

discriminate good from non-responders and can be used in combination with clinical variables.

Disclosure of Interest: None Declared

EPP0287

Decreased telomere length in a subgroup of young individuals with bipolar disorders: replication in the FACE-BD cohort and association with the shelterin component POT1

L. Spano^{1*}, C. Marie-Claire¹, O. Godin^{2,3}, M. Leboyer^{2,3,4}, B. Aouizerate^{2,5}, A. Lefrere^{2,6}, R. Belzeaux^{2,7,8}, P. Courtet^{2,9}, E. Olie^{2,10}, C. Dubertret^{2,11,12}, R. Schwan^{2,13}, V. Aubin^{2,14}, P. Roux^{2,15,16}, M. Polosan^{2,17}, L. Samalin^{2,18}, E. Haffen^{2,19}, F. Bellivier^{1,2,20} and B. Etain^{1,2,20}

¹Université Paris Cité, INSERM UMR-S 1144, Optimisation Thérapeutique en Neuropsychopharmacologie OTeN, Paris; ²Fondation FondaMental; ³Université Paris Est Créteil, INSERM U955, IMRB, Translational NeuroPsychiatry Laboratory; ⁴AP-HP, Hôpitaux Universitaires Henri Mondor, Département Médico-Universitaire de Psychiatrie et d'Addictologie (DMUIMPACT), Fédération Hospitalo-Universitaire de Médecine de Précision en Psychiatrie (FHU ADAPT), Créteil; ⁵Centre Hospitalier Charles Perrens, Laboratoire NutriNeuro (UMR INRA 1286), Université de Bordeaux, Bordeaux; ⁶Pôle de Psychiatrie, Assistance Publique Hôpitaux de Marseille; ⁷INT-UMR7289, CNRS Aix-Marseille Université, Marseille; ⁸Université Montpellier, Montpellier; ⁹Department of Emergency Psychiatry and Acute Care, CHU Montpellier, IGF, Univ. Montpellier, CNRS, INSERM, Créteil; ¹⁰Department of Emergency Psychiatry and Acute Care, CHU Montpellier, IGF, Univ. Montpellier, CNRS, INSERM, Montpellier; ¹¹AP-HP, Groupe Hospitalo-Universitaire AP-HP Nord, DMU ESPRIT, Service de Psychiatrie et Addictologie, Hôpital Louis Mourier, Colombes; ¹²Université de Paris, Inserm UMR1266, Sorbonne Paris Cité, Faculté de Médecine, Paris; ¹³Université de Lorraine, Centre Psychothérapique de Nancy, Inserm U1254, Nancy; ¹⁴Pôle de Psychiatrie, Centre Hospitalier Princesse Grace, Monaco; ¹⁵Centre Hospitalier de Versailles, Service Universitaire de Psychiatrie d'Adulte et d'Addictologie, Le Chesnay; ¹⁶Equipe DisAP-PsyDev, CESP, Université Versailles Saint-Quentin-en-Yvelines – Paris-Saclay, Inserm, Villejuif; ¹⁷Université Grenoble Alpes, Inserm, U1216, CHU Grenoble Alpes, Grenoble Institut Neurosciences, Grenoble; ¹⁸Centre Hospitalier et Universitaire, Département de Psychiatrie, Université Clermont Auvergne, CNRS, Clermont Auvergne INP, Institut Pascal (UMR 6602), Clermont-Ferrand; ¹⁹Service de Psychiatrie de l'Adulte, CIC-1431 INSERM, CHU de Besançon, Laboratoire de Neurosciences, UFC, UBFC, Besançon and ²⁰AP-HP, Groupe Hospitalo-Universitaire AP-HP Nord, DMU Neurosciences, Hôpital Fernand Widal, Département de Psychiatrie et de Médecine Addictologique, Paris, France

*Corresponding author.

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Introduction: A 10-15 years decrease in life expectancy has been observed in individuals with bipolar disorder (BD) and has been associated with premature cellular aging, but mechanisms involved remain unclear. Our team recently identified a subgroup of young individuals with prematurely shortened telomere length (TL).

Objectives: The aims of the present study were to replicate this observation in a larger sample and to analyze the expression levels

of genes associated with age or TL in a subsample of these individuals.

Methods: TL was measured by qPCR using peripheral blood DNA from 542 individuals with BD. Clustering analyzes were performed with age and TL as classification variables to identify similar groups.

Gene expression of 29 genes, including 20 associated with age and 9 with TL, was analyzed by RT-qPCR using peripheral blood RNA in a subgroup of 129 individuals. Gene expressions were compared between groups obtained from the previous clustering analyzes by Kruskal-Wallis and Mann-Whitney tests.

Results: Clustering analyzes identified 3 subgroups and replicated the clustering previously described: a subgroup of aged individuals with a low TL (mean age : 51.73 years ; mean TL : 2), a subgroup of young individuals with a high TL (mean age : 29.02 years ; mean TL : 4.36) and a subgroup of young individuals but with a low TL (mean age : 29.64 years ; mean TL : 1.96). None of the tested clinical variables were significantly associated with this subgroup.

Furthermore, gene expression level analyzes showed that only *POT1* expression was different between the two subgroups of young individuals, with a downregulation of *POT1* expression in the subgroup with a lower TL level. *POT1* is a protein involved in the maintenance of TL. *POT1* binds to another protein TPP1 allowing the recruitment of telomerase, the enzyme which extends TL. Our hypothesis is that in the subgroup presenting a lower *POT1* expression, the *POT1*-TPP1 complex cannot form and thus prevents telomerase recruitment and TL elongation.

Conclusions: This study confirms, on a larger sample, the existence of a subgroup of young individuals with BD presenting accelerated cellular aging. The observed decrease of *POT1* expression level suggests a newly described cellular mechanism in individuals with BD, that may contribute to telomere shortening.

Disclosure of Interest: None Declared

EPP0288

Telehealth Treatment of Patients with Bipolar Depression during the COVID-19 Pandemic: Comparative Safety, Patient Satisfaction, and Effectiveness to Prepandemic In-person Treatment

M. Zimmerman

Psychiatry, Brown University, Providence, United States

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Introduction: The COVID-19 pandemic prompted a transition from in-person to telehealth psychiatric treatment. There are no studies of partial hospital telehealth treatment for bipolar disorder.

Objectives: In the present report from the Rhode Island Methods to Improve Diagnostic Assessment and Services (MIDAS) project, we compared the effectiveness of partial hospital treatment of patients with bipolar depression treated virtually versus in-person.

Methods: Outcome was compared in 76 patients with bipolar depression who were treated virtually from April, 2020 to December, 2022 to 130 patients who were treated from May, 2017 to January 2020. The patients completed self-administered measures of patient satisfaction, symptoms, coping ability, functioning, and general well-being.