

# Pharmacogenetic-Guided Antidepressant Selection as an Opportunity for Interprofessional Collaboration: A Case Report

Céline K. Stäuble<sup>1,2,3</sup>, Markus L. Lampert<sup>2,3</sup>, Thorsten Mikoteit<sup>4</sup>, Martin Hatzinger<sup>4</sup>, Kurt E. Hersberger<sup>2</sup> and Henriette E. Meyer zu Schwabedissen<sup>1</sup>

<sup>1</sup>*Biopharmacy, Department of Pharmaceutical Sciences, University of Basel, Basel, Switzerland*

<sup>2</sup>*Pharmaceutical Care, Department of Pharmaceutical Sciences, University of Basel, Basel, Switzerland*

<sup>3</sup>*Institute of Hospital Pharmacy, Solothurner Spitäler, Olten, Switzerland*

<sup>4</sup>*Psychiatric Services Solothurn, Solothurner Spitäler and Faculty of Medicine, University of Basel, Solothurn, Switzerland*

## Abstract

In the herein reported case of a 42-year-old woman diagnosed with anxiety and depression, a long history of antidepressant ineffectiveness and adverse drug reactions was decisive for an in-depth medication review including pharmacogenetic panel testing. In detail, treatment attempts with paroxetine and escitalopram were ineffective and discontinued due to subjective gastrointestinal intolerance. Due to the worsening of the depression after the failed treatment attempts, admission to our clinic became necessary. Herein, owing to the collaboration of psychiatrists with clinical pharmacists, individualized incorporation of pharmacogenetic data into the process of antidepressant selection was enabled. We identified vortioxetine as a suitable therapeutic, namely for being most likely pharmacokinetically unaffected as predicted by pharmacogenetic panel testing and taking into account the current comedication, as well as for its favorable action profile. Herein, our collaborative effort proved to be successful and resulted in the patient's depression remission and clinic discharge with the interprofessionally selected pharmacotherapy. This exemplary case not only highlights the potential benefits and challenges of pre-emptive pharmacogenetic testing in antidepressant prescription, but also proposes an approach on how to put pharmacogenetics into practice.

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Contact: [celine.staeuble@unibas.ch](mailto:celine.staeuble@unibas.ch)