**ABSTRACT** 

**Dual Antidepressant Consumption in the Czech Republic** 

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Introduction: Antidepressants are widely used in many indications. Dual antidepressants are

prescribed in treatment of depressive disorder, anxiety disorder, in pain therapy and insomnia.

Besides that, there are trials to prove the efficacy of dual antidepressants in different indications.

Generally, antidepressant consumption in the Czech Republic is increasing. The question is,

what the real proportion of dual antidepressant consumption is.

**Objective:** As the objective, dual antidepressant consumption was analysed.

Methods: The consumption of antidepressants venlafaxine, duloxetine, mirtazapine and

mianserin was performed in the period from 1 January 2008 to 31 December 2018. The State

Institute for Drug Control (SÚKL) database was used. The data were described by descriptive

statistics. The drug consumption in Defined Daily Doses (DDD) was converted into Defined

Daily Dose/1,000 inhabitants/day (DID). In addition, comparison of use of particular dual

antidepressant doses was made.

Results: Overall, the relative consumption of dual antidepressants rises. Venlafaxine

consumption increased 3.0 times. Duloxetine consumption grew 3.4 times. Consumption of

mirtazapine is 1.9 times higher than it was in the beginning of the research period. In contrast,

mianserin consumption fell 7.0 times. In total, the highest relative consumption is the one of

venlafaxine (DID 51.7156), followed by mirtazapine (DID 39.4550), mianserin (1.9524) and

duloxetine (1.6678) respectively.

Conclusion: The rising tendency of dual antidepressant consumption could be caused by the variety of indications which they are used in. Together with depression, venlafaxine is prescribed in treatment of anxiety, duloxetine is administered in therapy of neuropathic pain. Mirtazapine is well tolerated by sexually active patients and can be used off-label as sedative. The descending consumption of mianserin might be caused by its shortage of supplies on the market.

**Key words:** drug consumption, dual antidepressants, venlafaxine, duloxetine, mirtazapine, mianserin