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## Is Drug- Drug Interaction, A Challenge in Treating Comorbid Condition like Dyslipidemia & BPD?

atients with bipolar disorder (BPD) are at high risk of development of comorbidities including dyslipidemia - a major risk factor for cardiovascular diseases.<sup>1</sup> Sleep pattern of patients with BPD has shown to be linked with dyslipidemia.<sup>2</sup> There is also evidence to support the association between dyslipidemia, psychiatric disorders, and suicide risk owing to the effects of altered lipid profiles on serotoninergic neuron membranes.<sup>3</sup>

#### Dyslipidemia: Increased Risk in BPD1



Prevalence of hyperlipidemia in patients with BPD

13.5% vs. 7.9% in the general population

The average annual incidence of hyperlipidemia in patients with BPD

4.37% vs. 2.55% in the general population

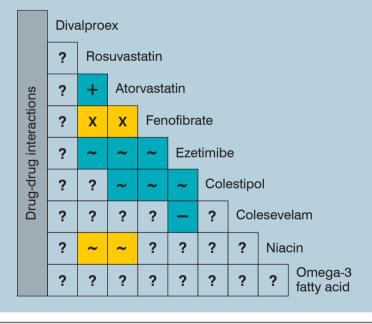
#### **Treatment Challenges**

Patients with dyslipidemia receive chronic treatment, while BPD patients also need to be treated for a longer duration. When, both the conditions co-exist, there are high chances of drug interaction due to polypharmacy.

### Drug Interaction with Other Lipid Lowering Drugs

Divalproex Sodium, a commonly prescribed drug for BPD, is not reported to have any significant interactions with the medicines which are used to treat the dyslipidemia.<sup>4,5</sup>

#### Drug interactions of divalproex and some commonly used drugs for treatment of dyslipidemia<sup>4,5</sup>



- ~ Possible interaction\*
- + Additive effect
- Reduction of effect
- x Not recommended
- ? Interaction unknown

Major interaction

Minor-to-moderate interaction

\*Observe precaution & monitor the patients

(The drug interactions between drugs are represented by the colour and the symbol in the column with the drug present in the horizontal line. E.g., Atorvastatin has minor-to-moderate (□) possible interaction (~) with ezetimibe; similarly, rosuvastatin can have major interaction (□) with fenofibrate and is (X) not recommended.

References: 1. Hsu JH, Chien IC, Lin CH. Increased risk of hyperlipidemia in patients with bipolar disorder: A population-based study. *General Hospital Psychiatry*. 2015;37(4):294–8. 2. Soreca I, Wallace ML, Frank E, Hasier BP, Levenson JC, Kupfer DJ. Sleep duration is associated with dyslipidemia in patients with bipolar disorder in clinical remission. *Journal of affective disorders*. 2012;141(2–3):484–7. 3. Aguglia A, Solano P, Giacomini G, Caprino M, Conigliaro C, Romano M, *et al.* The association between dyslipidemia and lethality of suicide attempts: A case-control study. *Frontiers in psychiatry*. 2019;10:70. 4. https://www.pdr.net/drug-summary/Depakote-Tablets-divalproex-sodium-1075. 5. https://www.drugs.com/interaction/list/?drug\_list=918-0.

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#### Dear Doctor,

On the basis of your clinical experience of managing BPD & co-morbidities, which are the agents for which you would like to know more about their actual or potential interactions.

