different role in suicide behaviors. Attention should be paid to those risk and protective factors.

**Keywords:** Bipolar disorder, Risk factors, Suicidal attempt, Hypomanic symptoms, Smoking

**PS67**

The comparison of psychological resilience improvement between probable bipolar disorder and probable unipolar depression.

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**Objective:** Few studies were investigating to compare the psychological resilience between mood disorders. The psychological resilience could be improved through psychiatric intervention, social support. The aim of study is comparison of the psychological resilience improvement between probable bipolar disorder (PBD) and probable unipolar depression (PUD).

**Method:** 322 Korean conscription was recruited at a camp for basic military training in 2015. All participants completed self-questionnaires to include CDRISC for assessing the psychological resilience. Participants were divided three group: PBD, PUD, Normal control (NC). PBD, NC group was matched to 66 PUD by propensity score matching analysis. ANOVA and repeated measure ANOVA was performed for comparing CDRISC scores between three groups through a basic military training.

**Result:** There was a significant difference among the three group in terms of the CDRISC through a basic military training. PBD group had significantly higher CDRISC scores than PUD at baseline, 5 week. Group and time interaction line, 5 week (p=0.0000). CES-D scores was not different between group had significantly higher CDRISC scores than PUD after a basic military training. The comparison of psychological resilience improvement between probable bipolar disorder (PBD) and probable unipolar depression (PUD).

**Conclusion:** The major finding of this study was more improvement of the psychological resilience on probable bipolar disorder than unipolar depression after a basic military training. The temperament of individuals related with bipolar disorder was higher on reward dependence (RD) and novelty seeking NS than unipolar depression. RD and NS was related to be more resilience for adversities by posttraumatic growth. In conclusion, RD and NS could affect the more improvement of the psychological resilience on individuals with PBD than individuals with PUD.

**Key Words:** Psychological resilience, Probable bipolar disorder, Probable unipolar depression

**PS68**

A retrospective study for predictors of bipolar disorder with a major depressive episode

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**Abstract**

**Background:** The guidelines of pharmacological therapy for mood disorders differ between major depressive and bipolar disorder. Antidepressants are the recommended treatment for major depressive disorder but not for depressive state in bipolar disorder, since antidepressants may induce rapid cycling and suicide-related behavior in patients with bipolar disorder. Therefore, it is important to distinguish between patients with depressive state in bipolar disorder and major depression at first visit. To predict diagnosis based on clinical factors, we retrospectively investigated the relationship between clinical factors and diagnosis for bipolar disorder.

**Method:** From the medical records of patients with major depressive disorder (N = 210) and bipolar disorder (N = 112), clinical factors according to a previous report (Ghaemi, 1999) were collected. We added 10 factors that we uniquely extracted. That clinical factors were such as family history about bipolar disorder, more than 3 depressive episodes, early onset, long depressive episode, depressive episode with psychosis, divorce, changed job 3 or more times, school refusal and suicidal attempts.

**Results:** Each association between diagnosis and clinical factors reported in bipolar disorders was statistically significant. The association between diagnosis and additional factor (job changes) was also statistically significant.

**Conclusions:** The current results suggest that some clinical factors are useful to distinguish bipolar disorder from major depressive disorder at first visit, and the factor of job changes could be a novel predictor of bipolar disorder.

**PS69**

Relationship between childhood maltreatment, suicidality, and bipolarity: a retrospective study

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**Abstract**

**Background:** The aims of current study were to determine whether childhood maltreatment contributes to the occurrence of major depressive disorder (MDD) with bipolarity or suicidality.

**Methods:** In total, 152 outpatients diagnosed with MDD between 2014 and 2015 on the medical records were included. Subjects were divided into two groups according to the presence of childhood maltreatment (CM group) and no childhood maltreatment (NCM group). Depression severity and bipolarity were identified using Beck Depression Inventory (BDI) and the Korean version of Mood Disorder Questionnaire (K-MDQ) respectively on the medical records. In addition, the baseline loud dependence of auditory evoked potentials of 36 patients on medical records were analyzed.

**Results:** The mean total BDI, BDI item 9 (suicide ideation), and total K-MDQ score were significantly higher in the CM group than the NCM group. The number of subjects with bipolarity was significantly higher in the CM than in the NCM group. Furthermore two thirds subjects experienced the significant maltreatment during childhood. The central serotonergic activity of the CM group was also lower than that of the NCM group.

**Conclusions:** The findings of this study support that there is a relationship between childhood maltreatment and bipolarity or suicidality in patients with MDD.

**PS70**

Treatment outcome of the acute depressive episode in patients with bipolar disorders with suicide attempts

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**Abstract**

The study sought to verify whether there is a difference in the prognosis of treatment during an acute period depending on their history of suicidal attempt or lack thereof. The subjects...
were acute bipolar patients registered at the mood disorder clinic of Seoul National University Bundang Hospital who were in acute depressive periods (CGI-BP≥3). Of the 86 subjects, 29 had a history of attempting suicide, and 59 had type I bipolar disorder. All of participants were divided into two groups based on whether they had attempted suicide in the past. After initial assessment, HAMD, GAF and CGI-BP were measured at the one month point, 2 month point and 6 month point then analyzed using repeated measure ANOVA. The baseline HAMD score were not different between the groups. Although, at 1 month point, the mean change in HAMD score was smaller in patients with a history of suicide attempt than the other patients (p=0.006), over 6 month period, there was no difference in HAMD score changes between the two groups (p=0.082). On the other hand, the HAMD remission rate was remained lower in patients with suicide attempt history over the 6 month period (p=0.004). At baseline, the suicide attempt group has a higher CGI-BP score (p=0.023) and a higher GAF score (p=0.006). Similarly, the change in CGI-BP during 1 month was smaller in the suicide attempt group (p=0.048), but the difference in CGI-BP change disappeared at 6 month (p=0.92). The GAF score was less improved in suicide attempt patients during the 6 months. In conclusion, the suicide attempt in bipolar disorder seems to be associated with poorer initial treatment response or a delayed improvement in depressive episode.

**Keywords:** Acute treatment, Bipolar disorder, Suicide attempts, Depressive phase, Difference

**PS71**

A Clinical Pilot Study of Plasma Mitochondrial DNA as a Biomarker for Bipolar Disorder

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**Abstract**

There is an urgent need for biomarkers of bipolar disorder to optimize its treatment. Although inflammatory markers have been most established biomarkers of bipolar disorder, molecular basis of cytokine elevation is not known. We hypothesized that plasma mitochondrial DNA (mtDNA), one of mitochondrial damage-associated molecular patterns, would contribute to inflammation observed in bipolar disorder. The purpose of the present study was to evaluate whether plasma mtDNA is useful as a biomarker. We measured plasma mtDNA level (copy number) in two sets of samples. In the first set, (11 medicated patients with bipolar disorder and 10 healthy controls), plasma mtDNA was measured by quantitative PCR and plasma IL-6, TNF-α, and CRP were measured by ELISA. In the second set, subjects with no medication; six bipolar disorder, 19 healthy controls, five major depressive disorder, and 16 schizophrenia, plasma mtDNA was measured. This study was approved by the ethics committees of Hannan Hospital, Osaka City University, RIKEN, and National Center of Neurology and Psychiatry and conducted in accordance with the Declaration of Helsinki. In the first set, there was no significant difference in plasma mtDNA level between patients with bipolar disorder and healthy controls. IL-6 showed a non-significant tendency of higher level in patients with bipolar disorder compared with controls (p = 0.06) and there was a trend of positive correlation between plasma mtDNA level and IL-6 level (r = 0.45). There was no significant differences in mtDNA level in the second set as well. In summary, these findings did not support our hypothesis that plasma mtDNA would be a biomarker of bipolar disorder. To draw a conclusion, however, further studies in cerebrospinal fluid would be needed. The positive correlation between mtDNA level and IL-6 level warrants investigation in larger samples.

**PS72**

Sibling Risk of Patients with Bipolar Patients in Taiwan: First Large-Scale National Population-Based Study from 2001 to 2011

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**Abstract**

**Objective:** The degree of genetic transmission of bipolar disorders in Han Chinese appear to be at higher risk of major psychiatric disorders, but estimates of individual sibling risks are unclear or of limited reliability. Hence we estimate the sibling risk for major psychiatric disorders of patients with DSM-IV diagnosis of bipolar in Taiwan from 2001 to 2011.

**Method:** Using data from the National Health Insurance (NHI) Research Database in Taiwan from 1996 to 2011, we conducted a nationwide cross-sectional study of data collected from 23,258,175 beneficiaries. The relationship of full siblings was identified based on shared parents. Only two or more siblings retrieved from 3 one-million cohorts (2000, 2005, 2010 year) were enrolled into the studying sibling cohort, including a total of 112,910 full sibling pairs among 221,755 subjects. Odds Ratios (ORs) with 95% CIs were calculated to identify the bipolar sibling risk for major psychiatric disorders.

**Result:** Subjects with at least one sibling with bipolar were more likely to have 8-fold prevalence of suffering bipolar (prevalence, 3.1% v.s. 0.4%). ORs were 7.26 (5.08–10.38) for developing bipolar, 4.54 (3.49–5.90) for ADHD, 4.62 (3.12–6.85) for schizophrenia. The effect of the same-sex sibling was found for developing bipolar disorders. ORs of bipolar for the same-sex siblings were 10.67 and 8.08 among male and female bipolar siblings; however, for different-sex siblings, ORs were decreased to 5.3 in both male and female siblings. In addition, OR for a bipolar sibling to suffer schizophrenia was around 6 except for a female having a bipolar sister (OR 1.32, 95%CI 0.3–5.3).

**Conclusion:** This is the first large-scale epidemiological study providing the evidence of a significant degree of risk in genetic transferring among the bipolar sibling. Those who have bipolar sibling are a high-risk population and further, male bipolar siblings are also high-risk for developing schizophrenia.

**PS73**

Changes in neuronal densities underlying transcriptional alterations in psychiatric patients

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**Abstract**

**Introduction:** High-throughput expression techniques are widely used to study psychiatric disorders. Genes found to be differentially expressed are next subjected to various network-enrichment analyses using resources such as Gene Ontology and protein-protein interaction databases. Such analyses are based