

## POSTER PRESENTATION

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# Correlation between FFP transfusion and actual mortality rate in ICU patients

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From ESICM LIVES 2015

Berlin, Germany. 3-7 October 2015

## Introduction

While plasma donation is still necessary as a unique source of human proteins and to treat coagulation disorders, FFP administration seems to have high rate of inappropriate indication. After all, FFP transfusion is not risk free, and is associated with lung injury, infectious disease and circulatory overload in recipients. On the other hand, patients who die into the ICU have impaired physical status and may have increased demand for FFP transfusion.

## Objectives

The aim of our retrospective observation study was to test the hypothesis that a correlation exists between FFP transfusion and actual mortality rate, in our both medical and surgical ICU served in community hospital.

## Methods

From January 2006 to June 2014 admitted to our ICU 620 patients, mean age 64.8 years, mean length of ICU stay (LOS) 14.2 days, mean mechanical ventilation duration per ventilated patient (V. Days) 12.23 days, mean APACHE II score on admission 21.2, predicted mortality 38.9 %, actual mortality 31.45 %, Standardized Mortality Ratio (SMR) 0.80. From our database we looked for actual mortality rate and the following values and indexes according FFP transfusion per year from 2006 to 2014 (mean

values). Total, per patient, per hospitalization days (HD), per patient under mechanical ventilation (pts V) and per ventilation days (VD) Using linear correlation method, we looked for linear slope, correlation coefficient (r), and coefficient of determination ( $r^2$ ), and by linear regression method using ANOVA test we looked for p value, according actual mortality rate and FFP transfusion.

## Results

## Conclusions

According to our data, there was no statistically significant correlation detected between actual mortality rate and FFP transfusion indexes. Our data suggest that even though some patients who die due to multiple organ failure may need more FFP than others, FFP transfused do not correlate statistically significant with actual mortality rate in ICU patients.

Published: 1 October 2015

doi:10.1186/2197-425X-3-S1-A962

**Cite this article as:** Vakalos and Popko: Correlation between FFP transfusion and actual mortality rate in ICU patients. *Intensive Care Medicine Experimental* 2015 **3**(Suppl 1):A962.

**Table 1**

FFP	Slope	r	r <sup>2</sup>	S. Error	Lower C.I.	Upper C.I.	p value
Total	1.251	-0.4404	0.1942	0.963	-1.027	3.530	0.2351
Per patient	-0.016	-0.3441	0.1184	0.017	-0.056	0.023	0.3645
Per Hosp Day	-0.001	-0.3392	0.1151	0.001	-0.004	0.001	0.3718
Per pt ventilated	-0.016	-0.3251	0.0105	0.018	-0.059	0.026	0.3933
Per Vent Day	-0.018	-0.3821	0.1460	0.001	-0.005	0.002	0.3101

[Correlation between actual mortality rate and FFP]

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