

LONG-TERM OUTCOME OF CRITICALLY ILL RENAL TRANSPLANT RECIPIENTS AFTER ADMISSION TO INTENSIVE CARE UNIT: A 5-YEAR FOLLOW-UP

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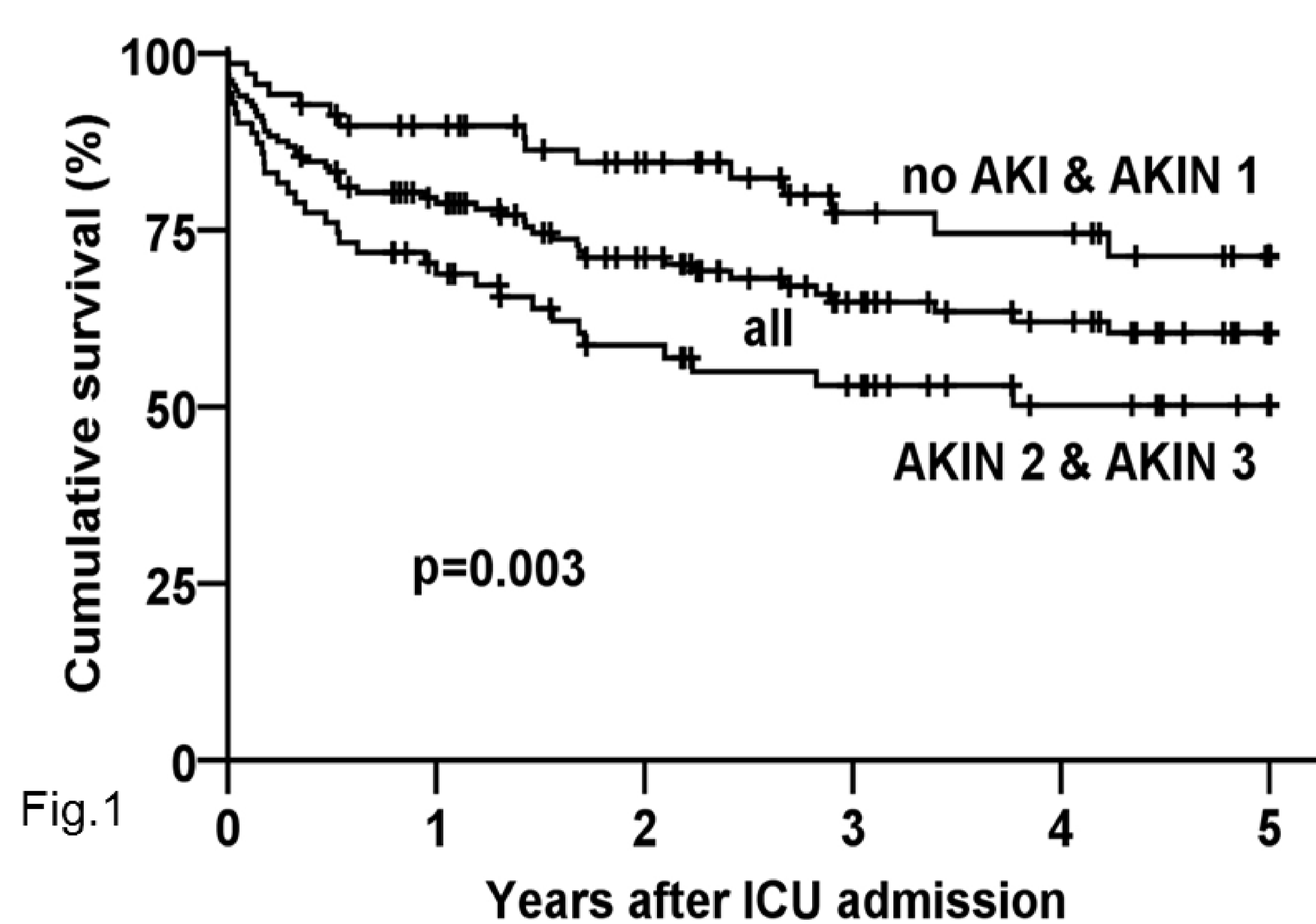
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Introduction: The hospital mortality rate of renal transplant patients admitted to intensive care units (ICU) is considered to be significantly higher compared to general ICU patients. Data concerning the long term outcomes of these patients is lacking.

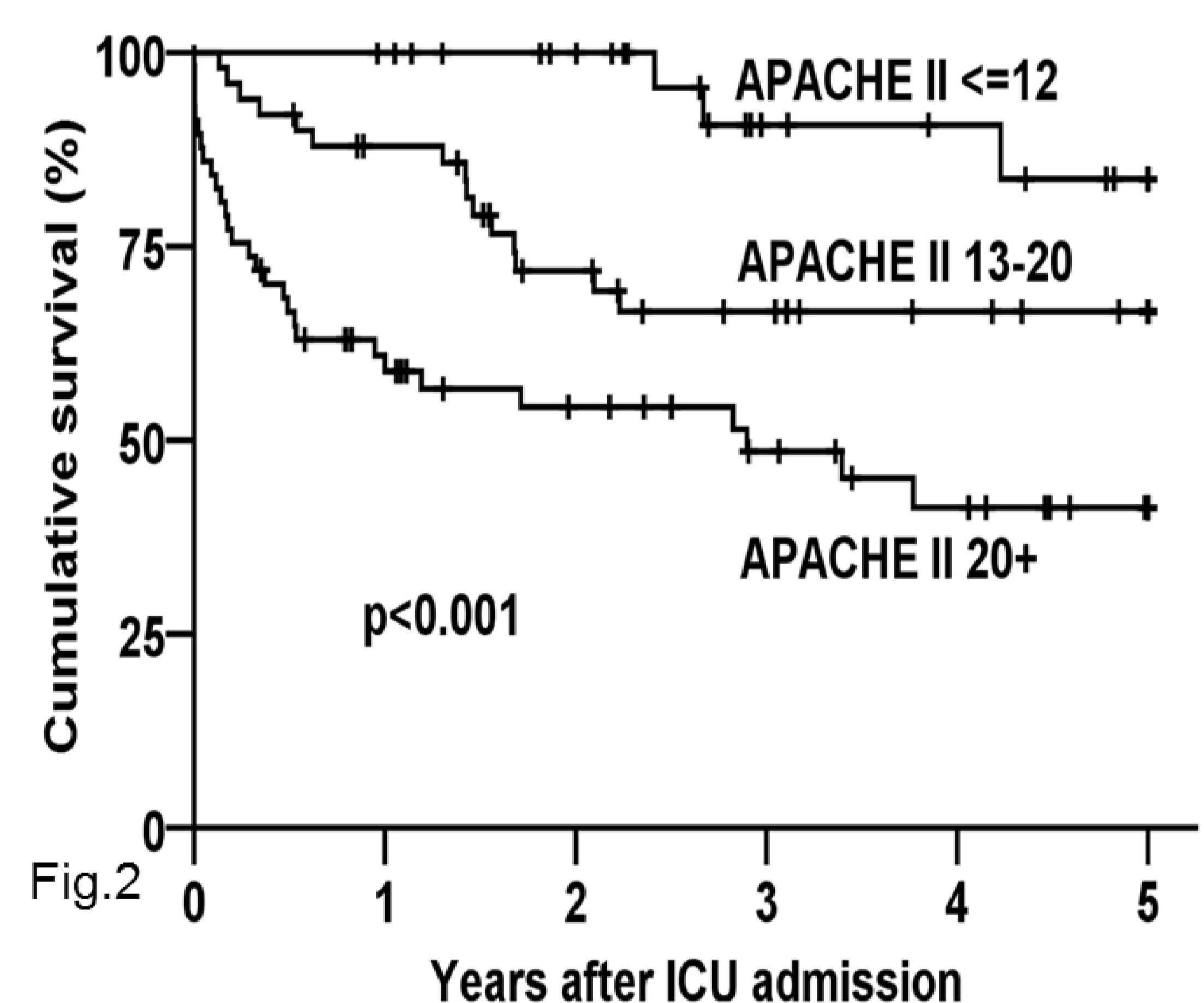
Methods: This 10 year single center retrospective study included all renal transplant recipients with persistent graft function admitted to ICU between 2003 and 2013. Patients transplanted less than 30 days prior to ICU admission as well as readmissions were excluded from the study. Patient characteristics, clinical parameters and mortality were assessed and analyzed to identify prognostic and predictive factors for the long-term outcome.

Results: 140 patients (60 ± 13 years; 61% male; APACHE II 19.2 ± 8.7 ; 44% post-surgery patients) were admitted to ICUs and fulfilled the inclusion criteria. The in-hospital mortality rate was 9%, the 90-day mortality was 12%, 5-year mortality 39% (Fig.1). The incidence of kidney graft loss censored for death was 24%. Acute kidney injury depending on severity deteriorates the outcome significantly (Fig.1). The ICU severity scores (Fig.2) remained significantly predictive for the long-term mortality in the multivariate analysis.

Conclusions: The mortality rates were lower than previously described. The long-term survival (5-years) was $>60\%$ in this study. This is the first study analyzing the long-term outcome of renal transplant patients after ICU-admission.



Time (a)	0	1	2	3	4	5
No. at Risk						
all	140	102	78	54	43	30
no AKI & AKIN 1	69	57	45	28	26	18
AKIN 2 & 3	71	46	33	26	17	12
Mortality (%)						
all	0	21	29	35	38	39
no AKI & AKIN 1	0	10	15	23	26	29
AKIN 2 & 3	0	31	41	47	50	50



Time (a)	0	1	2	3	4	5
No. at Risk						
APACHE II ≤ 12	33	32	27	15	13	9
APACHE II 13-20	50	41	29	23	19	16
APACHE II 20+	57	29	22	16	11	5
Mortality (%)						
APACHE II ≤ 12	0	0	0	9	9	16
APACHE II 13-20	0	12	28	33	33	33
APACHE II 20+	0	41	46	52	59	59

