BACKGROUND & OBJECTIVES
Since the launch of voriconazole, variable voriconazole plasma levels (VPLs) are a challenge. Little is known about the plasma protein binding (PPB). PPB is 58% according to in vitro data from premarketing studies. In our study, PPB characteristics of voriconazole and the impact of hypoproteinemia were evaluated in clinically relevant patient populations.

RESULTS

CONCLUSION
The correlation between voriconazole PPB and plasma albumin levels, as shown only in the ICU population, needs to be confirmed with multivariate analysis in a larger sample size, with a wide range of albumin levels and voriconazole plasma concentrations.

INCLUSION CRITERIA
• Pediatrics (>2 years), adult hematology and adult ICU patients
• Treatment with voriconazole
• A documented steady state trough VPL > 0.4 mg/L

MATERIALS & METHODS
• Unbound and bound fractions of voriconazole were separated using high-throughput equilibrium dialysis (HT-ED) during 4 hours (HTDialysis LLC, USA), followed by LC-MSMS for voriconazole analysis.
• Statistical analysis was performed using SPSS 20.0 for Windows (SPSS Inc. 2011, Chicago, IL, USA), p<0.05 was considered significant.
• Correlations were defined based on Spearman’s rank correlation coefficients and R² values.

FUTURE PERSPECTIVES: ADULT ICU PATIENTS

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REFERENCES
1. Roffey et al, 2003, Drug Metab & Dispos