

Oral vs IM/SC Administration

Revised November 2025

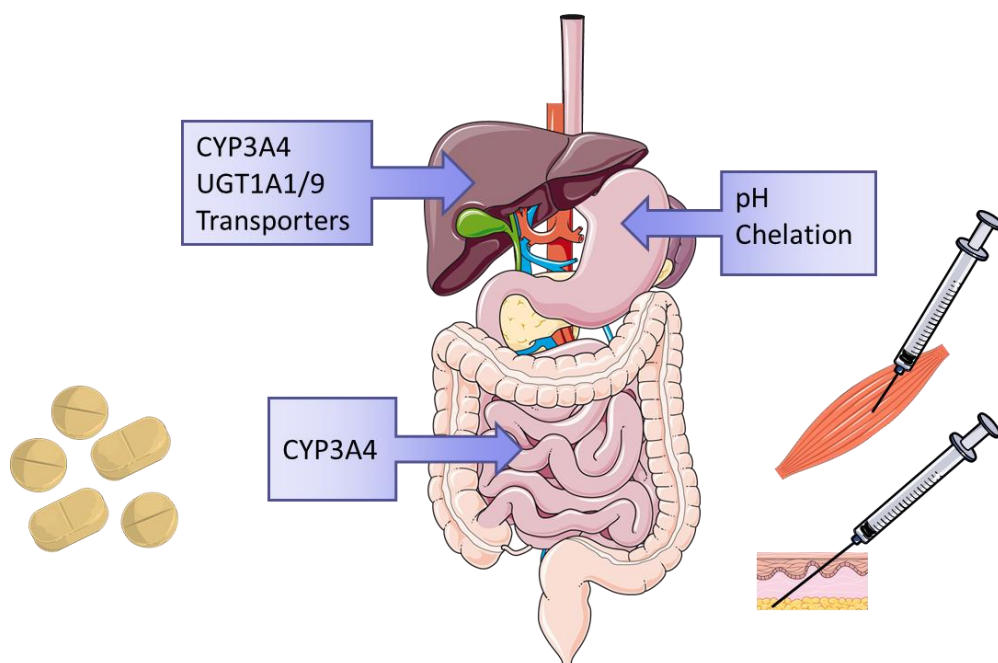
Page 1 of 1

For personal use only. Not for distribution. For personal use only. Not for distribution. For personal use only. Not for distribution.

Drug-drug interactions after oral and intramuscular/subcutaneous administration of cabotegravir, rilpivirine and lenacapavir

- Intramuscular (IM) or subcutaneous (SC) administration avoids drug-drug interactions at the gastrointestinal level.
- Drug-drug interactions can still occur with IM or SC administration.
- IM or SC administration does not necessarily mitigate the magnitude of interactions with inducers.
- Physiological interactions may also occur with IM administration. A case report suggests enhanced muscle growth and enhanced blood flow in muscles (due to anabolic androgen steroids and intensive physical activity) may increase the release of IM cabotegravir/rilpivirine from the depot injection, and the subsequent increased elimination of cabotegravir/rilpivirine may result in suboptimal levels at the end of the dosing interval (*Burger D, et al. AIDS, 2024, 38(11):1728-1729*).

Mechanisms of drug-drug interactions with cabotegravir, rilpivirine and lenacapavir



Adapted from: www.smart.servier.com

	Oral administration	IM/SC administration
Stomach/intestine	• Change in gastric pH • Chelation with divalent cations • Inhibition/induction of CYP3A4 and transporters	• Bypassed
Liver	• Inhibition/induction of CYP3A4, UGT1A1/9, transporters	• Inhibition/induction of CYP3A4, UGT1A1/9, transporters

Examples of drugs interacting with oral but not IM/SC administration

Cabotegravir	Rilpivirine	Lenacapavir
• Antacids • Calcium • Colestyramine • Iron • Magnesium • Multivitamins containing divalent cations • Orlistat • Sevelamer • Strontium ranelate	• Antacids • Colestyramine • H2 receptor antagonists • Liraglutide • Orlistat • Proton pump inhibitors • Sevelamer • Strontium ranelate	• Colestyramine • Orlistat • Sevelamer • Strontium ranelate

Using a saved or printed version?
Click or scan to check for updates



Adapted from Hodge D et al, Clin Pharmacokinet, 2021.

© Liverpool Drug Interactions Group, University of Liverpool, 3rd Floor William Henry Duncan Building, 6 West Derby Street, Liverpool, L7 8TX.

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.