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The aim of the TREAT-study (Treatment-systems Research on European Addiction Treatment) is the comparison of the course of predominantly opiate dependent patients from six European regions concerning severity of illness, health service use and heroin-use.

**Method:** TREAT is a collaborative multi-centre-study conducted in Athens, Essen, London, Padua, Stockholm and Zurich which includes three repeated measures over a period of 18 month (T1-T3). Apart from the Europ-ASI, questionnaires for comorbid disorders and the utilisation of the treatment system were administered. The sample comprised about 100 subjects per region diagnosed with opiate addiction. 317 patients (53%) were retrieved for all three measures.

**Results:** With some exceptions in all centres health service use by patients could be increased during the observation period. The severity of addiction decreased in almost all regions.

In a statistical model comprising all subjects who completed the study, the best predictor for abstinence was the number of detoxification treatments but also participation in long-term rehabilitative therapy. Patients with additional severe alcohol consumption at the beginning of the study had a higher risk for continuous drug use.

A second regression-model assumed that participants who had dropped out were still dependent on opiates. Again the combination of heroin and alcohol appeared to be a negative predictor. Patients in methadone maintenance treatment suffering from major depression showed a more positive outcome.

**Discussion:** Regional differences concerning patients' characteristics, health services and drop-out rates give reason for a cautious interpretation. The study describes high- and low-risk-groups as hints for the effective allocation of resources.

### FC03.04

The neural correlates of decision-making in bipolar disorder: An fMRI study

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**Background and Aims:** Poor decision-making is a prominent feature of Bipolar Disorder (BD) suggesting that patients may be impaired in affective aspects of complex problem solving. We examined the neural correlates of emotional learning (EL) in remitted BD patients and healthy controls (HC).

**Methods:** Subjects comprised three groups: (a) 11 remitted BD patients with EL (b) 11 remitted BD patients who failed to show EL and, (c) 11 HC with EL. All groups were demographically matched. Patients were also matched on clinical variables. Participants underwent functional magnetic resonance imaging (fMRI) while performing the Iowa Gambling Task. In the active condition participants relied upon EL to weigh up short-term rewards against long-term losses, in order to achieve an optimal gambling strategy. The control condition was identical to the gambling condition except for the reward/loss component. Behavioural and neural responses associated with the overall task performance were assessed.

**Results:** Regardless of their performance in EL, BD patients, compared to HC, showed increased task-related activation in the insula and ventral anterior cingulate gyrus. BD patients with EL showed increased activation in left frontopolar and ventrolateral prefrontal

cortices while reduced activation was noted in the same regions in BD patients who failed to show EL.

**Conclusions:** BD patients showed evidence of increased limbic activation associated with affective decision-making. Their ability to attain emotional learning was associated with increased recruitment of frontopolar and ventral prefrontal cortex regions. This finding may reflect a successful compensatory response to limbic overactivation during affective decision-making.

### FC03.05

Substance use disorders among eating disorders and impulse control disorders: Personality and clinical correlates

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**Background and Aims:** Given the clinical similarity and the frequent comorbidity between impulse control disorders and certain eating disorders (ED) such as bulimia nervosa, we aimed to compare personality and clinical profiles of individuals with and without substance use disorders (SUD) who had primary diagnoses of ED or impulse control disorders, namely pathological gambling (PG).

**Methods:** 1096 ED [91.8% females] and 1120 PG [92.4% males] patients were assessed for the presence of SUD. All patients were consecutively admitted to our Psychiatry Department and diagnosed according to DSM-IV-TR criteria. We administered the Temperament and Character Inventory-Revised (TCI-R), the Symptom Checklist-90-Revised (SCL-90-R), and other clinical indices. Lifetime substance use included alcohol and other substances and was measured with the SCID-I. Student-Fisher t-tests were used to compare clinical features. Binary logistic regression models were used to analyse personality predictors of comorbidity with SUD. Adjustments for sex, age, and specific diagnosis were applied.

**Results:** High Novelty Seeking, low Reward Dependence and low Self-Directedness were predictive of SUD in the whole sample independent of diagnosis ( $p < 0.01$ ). In the PG sample only, after adjustment for sex and age, Reward Dependence was no longer associated with SUD. Patients of both clinical samples with SUD showed higher SCL-90-R scores and severer eating and gambling symptoms (respectively).

**Conclusions:** Our results suggest that high Novelty Seeking, low Reward Dependence and low Self-Directedness are associated with lifetime SUD, which is also associated with a severer presentation of the primary disorder. This pattern holds across different populations such as ED and PG.

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## Symposium: The new acute mental patient: Diagnostic constructs and treatment innovation in emergency psychiatry

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### S53.01

Toward DSM v: Why the new acute mental patient deserves more study

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Over the last several years diagnostic research made significant conceptual and methodological advances but acute mental disorders still remain almost neglected from international classifications. This is becoming, however, an area of growing concern with considerable relevance to mental health policies: an increasing number of patients seek for acute/emergency treatment with atypical symptoms yet classic diagnostic categories do not adequately describe the multiple co-morbidities and unpredictable course of these disorders. To capture a number of exquisite clinical characteristics that may be a putative target of innovative treatment programs on the changing scene of emergency psychiatry and acute psychiatric treatment, this report will introduce the concept of "new acute mental patient" a condition at the crossroad of dissociative disorders, mood disorders and personality disorders among patients exposed to traumatic life events. The validity of this diagnostic construct and its relevance to outcome research will be further investigated utilizing the data basis from longitudinal studies.

### S53.02

Learning from the longitudinal course of concurrent traumatic life events, major depression and personality disorders

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**Background and Aims:** Traumatic stress/dissociation, major depression and borderline personality disorders exhibit extensive overlapping and appear to be both concurrent and sequential over time. The purpose of the study was to conduct a longitudinal investigation of the association of these diagnostic dimensions over time among acutely suicidal patients. An additional aim was to determine which symptom co-variance profile was associated with the most acute clinical phase of the disorder, treatment failure and service consume.

**Methods:** 100 patients aged 18-55, referred to emergency room with major depression, borderline personality disorder and traumatic life event were prospectively investigated in a naturalistic follow-up design.

**Results:** Subjects almost recovered early in the follow-up (3 month and 6-month) from all disorders. The analyses indicated that traumatic stress/dissociation but not major depression and borderline personality disorder are a factor in the suicidal crisis of these patients. Comment. Stress related dissociative disorder may be an underestimated factor among acutely suicidal patients requiring intensive treatment.

### S53.03

Integrating emergency care, crisis intervention and acute treatment at the general hospital: Efficiency and costs

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**Backgrounds and Aims:** We assessed the efficiency and costs of an innovative emergency service focusing on specialized evaluation and intensive treatment for the new acute mental patient.

**Methods:** A computerized register provided continuous evaluation of the impact of the new unit on the global patient flows in a 500.000 inhabitants catchment area during 5 years. Furthermore, we carefully assessed the all population treated at the emergency

room and the subpopulation population assigned to crisis intervention at the General hospital at emergency room discharge during 2-months. The efficiency and costs were investigated with: a) pre-post analyses (global flows), b) assessing the reliability of decision processes according to pre-established decision guidelines.

**Results:** Well integrated, diagnostic assessment, acute treatment and crisis intervention for the new acute mental appeared to dramatically improve the efficiency of a large system of community psychiatry services.

**Comment:** The study suggests that the emergency treatment of the new acute mental patient deserves more study.

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## Symposium: Impulsivity, compulsivity and addiction

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### S29.01

The role of impulsivity in the pathogenesis and treatment of addiction

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Research on pathogenesis and treatment has long been concentrated on the problems involving abnormalities in the reward and motivational system. However, current research also looks at decision making, including both error detection and behavioral inhibition. It is assumed that compulsive use and relapse in patients with a substance use disorder or with pathological gambling are the result not only of excessive salience of drug related stimuli but also of impaired error detection and behavioral disinhibition.

In this presentation an overview will be given of the research on decision making in alcoholics, drug addicts and pathological gamblers. The data show that patients with both chemical and non-chemical addictions have serious problems with error detection and behavioral inhibition independent of the presence of antisocial or borderline personality disorders. Recent data also show that ex-addicts have fewer problems with behavioral inhibition, indicating either pre-existing normality or improvement after abstinence. The fact that patients with low levels of behavioral inhibition relapse more frequently supports the first explanation. It, therefore, seems important to improve decision making in patients with addictive behaviors, using pharmacological interventions (cognitive enhancers), neurophysiological techniques (biofeedback) or psychotherapeutic treatments (training).

### S29.02

Neurobiological correlates of impulsivity and addiction

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In alcoholism, central serotonergic dysfunction may contribute to negative affect and impulsive aggression. In animal experiments and human studies, serotonin transporters and receptors interact with central processing of affectively negative stimuli. Monoamine effects on central processing of emotionally salient stimuli are genetically influenced, and besides single gene effect, gene-gene interactions have been postulated. Gene-gene effects are often assumed but difficult to test in behavioral genetics due to the small explained behavioral variance. Processing of unpleasant stimuli in the amygdala has been associated with a functional polymorphism (val158-met) in the catechol-O-methyltransferase (COMT) gene and independently