

# Valproic acid and behavior disorders : observation of efficiency and toxicity in a Cognitive-Behavioral Unit

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## Background

Antipsychotic treatments are known to increase cardiovascular events particularly in the elderly. Therefore their consumption should be reduced. However there are few alternatives for physicians to treat behavior disorders, in cognitive-behavioral units (CBU).

## Purpose

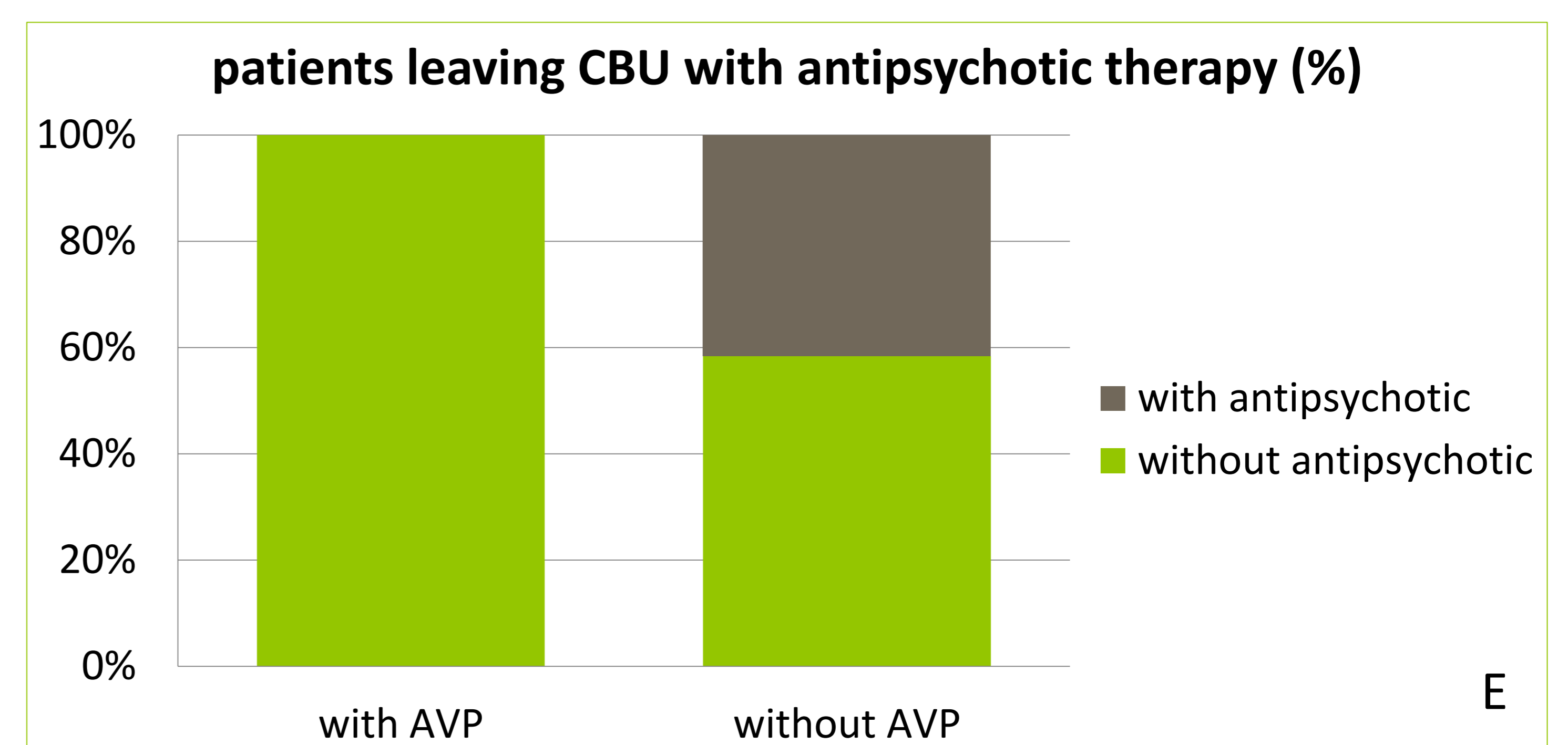
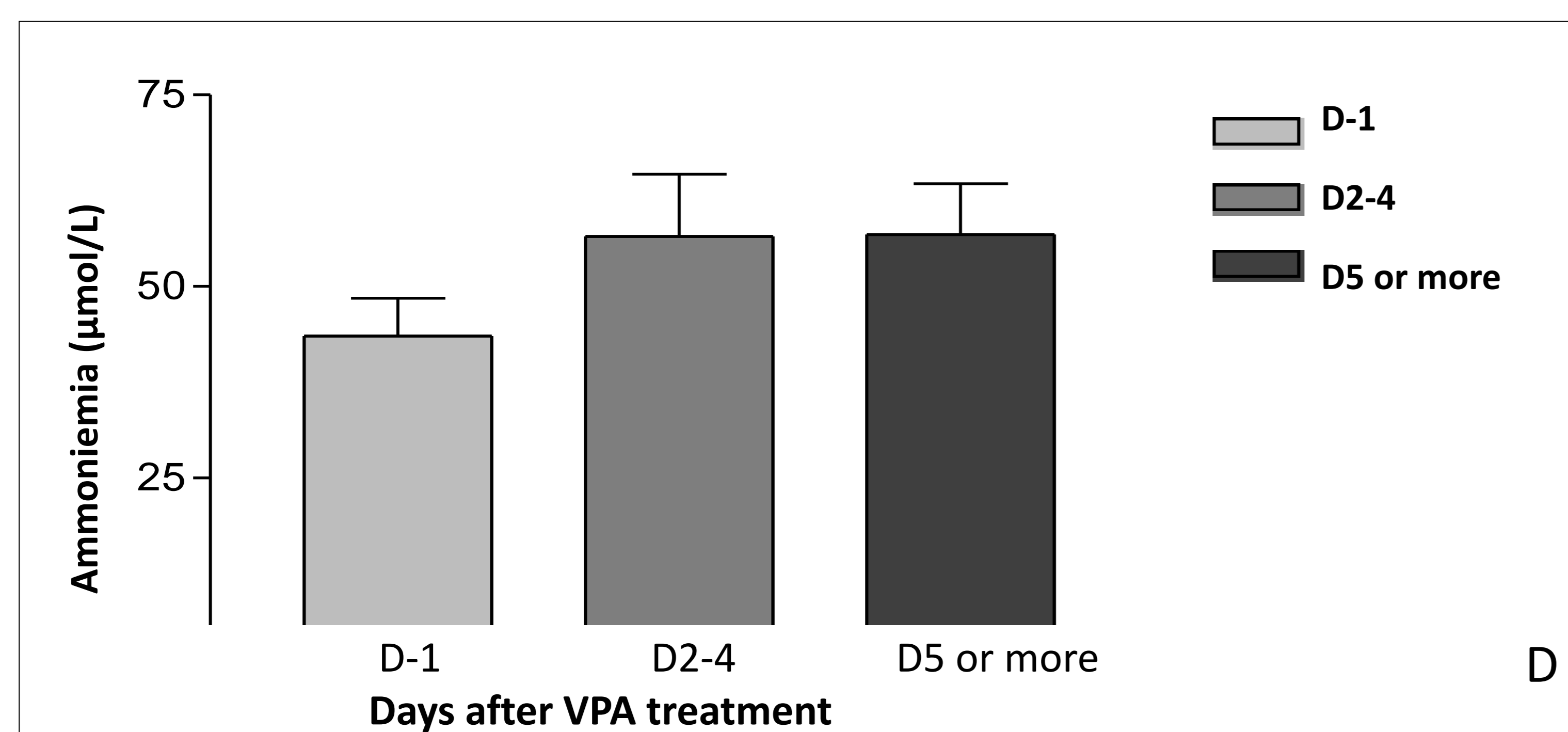
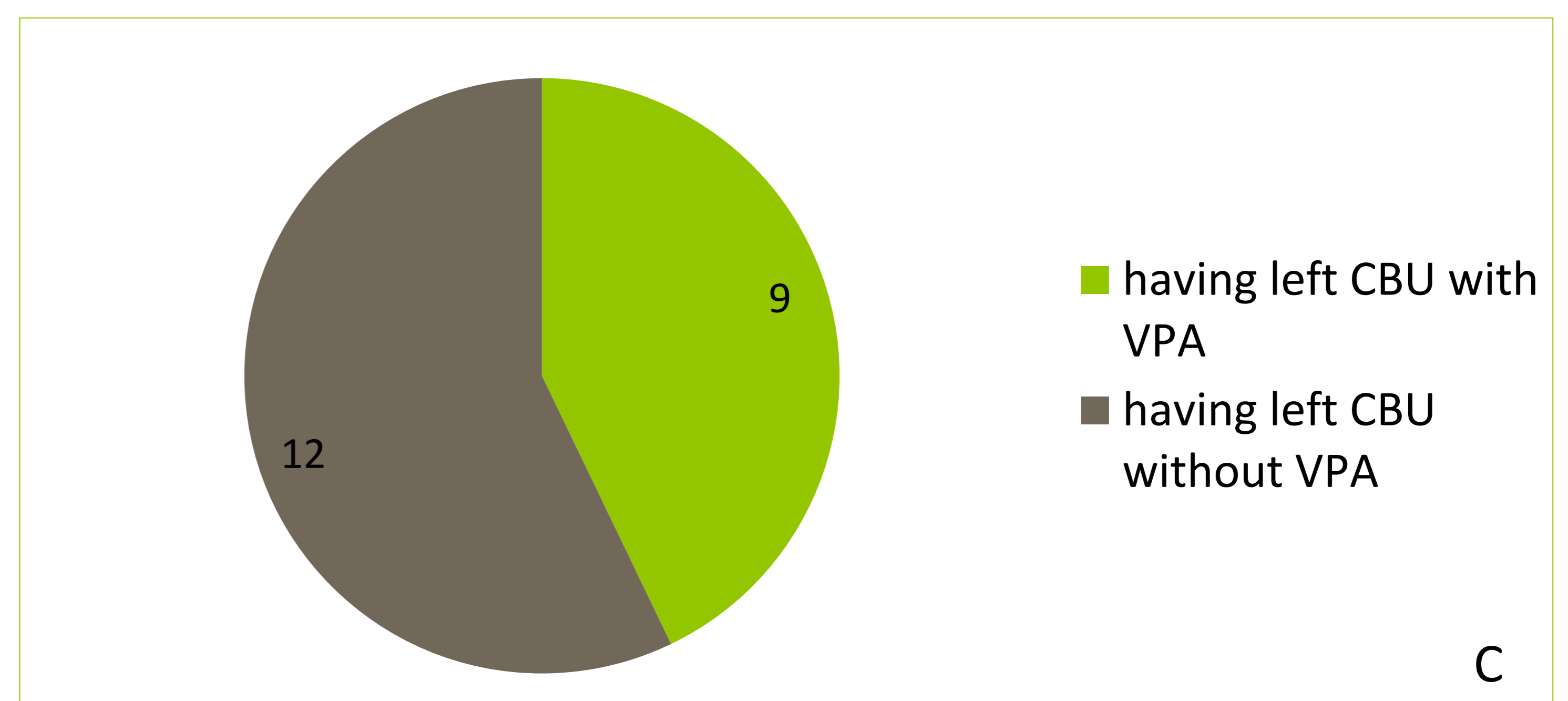
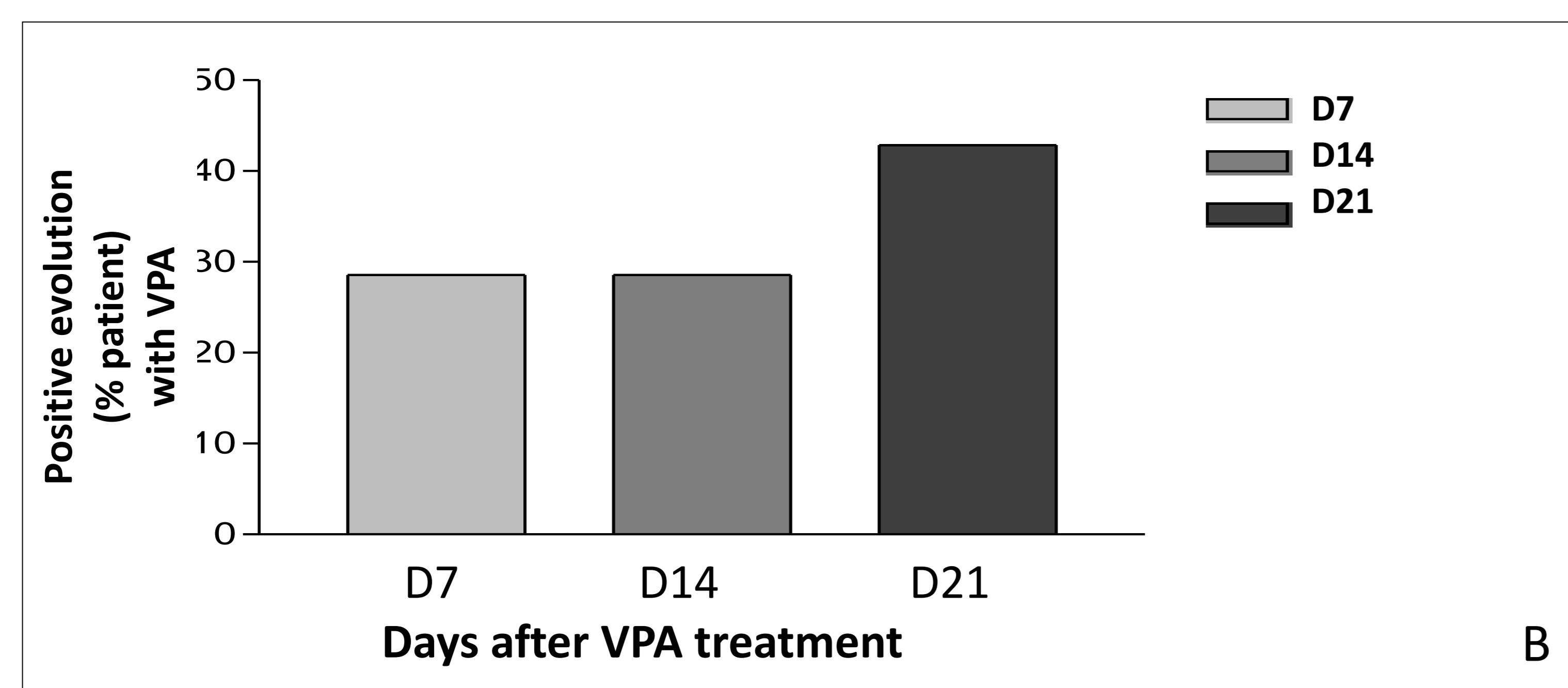
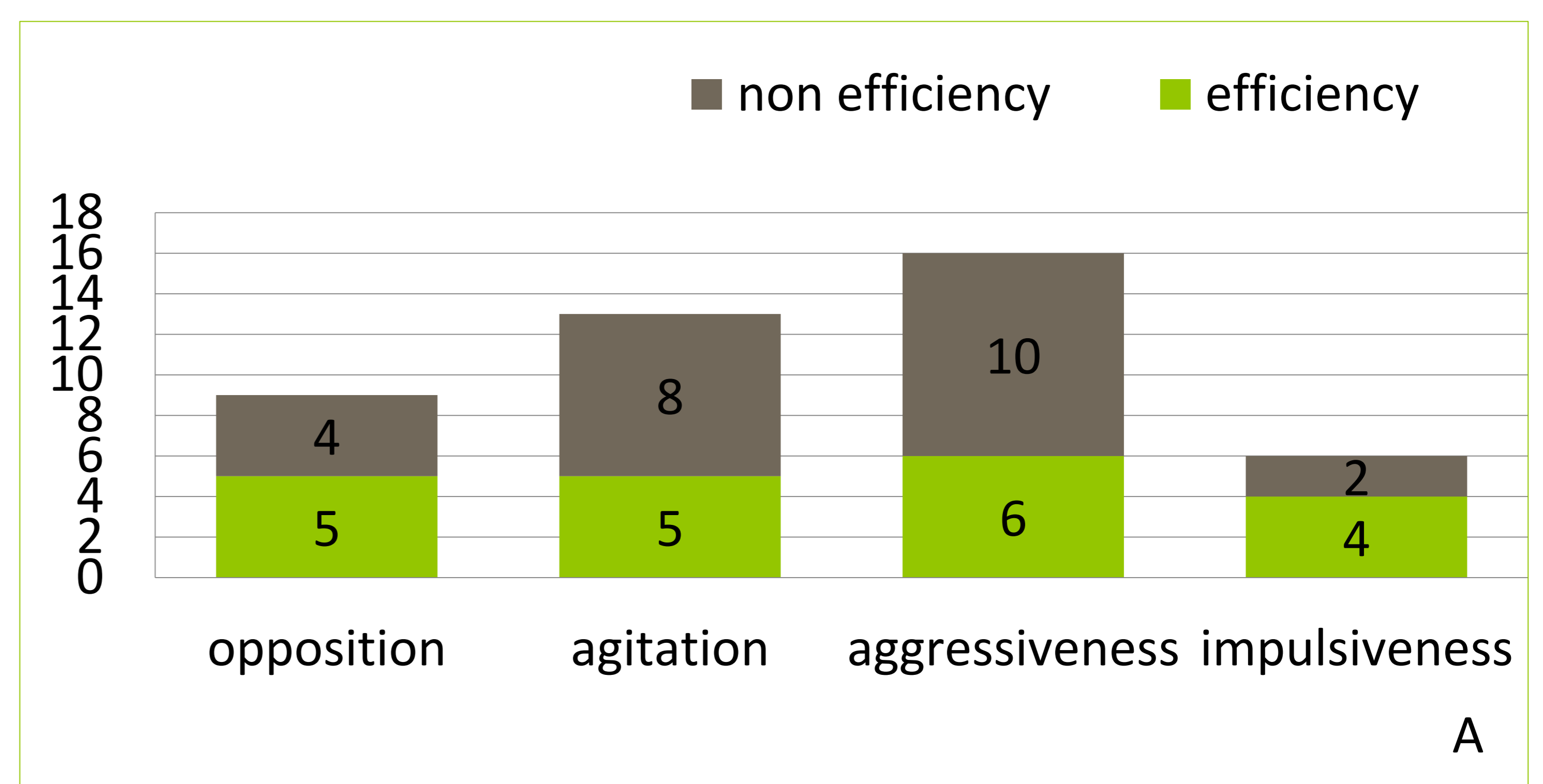
Valproic Acid (VPA) is an anticonvulsivant and/or a mood stabilizer which, sometimes, can be used in a behavioral way in geriatric care units. One side effect of VPA is hyperammonemia. This side effect can lead to sedation, behavior and personality troubles.

## Material & Methods

Inclusion criteria were **opposition, agitation, aggressiveness or impulsiveness**. Ammonemia rates were dosed at D-1, between D2 and D4, and after D5. Creatinine clearance, medical history and other treatments were collected. Efficiency after 7, 14 and 21 days and chronic VPA treatment have been evaluated. Results are presented with n, % or mean +/- Sem when appropriate.

## Results

Patient characteristics (n=21)	
age year (mean +/- SEM)	79,8+/-1,8
male n (%)	15 (71)
cardiovascular risk factors n (%)	3 (14)
Cockroft creatinine clearance ml/min (mean+/- SEM)	65,4+/-8,9
Hepatic failure n (%)	0 (0)
Oppositional disorder n (%)	9 (42%)
Agitation n (%)	13 (61%)
Agressiveness n (%)	16 (76%)
Impulsiveness n (%)	6 (28%)



## Conclusion

Every indication included, only 42.8% of patients with VPA are responders (C). Positive evolution seems to be effective for a majority of patients after 21 days of treatment (B). Ammonemia level early tends to increase during VPA treatment (D). 100% of patients, having left CBU with VPA, don't need antipsychotic treatment (E). However, 12/21 patients have left CBU without VPA. 41,6% of them need antipsychotic treatment. Further investigations are needed to confirm that VPA could be used in behavior disorders.