SCNS. 14. Evidence of antidepressant effect of Riparin I, isolated from *Aniba riparia*, in a model depression chronic in mice

OLIVEIRA, I.C.M., VASCONCELOS, A.S., VIDAL, L.M.T., RODRIGUES, F.A.P., SOUSA, F.C.F.

Department of Physiology and Pharmacology, Faculty of Medicine, Federal University of Ceará: Rua Cel. Nunes de Melo 1127, 60430-270 Fortaleza, Brazil
* irisbusy@yahoo.com.br

**Introduction:** Major Depressant Disorder is one of the most common neuropsychiatric disorders and affects 17-20% of the world population. Despite scientific efforts, its treatment still presents itself with a limited efficacy and a delayed start-up effect. In this context, natural products are a potential source of new drugs. Riparin I (Rip I), one alcamide isolated from *Aniba Riparia*, has presented promising results. In pre-clinic trials, it has unchained predictive effects of antidepressant and anxiolytic activities in acute behavioral models of depression and anxiety.

**Objectives:** Facing that, the goal of the trial was to investigate the activity of Riparin I in mice exposed to the model of chronic depression induced by corticosterone (Cort).

**Methods:** Swiss female mice, weighting 22-25g, were divided as the following: control group (vehicle - saline, 1% de tween80, 1% de DMSO, s.c., for 14 and 21 consecutive days), stressed group (CORT, 20mg/kg, s.c, for 14 or 21 days), group treated with RipI (50 mg/kg, orally, for 8 days), group treated with fluvoxamine (Flu 50 mg/kg, orally, for 8 days). Treatments started on the 14th day of corticosterone-induced stress until the 21st day. Behavior models analyzed were as follows: tail suspension (TS) and forced swim test (FS). The corticosterone treated group presented a greater immobility time (IT) than the control group (SC: Cont.: 45 ± 7.30; CONT.: 108.9 ±3.5; p < 0.01). Meanwhile, the groups treated with RipI (50) and Flu (50) presented a smaller IT than the CORT group (SC: CONT.: 108.9±3.5; RipI: 49.57±6.6; Flu: 42±13.3; p<0.01). Depressant behavior was unchanged by corticosterone administration and reverted using RipI and Flu.

**Conclusions:** These results allow us to suggest a possible antidepressant effect of RipI in the corticosterone-induced animal depression model.