The purpose of this study is to investigate if the MDA plasma concentrations are correlated to negative psychopathology in paranoid schizophrenic inpatients.

Methods: The sample was comprised by 38 patients who were admitted in the psychiatric ward of the University Hospital of the Canaries. Thirty eight patients were male and 9 were female with medium average age of 37.41±11.23. Exclusion criteria were psychoactive substance use, presence of acute or chronic organic pathology, treatment with immunosuppressive medication, pregnancy and mental retardation or severe cognitive impairment. There were performed two blood extractions following the circadian rhythm, at 12:00 and at 24:00 hours. One hour before night blood collection, each patient was placed in a reclined position in bed, with the eyes closed, in complete darkness and with eyes covered with a mask. Blood was centrifuged at 3.000 rpm for 10 minutes. Specific biological and psychopathological determinations were performed at admission and at discharge. Psychopathology was assessed with PANSS and by the same psychiatrist. Statistical analyses were carried out with the Social Statistical Package for the Social Sciences (SPSS). MDA was determined spectrophotometrically.

Results: MDA level at night was 1.94±1.54 while MDA level at midday was 2.23±1.36. Mean PANSS negative score was 15.73±6.31. Serum MDA level correlated positively with PANSS negative scores, both at midday and night (midday \( r=0.39, p<0.01 \), midnight \( r=0.41, p<0.01 \)).

Conclusions: The total negative subscale score correlated positively with day and night time levels of MDA, therefore we can conclude that MDA may be used as a marker of negative psychopathology.