 risk factor present. Given the broad classes of this classification and the differences in age and %TBSA between Ryan's and our population, this model predicts mortality in a reliable but very coarse way.

REF. (1) Ryan, et al. NEJM 1998;338:362-6.

| Risk factors (n) | Age | TBSA>40% | Inhalation Injury | Mortality (%) | Mortality (%) Ryan |
|------------------|-----|----------|-------------------|---------------|--------------------|
| Zero | - | - | - | 5/998 (0.5) | 4/1314 (0.3) |
| One | + | - | - | 13/133 (9.8) | 4/75 (5) |
| One | - | + | - | 5/82 (6.1) | 1/31 (3) |
| One | - | - | + | 8/49 (16.3) | 5/112 (4) |
| Two | + | + | - | 4/6 (66.7) | 0/1 (0) |
| Two | + | _ | + | 13/19 (68.4) | 12/39 (39) |
| Two | - | + | + | 32/77 (41.6) | 21/79 (27) |
| Three | + | + | + | 19/21 (90.5) | 21/22 (95) |

Table 1 :