



Resource: ART Drug-Drug Interactions

April 2023

| Table 22: Antiplatelet Drugs (also see drug package inserts) | | |
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| → Adenosine phosphate receptor inhibitors, cilostazol, dipyridamole | | |
| Class or Drug | Mechanism of Action | Clinical Comments |
| <ul style="list-style-type: none"> • NRTIs • Dolutegravir (DTG) • Bictegravir (BIC) • Cabotegravir (CAB) • Raltegravir (RAL) • Rilpivirine (RPV) • Doravirine (DOR) | No significant interactions are expected. | No dose adjustments are necessary. |
| Elvitegravir (EVG), boosted | <ul style="list-style-type: none"> • Cilostazol may be metabolized by CYP3A; COBI-boosted EVG can increase concentrations of this drug. • Ticagrelor: Strong CYP3A4 inhibitors may increase ticagrelor exposure. • Clopidogrel: Boosted EVG significantly decreases production of clopidogrel's active metabolite. • Prasugrel: Boosted EVG decreases prasugrel's active metabolite; however, adequate antiplatelet activity is maintained. • Vorapaxar: Increased vorapaxar levels are expected. | <ul style="list-style-type: none"> • Cilostazol: Monitor for antiplatelet effect. May be necessary to use alternative antiplatelet drug or alternative ARV. • Ticagrelor: To avoid increased bleeding risk, do not use ticagrelor with strong CYP3A inhibitors, particularly COBI and RTV. • Clopidogrel, vorapaxar: Do not coadminister. • Prasugrel: No dose adjustments are necessary. |
| Boosted PIs | <ul style="list-style-type: none"> • Cilostazol is metabolized by CYP3A; boosted PIs will increase concentrations of this drug. • Dipyridamole: RTV-boosted PIs may induce UGT enzymes, which are responsible for metabolism of dipyridamole (not seen with COBI). • Ticagrelor: Strong CYP3A4 inhibitors may increase ticagrelor exposure. • Clopidogrel: Boosted PIs may decrease production of clopidogrel's active metabolite. • Prasugrel: Boosted PIs may decrease prasugrel's active metabolite; however, adequate antiplatelet activity is maintained. • Vorapaxar: Increased vorapaxar levels are expected. | <ul style="list-style-type: none"> • Cilostazol: Monitor for antiplatelet effect; may be necessary to use alternative antiplatelet drug or alternative ARV. • Dipyridamole: Monitor for antiplatelet effect; use alternative ARV or boost with COBI if necessary. • Ticagrelor: To avoid increased bleeding risk, do not use ticagrelor with strong CYP3A inhibitors, particularly COBI and RTV. • Clopidogrel, vorapaxar: Do not coadminister. • Prasugrel: No dose adjustments are necessary. |

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| Class or Drug | Mechanism of Action | Clinical Comments |
|---|--|--|
| <ul style="list-style-type: none"> • Efavirenz (EFV) • Etravirine (ETR) | <ul style="list-style-type: none"> • Cilostazol: EFV and ETR may reduce cilostazol concentrations. • Dipyridamole: EFV and ETR may induce UGT enzymes, which are responsible for metabolism. • Ticagrelor, clopidogrel: EFV and ETR reduce ticagrelor concentrations and conversion of clopidogrel to its active metabolite. • Vorapaxar: When coadministered with ETR, vorapaxar levels expected to be reduced. | <ul style="list-style-type: none"> • Cilostazol: Monitor for antiplatelet effect; may be necessary to use alternative antiplatelet drug or alternative ARV. • Dipyridamole: Monitor for antiplatelet effect; use alternative ARV if necessary. • Ticagrelor, clopidogrel: Use with EFV or ETR may reduce antiplatelet effect; monitor closely for efficacy and use alternative ARV if necessary. • Prasugrel: When coadministered with ETR, no dose adjustments are necessary. • Vorapaxar: No data available. |

Abbreviations: ARV, antiretroviral; COBI, cobicistat; CYP, cytochrome P450; NRTI, nucleoside reverse transcriptase inhibitor; PI, protease inhibitor; RTV, ritonavir; UGT, uridine diphosphate glucuronosyltransferase.