Objective: Low platelet MAO-B activity has been associated with various forms of impulsive behaviour and suicidality. The present study investigated the relationship between MAO-B activity in platelets and aspects of suicidality in depressed patients and controls.

Method: In 87 patients with affective spectrum disorders (58% suffering from a Major Depressive Episode - MDE) the potential association between platelet MAO-B activity and suicidality was examined. 59 of the patients had committed suicide attempt recently (SA - "suicide attempters"), 28 patients were acutely depressed without having shown suicidal thoughts or suicidal behaviour in the past (NA - "non suicide attempters").

Results: SA and NA were comparable as to their diagnoses and general demographic and psychopathological parameters. MAO-B activity did not differ between SA and NA. No systematic correlations existed between MAO-B activity and any dimensions of suicidal behaviour or psychopathology. As a single finding only a weak positive association of higher MAO-B activity in SA with a fatal intention of the suicide attempt was observed.

Conclusion: Our findings do not support a consistent association of platelet MAO-B activity and suicidal behaviour in general, but specific facts of suicidality might be associated.