



エリキュースとイグザレルト

プラザキサ

## Appendix A: Potential NOAC Drug Interactions

| Dabigatran <sup>(1-3)</sup>   | Apixaban <sup>(4-6)</sup> and Rivaroxaban <sup>(7-9)</sup>   |
|---|--|
| <b>Contraindicated</b><br>Note: Effect may last for several weeks after discontinuation of inducers of P-glycoprotein and/or CYP3A4   |  |
| <b>Anticoagulants</b> <ul style="list-style-type: none"> <li>• anti-thrombin agents (e.g., bivalirudin)</li> <li>• Factor-Xa inhibitors (e.g., apixaban and rivaroxaban)</li> <li>• heparin (unless used to maintain a patent central venous or arterial catheter)</li> <li>• heparin derivatives (e.g., fondaparinux)</li> <li>• low molecular weight heparins (e.g., dalteparin and enoxaparin)</li> <li>• warfarin (unless switching to or from a NOAC)</li> </ul> |  |
| <b>Strong inhibitors of P-glycoprotein</b> <ul style="list-style-type: none"> <li>• azole-antimycotics (e.g., itraconazole, ketoconazole, posaconazole, and voriconazole)</li> <li>• HIV protease inhibitors (e.g., darunavir fosamprenavir, indinavir, lopinavir nelfinavir, ritonavir, and saquinavir)</li> </ul>   | <b>Strong inhibitors of both P-glycoprotein and CYP3A4</b> <ul style="list-style-type: none"> <li>• azole-antimycotics (e.g., itraconazole, ketoconazole, posaconazole, and voriconazole)</li> <li>• boceprevir</li> <li>• cobicistat</li> <li>• HIV protease inhibitors (e.g., darunavir fosamprenavir, indinavir, lopinavir nelfinavir, ritonavir, and saquinavir)</li> <li>• imatnib</li> </ul>   |
| <b>Avoid use</b><br>Note: Effect may last for several weeks after discontinuation of inducers of P-glycoprotein and/or CYP3A4   |  |
| <b>Platelet inhibitors</b> <ul style="list-style-type: none"> <li>• ASA, clopidogrel, dipyridamole, prasugrel, sulfapyrazone, ticagrelor, ticliopidine</li> </ul>   |  |
| <b>Moderate inhibitors of P-glycoprotein</b> <ul style="list-style-type: none"> <li>• cyclosporine</li> <li>• dronedarone</li> <li>• itraconazole posaconazole</li> <li>• tacrolimus</li> <li>• ticagrelor</li> </ul>   |  |
| <b>Strong inducers of P-glycoprotein</b> <ul style="list-style-type: none"> <li>• carbamazepine</li> <li>• dexamethasone</li> <li>• doxorubicin</li> <li>• nefazodone</li> <li>• phenobarbital</li> <li>• phenytoin</li> <li>• prazocin</li> <li>• rifampin</li> <li>• St. John's Wort</li> <li>• tenofovir</li> <li>• tipranavir</li> <li>• trazodone</li> <li>• vinblastine</li> </ul>  | <b>Strong inducers of CYP3A4</b> <ul style="list-style-type: none"> <li>• bosentan</li> <li>• efavirenz</li> <li>• etravirine</li> <li>• fosphenytoin</li> <li>• nafcillin</li> <li>• nevirapine</li> <li>• oxcarbazepine</li> <li>• phenobarbital</li> <li>• primidone</li> <li>• rifabutin</li> </ul><br><b>Inducers of P-glycoprotein</b> <ul style="list-style-type: none"> <li>• doxorubicin</li> <li>• prazocin</li> <li>• tipranavir</li> <li>• trazodone</li> <li>• vinblastine</li> </ul> |

| Dabigatran <sup>(1-3)</sup>   | Apixaban <sup>(4-6)</sup> and Rivaroxaban <sup>(7-9)</sup>  |
|---|---|
| <b>Use With Caution</b>   |   |
| <b>Nonsteroidal anti-inflammatory drugs (NSAIDs)</b>  |   |
| <ul style="list-style-type: none"> <li>Diclofenac, ibuprofen, indomethacin, ketoprofen, naproxen, piroxicam, sulindac</li> </ul>  |   |
| <b>Other inhibitors of P-glycoprotein</b><br>Notes: <ol style="list-style-type: none"> <li>Use with caution in patients with normal renal function.</li> <li>Avoid use in patient with CrCl &lt; 50 mL/min or age ≥ 80 years.</li> <li>Where concomitant use cannot be avoided, administer dabigatran at least 2 hours before P-glycoprotein inhibitor.</li> </ol> <ul style="list-style-type: none"> <li>abiraterone</li> <li>alfentanil</li> <li>amiodarone</li> <li>atorvastatin</li> <li>azithromycin</li> <li>beceprevir</li> <li>carvedilol</li> <li>clarithromycin</li> <li>cobicistat</li> <li>diltiazem</li> <li>dipyridamole</li> <li>duloxetine</li> <li>erythromycin</li> <li>fenofibrate</li> <li>grapefruit (fruit or juice)</li> <li>ivacaftor</li> <li>lovastatin</li> <li>mefloquine</li> <li>nicardipine</li> <li>nifedipine</li> <li>progesterone</li> <li>propafenone</li> <li>propranolol</li> <li>quinidine</li> <li>quinine</li> <li>sunitinib</li> <li>tamoxifen</li> <li>ticagrelor</li> <li>tolvaptan</li> <li>ulipristal</li> <li>verapamil</li> </ul> | <b>Inhibitors of P-glycoprotein and/or CYP3A4</b><br>Notes: <ol style="list-style-type: none"> <li>Use with caution in patients with normal renal function.</li> <li>Avoid use in patient with CrCl &lt; 30 mL/min or age &gt; 80 years or weight &lt; 60 kg.</li> </ol> <ul style="list-style-type: none"> <li>amiodarone</li> <li>azithromycin</li> <li>cimetidine</li> <li>clarithromycin</li> <li>cyclosporine</li> <li>diltiazem</li> <li>donedarone</li> <li>erythromycin</li> <li>felodipine</li> <li>fluconazole</li> <li>grapefruit (fruit or juice)</li> <li>lapatinib</li> <li>nicardipine</li> <li>quinidine</li> <li>tamoxifen</li> <li>ticagrelor</li> <li>verapamil</li> </ul> |
| <b>Gastric pH-elevating agents</b>  |   |
| Note: Where concomitant use cannot be avoided, administer dabigatran at least 2 hours before. <ul style="list-style-type: none"> <li>proton pump inhibitors (e.g., esomeprazole, omeprazole, pantoprazole, and rabeprazole)</li> <li>H<sub>2</sub>-antagonists (e.g., cimetidine, famotidine, and ranitidine)</li> <li>antacids (aluminium compounds, sodium bicarbonate, calcium and/or magnesium compounds, or combinations of these)</li> </ul>  |   |

**Abbreviations:** ASA = acetyl-salicylic acid; CrCl = creatinine clearance; CYP3A4 = cytochrome P450 3A4 isoenzymes; HIV = human immunodeficiency virus; kg = kilogram; mL/min = milliliter per minute; NOAC = non-vitamin K antagonist oral anticoagulants.

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