clozapine therapy can achieve good outcome both with respect to treatment of psychosis and amelioration of SA. This presentation will focus on the relationships between craving (measured on the Minnesota Craving Scale), psychopathology, changes in HVA/SHIiA, and treatment response to clozapine in SA patients.

### 61. EXTRACRANIAL SIZE IN PATIENTS WITH SCHIZOPHRENIA

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Much of the current literature from both neuroimaging and post mortem studies points to a reduction in intracranial size and cerebrum in schizophrenia. Intriguingly, there is also evidence for reduced extracranial size in infants at high risk for schizophrenia, while studies in adults with schizophrenia which have assessed head size have been inconclusive. Using head measures of circumference, length and width derived from caliper examination in both coronal and sagittal planes, we examined head size in 46 male controls (mean age 42 ± 9 years; 20 Caucasian, 26 African American) and 44 patients (mean age 40 ± 9 years; 18 Caucasian, 26 African American) with DSM-IV schizophrenia. In a linear regression model which entered race and diagnosis as independent factors and stature and elbow breadth as covariates, we found no evidence for reduced extracranial size in schizophrenia. These data suggest that the process(es) which underlie smaller brains in schizophrenia do not produce a corresponding reduction in head size.

### 62. LOW LEVELS OF ANTIBODIES TO CARDIOLIPIN IN FIRST EPISODE AND CHRONIC SCHIZOPHRENIA

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The objective of this study was to measure anticardiolipin antibodies (aCL) in major psychiatric diseases. In experiment 1, 96 subjects were evaluated: 20 first episode schizophrenia patients, [SCZ1] 20 chronic schizophrenia patients in acute exacerbation [SCZ2], 19 bipolar patients, 20 schizoaffective patients and 17 healthy age matched controls. In experiment 2 there were 97 subjects: 20 first episode schizophrenia patients [SCZ1], 60 chronic schizophrenia patients in acute exacerbation [SCZ2] and 17 healthy age matched controls.

Diagnosis was according to DSM-IV guidelines. Serum samples were tested for aCL in parallel by enzyme linked immunosorbant assay in the presence of bovine serum. 6 positive control samples with high levels of aCL were run in parallel. Background binding to wells uncoated with cardiolipin (CL) was also measured.

In experiment 1, aCL levels were similar in the control, bipolar and schizoaffective groups. In contrast, aCL levels in the SCZ1 and SCZ2 groups were significantly lower than controls (p = 0.000002 and 0.00002 respectively).

Experiment 2 supported these results (p = 0.0002 for all schizophrenic patients versus controls). Interestingly, background levels in both experiments were higher in the schizophrenic groups than controls.

Serum aCL levels are lower in schizophrenic patients, and especially in first episode cases, compared to controls. One possible explanation for the lower levels of aCL in schizophrenic patients is the consumption of these antibodies in an active phase of the disease. The higher background levels in these groups may indicate a high level of antibodies to some serum component in schizophrenic patients.

### 63. CYTOKINE PRODUCTION IN SCHIZOPHRENIC PATIENTS: DIFFERENTIAL EFFECT OF NEUROLEPTIC MEDICATIONS

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Patients with schizophrenia possess different immunological aberrations but their significance is not clear.

In the present study the authors analyzed the production of cytokines in serum of 33 schizophrenic patients, before and after neuroleptic treatment, and 21 age and sex matched healthy controls.

IL-1 receptor antagonist (IL-1ra), and IL-2 soluble receptor antagonist (IL-2sR) levels were evaluated by a sandwich enzyme immunoassay.

No significant differences were found in serum levels of IL-1ra between schizophrenic patients and controls, but it was highly increased in schizophrenic patients after neuroleptic treatment (p < 0.017). Significant increased levels of IL-2sR was found in schizophrenic patients before and after treatment as compared to healthy controls (p < 0.02, p < 0.004, respectively).

The present study supports evidence for immune activation in some schizophrenic patients and neuroleptic medications differently affect the production of various cytokines.

### 64. CORRELATIONS BETWEEN FOUR COMPONENTS OF SENSORY GATING

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Sensory gating refers to the brain’s ability to modulate its sensitivity to incoming sensory stimuli. This definition allows the concept of gating to include the capacity to inhibit irrelevant stimuli (gating out) and to dishabituate when novel stimuli are presented (gating in). Whether these measures reflect the same or different sensory gating components is not known. A high degree of correlation between these measures would indicate that they are reflecting the same process. Four components of sensory gating were examined in 36 normal volunteers: habituation (attenuation or gating out) and dishabituation (enhancement or gating in) of the P50 (early or preattentive gating) and of the N100 (late or early-attentive gating) EP amplitudes. Two conditions of the paired-click paradigm (S1 & S2) were used: identical pairs (gating out) and non-identical pairs (gating in). The P300 was recorded utilizing an odd-ball paradigm. All gating measures were calculated as the S2/S1 ratios. Pearson correlations were: early in vs. early out = −.356, late in vs. late