

## Elbasvir/Grazoprevir (Zepatier™) Drug Interactions A Quick Guide for Clinicians – 2023

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Mechanism of Action and Route of Metabolism for Elbasvir/grazoprevir (Zepatier™)

| Medication                         | HCV Mechanism of Action                         | Route of Metabolism and Drug Interaction Potential   |
|------------------------------------|---|--|
| • Elbasvir/grazoprevir (Zepatier™) | NS5a inhibitor and<br>NS3/4A protease inhibitor | <ul> <li>Elbasvir and grazoprevir are substrates of CYP3A4 and P-glycoprotein (P-gp). Concurrent use of medications that are moderate or severe inhibitors or inducers of CYP3A4 are likely to interact.</li> <li>Grazoprevir is a substrate of OATP1B1/3 transporters. Concurrent use of medications that inhibit OATP1B1/3 should be avoided.</li> </ul> |

## Elbasvir/grazoprevir (Zepatier™) Drug Interactions with HIV Medications

| Concurrent Medication   | Recommendation and Clinical Comments  |  |
|---|---|--|
| HIV Protease Inhibitors   |   |  |
| <ul> <li>Atazanavir (Reyataz<sup>®</sup>) + ritonavir (Norvir<sup>®</sup>)</li> </ul> | <ul> <li>Co-administration not recommended. Use of elbasvir/grazoprevir with</li> </ul> |  |
| <ul> <li>Atazanavir/cobicistat (Evotaz™)</li> </ul>                                   | protease inhibitors should be avoided due to potential for hepatotoxicity               |  |
| • Darunavir (Prezista®) + ritonavir (Norvir®)   | and increased grazoprevir plasma concentrations.  |  |
| <ul> <li>Darunavir/cobicistat (Prezcobix™; in Symtuza®)</li> </ul>                    |   |  |
| • Lopinavir/ritonavir (Kaletra®)  |   |  |
| HIV Non Nucleoside Reverse Transcriptase Inhibitors                                   |   |  |
| • Efavirenz (Sustiva®; in Atripla®, Symfi®, Symfi Lo®)                                | Co-administration not recommended. Significant reduction in elbasvir and                |  |
| • Etravirine (Intelence®)   | grazoprevir levels expected which may lead to loss of HCV response.                     |  |
| Nevirapine (Viramune®)  |   |  |
| • Rilpivirine oral (Edurant®; in Complera®, Odefsey®, Juluca®)                        | Concurrent use at standard doses appropriate.   |  |
| Rilpivirine injection (in Cabenuva®)  |   |  |
| Doravirine (Pifeltro®; in Delstrigo®)   |   |  |

## Elbasvir/grazoprevir (Zepatier™) Drug Interactions with HIV Medications, continued

| Concurrent Medication   | Recommendation and Clinical Comments  |  |
|---|---|--|
| HIV Integrase Strand Transfer Inhibitors                                      |   |  |
| Bictegravir/tenofovir alafenamide/emtricitabine (Biktarvy®)                   | Concurrent use at standard doses appropriate.   |  |
| Cabotegravir oral (Vocabria®)   |   |  |
| <ul> <li>Cabotegravir injection (Apretude®; in Cabenuva®)</li> </ul>          |   |  |
| <ul> <li>Dolutegravir (Tivicay®; in Dovato®, Triumeq®, Juluca®)</li> </ul>    |   |  |
| • Raltegravir (Isentress®, Isentress HD®)                                     |   |  |
| <ul><li>Elvitegravir/cobicistat/tenofovir disoproxil</li></ul>                | <ul> <li>Co-administration not recommended. Use of elbasvir/grazoprevir with</li> </ul> |  |
| fumarate/emtricitabine (Stribild®)  | cobicistat containing regimens is likely to increase elbasvir and                       |  |
| <ul><li>Elvitegravir/cobicistat/tenofovir alafenamide/emtricitabine</li></ul> | grazoprevir concentrations.   |  |
| (Genvoya®)  |   |  |
| HIV Nucleoside/Nucleotide Reverse Transcriptase Inhibitors                    |   |  |
| <ul> <li>Abacavir (Ziagen®, in Epzicom®, Triumeq®)</li> </ul>                 | Concurrent use at standard doses appropriate.   |  |
| Emtricitabine (Emtriva®, in other STRs)                                       |   |  |
| Lamivudine (Epivir®)  |   |  |
| • Tenofovir Disoproxil Fumarate (Viread®; in Cimduo®                          |   |  |
| Temixys®, Truvada®)   |   |  |
| Tenofovir Alafenamide (in Descovy®, other STRs)                               |   |  |
| HIV Entry Inhibitors, CCR5 Antagonists, gp120-Directed Attachment Inhibitors  |   |  |
| • Fostemsavir (Rukobia®)  | Co-administration not recommended. Increased grazoprevir levels likely                  |  |
|   | when combined with fostemsavir. Use alternative HCV regimen.                            |  |
| Maraviroc (Selzentry®)  | Concurrent use at standard doses appropriate.   |  |
| Ibalizumab (Trogarzo®)  |   |  |
| HIV Capsid Inhibitor  |   |  |
| • Lenacapavir (Sunlenca)  | Concurrent use at standard doses appropriate.   |  |

## Elbasvir/grazoprevir (Zepatier™) Drug Interactions with Common Primary Care Medications

| Medication and or Class   | Recommendation and Clinical Comments   |
|---|--|
| Antibiotic – nafcillin  | • Significant decrease in elbasvir/grazoprevir levels expected. Co-administration not recommended.   |
| Anticonvulsants – carbamazepine, phenytoin  | • Significant decrease in elbasvir/grazoprevir levels expected. Co-administration is contraindicated.  |
| Antifungals – ketoconazole  | <ul> <li>Significant increase in elbasvir/grazoprevir levels expected, increasing risk of<br/>hepatotoxicity. Co-administration not recommended.</li> </ul>  |
| Antimycobacterials – rifampin   | <ul> <li>Significant decrease in elbasvir/grazoprevir levels expected. Co-administration is<br/>contraindicated.</li> </ul>  |
| Endothelin Antagonists – bosentan   | • Significant decrease in elbasvir/grazoprevir levels expected. Co-administration not recommended.   |
| • Herbal products – St. John's Wort   | • Significant decrease in elbasvir/grazoprevir levels expected. Co-administration is contraindicated.  |
| <ul> <li>HMG-CoA Reductase Inhibitors – atorvastatin,<br/>rosuvastatin, fluvastatin, lovastatin, simvastatin</li> </ul> | <ul> <li>Increased statin levels expected with concurrent use of elbasvir/grazoprevir. When using together: Do not exceed atorvastatin 20mg daily; Do not exceed rosuvastatin 10mg daily; Use lowest doses and titrate with close monitoring for fluvastatin, lovastatin, simvastatin</li> </ul> |
| • Immunosuppressants – cyclosporine   | <ul> <li>Significant increase in grazoprevir levels which may lead to hepatotoxicity. Co-<br/>administration is contraindicated.</li> </ul>  |
| • Immunosuppressants – tacrolimus   | <ul> <li>Significant increase in tacrolimus levels expected. Frequent monitoring for<br/>tacrolimus, changes in renal function, and tacrolimus associated adverse events<br/>recommended.</li> </ul>   |
| Wakefulness- Promoting Agents – modafanil  Dialainess- Their fermion and in this table has been decided.                | Significant decrease in elbasvir/grazoprevir levels expected. Co-administration not recommended.   |

Disclaimer: The information contained in this table has been developed from various resources, including FDA product information, abstracts and posters presented at national and international meetings, and from Recommendations for the Testing, Managing and Treating of Hepatitis C from AASLD and IDSA located at www.hivguidelines.org. While the tables contained in this guide are complete based upon references reviewed, there may be other medications that may also be contraindicated or should be co-administered with caution. Please consult additional resources as needed.

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