ART Drug-Drug Interactions: Abacavir (ABC) Interactions

October 2022

Table 14: Abacavir (ABC) Interactions (also see drug package inserts)

Class or Drug	Mechanism of Action	Clinical Comments
Alcohol [Yuen, et al. 2008; McDowell, et al. 2000]	ABC is metabolized via alcohol dehydrogenase, and competitive metabolism may increase exposure to ABC.	• Use may increase ABC concentrations; monitor for ABC-related adverse effects. • ABC does not appear to increase blood alcohol concentrations.
Rifabutin, rifampin, rifapentine	• **Rifabutin, rifapentine:** No clinically significant interactions are expected. • **Rifampin** may reduce ABC concentration.	• **Rifabutin, rifapentine:** No dose adjustments are necessary. • **Rifampin:** No dose adjustments are recommended for concomitant use with ABC.
Mpox treatments	**Cidofovir** is eliminated via glomerular filtration and active renal secretion by OAT1 and OAT3.	• **Cidofovir:** Avoid coadministration with nephrotoxic agents. Consider use of TAF in place of TDF and monitor for renal-related adverse effects. • **Brincidofovir, tecovirimat, VIGIV:** Drug interactions are unlikely.

Abbreviations: OAT, organic anion transporter; TAF, tenofovir alafenamide; TDF, tenofovir disoproxil fumarate; VIGIV, vaccinia immune globulin intravenous.

No significant interactions/no dose adjustments necessary: Common oral antibiotics (Table 19); drugs used as antihypertensive medicines (Table 20); anticoagulants (Table 21); antiplatelet drugs (Table 22); statins (Table 23); antidiabetic drugs (Table 24); acid-reducing agents (Table 25); polyvalent cations (Table 26); asthma and allergy medications (Table 27); long-acting beta agonists (Table 28); inhaled and injected corticosteroids (Table 29); antidepressants (Table 30); benzodiazepines (Table 31); sleep medications (Table 32); antipsychotics (Table 33); anticonvulsants (Table 34); nonopioid pain medications (Table 35); opioid analgesics and tramadol (Table 36); hormonal contraceptives (Table 37); erectile and sexual dysfunction agents (Table 38); alpha-adrenergic antagonists for benign prostatic hyperplasia (Table 39); tobacco and smoking cessation products (Table 40); methadone, buprenorphine, naloxone, and naltrexone (Table 42); immunosuppressants (Table 43); COVID-19 therapeutics (Table 45); gender-affirming hormones (Table 47).

References

McDowell JA, Chittick GE, Stevens CP, et al. Pharmacokinetic interaction of abacavir (1592U89) and ethanol in human immunodeficiency virus-infected adults. *Antimicrob Agents Chemother* 2000;44(6):1686-1690. [PMID: 10817729] https://pubmed.ncbi.nlm.nih.gov/10817729

Yuen GJ, Weller S, Pakes GE. A review of the pharmacokinetics of abacavir. *Clin Pharmacokinet* 2008;47(6):351-371. [PMID: 18479171] https://pubmed.ncbi.nlm.nih.gov/18479171