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## Individual-specific and subgroup level associations between stress and psychopathology in daily life

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**Conclusions:** If MDMA-assisted psychotherapy significantly attenuates PTSD symptomatology and associated functional impairment, these results will form the basis for marketing authorization applications worldwide, including among participants with dissociative subtype of PTSD, depression, history of alcohol and substance use disorders, and adverse childhood experiences.

**Disclosure:** No significant relationships.

**Keywords:** neuroplasticity; MDMA; psychotherapy; ptsd

## Precision psychiatry

### O210

#### Depression patient-derived cortical neurons reveal potential biomarkers for antidepressant response

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**Introduction:** Major depressive disorder is highly prevalent worldwide and has been affecting an increasing number of people each year. Current first line antidepressants show merely 37% remission, and physicians are forced to use a trial-and-error approach when choosing a single antidepressant out of dozens of available medications.

**Objectives:** We sought to identify a method of testing that would provide patient-specific information on whether a patient will respond to a medication using in vitro modeling.

**Methods:** Patient-derived lymphoblastoid cell lines from the STAR\*D study were used to rapidly generate cortical neurons and screen them for bupropion effects, for which the donor patients showed remission or non-remission.

**Results:** We provide evidence for biomarkers specific for bupropion response, including synaptic connectivity and morphology changes as well as specific gene expression alterations.

**Conclusions:** These biomarkers support the concept of personalized antidepressant treatment based on in vitro platforms and could be utilized as predictors to patient response in the clinic.

**Disclosure:** This work was funded by Genetika+ Ltd, Jerusalem, Israel. YA, DK, EN, DL and TCS are employees of Genetika+ Ltd and received salary and/or stock options for the submitted work.

**Keywords:** Depression; personalized medicine; biomarkers; disease models

### O211

#### Individual-specific and subgroup level associations between stress and psychopathology in daily life: A temporal network investigation

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**Introduction:** Stress is a risk factor for developing psychopathology. Emerging evidence suggests that daily experiences of stress may also predict symptoms during the day. It is unclear to what extent the influence of stress on psychopathology during the day is the same across individuals (including across diagnostic boundaries), and which effects are individual-specific

**Objectives:** This study aims to reveal how stress and symptoms are interrelated in a cross-diagnostic context by modeling individual level temporal networks, and examining subgroups with similar dynamics.

**Methods:** Hundred twenty two young adults (43.4% women) with a wide range of psychopathology in terms of severity and type of problems completed a six-month daily diary study. We used a temporal network approach (i.e., group iterative multiple model estimation) to model how stress and ten specific symptoms (e.g., feeling down, paranoia, restlessness) were related across time at the individual-specific, subgroup, and group level.

**Results:** After controlling for the lagged influence of stress on itself, stress level predicted the level of restlessness, worrying, nervousness, and feeling down during the same day for >70% of individuals. We observed three larger subgroups with each over 20 individuals, whose temporal networks showed different dynamic patterns involving specific symptoms. Effects of stress on other specific symptoms differed across individuals, and these were not subgroup-specific.

**Conclusions:** This study showed important overlap between individuals in terms of impact of stress on psychopathology in daily life. Subtle differences between individuals were also observed. Possibly, such differences are relevant for examining individual-specific vulnerability for future psychopathology. This requires further investigation.

**Disclosure:** No significant relationships.

**Keywords:** cross-diagnostic; Stress reactivity; person-specific analysis; temporal network analysis

### O212

#### Pharmacogenetic drug use in young danish individuals with severe mental disorders

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**Introduction:** Pharmacogenetics (PGx) studies genetic variance and related differences in drug outcomes. PGx guidelines for