www.hiv-druginteractions.org

UNIVERSITY OF LIVERPOOL

Interaction Report

Report ID:
Date Produced: 23 June 2025

Antiretroviral Treatment	Co-medications
Efavirenz (EFV)	Tramadol

This report lists the summaries of potential interactions (i.e. "red", "amber" and “yellow” classifications) for the drugs in the table above.

Interactions with a "green" or "grey" classification (i.e. no clinically significant interaction or no clear data) have been checked and are listed at the end of this report, but summaries are not shown.

For full details of all interactions, see www.hiv-druginteractions.org .

Description of the interactions

Potential weak interaction - additional action/monitoring or dosage adjustment is unlikely to be required (YELLOW)

Efavirenz (EFV) + Tramadol

Coadministration has not been studied. Tramadol is metabolized by N-demethylation (CYP3A4 and CYP2B6) and to an active metabolite which is more potent than the parent compound by O-demethylation (CYP2D6). Efavirenz could potentially reduce tramadol exposure but may not affect the metabolic pathway leading to the more potent active metabolite. No a priori dosage adjustment is recommended, but the analgesic effect should be monitored. Tramadol has a possible risk of QT prolongation and/or TdP on the CredibleMeds.org website. Efavirenz was shown to prolong the QT interval above the regulatory threshold of concern in homozygous carriers of the CYP2B6*6/*6 allele (i.e. 516T variant in the gene encoding CYP2B6). The European product label for efavirenz contraindicates coadministration with a drug with a known risk of Torsade de Pointes whereas the American product label for efavirenz recommends that alternatives should be considered. As the potential risk of a QT interval prolongation relates specifically to homozygous carriers of CYP2B6*6/*6 and given the accumulated years of safety data with efavirenz and such drugs, the contraindication is not reflected in the colour coding of this interaction summary.

© Liverpool Drug Interactions Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.
This report is provided for information only. It is not intended to replace a consultation with an appropriately qualified health professional. Information presented relates only to known or suspected effects of interacting medications, and is based on relevant data in the public domain. No clinical advice is given or implied, clinicians must exercise their own judgement in relation to the risks and benefits of combining drugs, which depend on factors beyond pharmacokinetic interactions between two drugs. The University of Liverpool shall not be held responsible for the application or use of any information it gives and the user shall hold the University of Liverpool harmless against any consequences arising from the same. We aim to ensure that information is accurate and consistent with current knowledge and practice. However, the University of Liverpool and its servants or agents shall not be responsible or in any way liable for the continued currency of information in this publication whether arising from negligence or otherwise howsoever or for any consequences arising therefrom. The University of Liverpool expressly exclude liability for errors, omissions or inaccuracies to the fullest extent permitted by law.