### Immunosuppressants (for SOT) Treatment Selector

**Charts revised October 2022. Full information available at www.hiv-druginteractions.org**

<table>
<thead>
<tr>
<th>Corticosteroids</th>
<th>ATIV, ATIV, DRV, DRV, LPV, EFOR, EFV, ETV, NVP, RPV oral, FTR, LEN, MVC, BIC, F/TAF, CAB oral, CAB, RPV, DTG, EVG, F/TAF, EVG, F/TDF, RAL, FTC, TAF, FTC, TDF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prednisone</td>
<td>ta ta ta ta ta ta ta ta a ↔ 20% ↓ ↓ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔</td>
</tr>
</tbody>
</table>

**Antimetabolites**

| Azathioprine      | ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |
| Mycophenolate     | ↔ ib ↔ ib ib ↔ lb ↔ lb ↔ lb ↔ o ↔ o ↔ ↔ ↔ ↔ ↔ ↔ |

**Calcineurin inhibitors**

| Ciclosporin       | tb tb tb tb tb n l n b ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |
| Tacrolimus        | tb tb tb tb tb tb tb ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |

**mTOR inhibitors**

| Everolimus        | ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |
| Sirolimus         | ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |

**Other**

| Anti-thymocyte globulin | ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |
| Basiliximab          | ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |
| Belatacept           | ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ ↔ |

**Interactions with CAB/RPV long acting injections**

Pharmacokinetic interactions shown are mostly with RPV. QT interactions shown are with RPV.

**Interactions with Lenacapavir**

Residual LEN may affect exposure of sensitive CYP3A4 substrates initiated within 9 months after stopping subcutaneous LEN.

**Interactions with Ibalizumab**

None

### Colour Legend

- **No clinically significant interaction expected.**
- **These drugs should not be coadministered.**
- **Potential interaction which may require a dose adjustment or close monitoring.**
- **Potential interaction predicted to be of weak intensity.**
- **No a priori dosage adjustment is recommended.**

### Text Legend

- ↑ Potential increased exposure of the immunosuppressant
- ↓ Potential decreased exposure of the immunosuppressant
- ↔ No significant effect
- ♥ One or both drugs may cause QT and/or PR prolongation.
- *EGG monitoring is advised if coadministered with atazanavir or lopinavir.
- *Rilpivirine and fostemsavir were shown to prolong the QT interval at supratherapeutic doses. Caution is advised with rilpivirine. ECG monitoring is advised if coadministered with atazanavir or lopinavir.
- *Potential decreased exposure of HIV drug
- *Potential increased exposure of HIV drug
- % Numbers refer to increase or decrease in AUC as observed in drug-drug interaction studies.

### Notes

- **a** Risk of elevated corticosteroid levels, Cushing’s syndrome and adrenal suppression. This risk is present for oral and injected administration, and also for topical, inhaled or eye drop formulations.
- **b** TDM of immunosuppressant is recommended.
- **c** Concentrations of tenofovir-DF may increase, but no effect on elvitegravir, cobicistat or emtricitabine is expected. Monitor renal function.
- **d** Concentrations of both tenofovir and mycophenolate could be increased due to competition for active tubular secretion. Monitor renal function. No effect on emtricitabine expected.
- **e** Co-administration may increase concentrations of bictegravir and tenofovir alafenamide; no effect on emtricitabine is expected.
- **f** Co-administration may increase concentrations of tenofovir alafenamide; no effect on emtricitabine is expected.
- **g** Concentrations of tenofovir may increase. Monitor renal function. No effect on emtricitabine expected.
- **h** Monitor renal function.

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**Abbreviations**

- ATIV: atazanavir
- DRV: darunavir
- LPV: lopinavir
- NVP: nevirapine
- EFV: efavirenz
- ETV: etravirine
- NVP: nevirapine
- RPV: ritonavir
- TDF: tenofovir
- FTC: emtricitabine
- FTC/TAF: emtricitabine/tenofovir DF
- BIC/TAF: bictegravir/tenofovir DF
- F/TDF: F/LPV
- MVC: maraviroc
- RAL: raltegravir
- DRV: darunavir
- EFV: efavirenz
- ETV: etravirine
- NVP: nevirapine
- LPV: lopinavir

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