**Table S1.** Dosing recommendations for Clopidogrel (CPIC guidelines)[1]

| Drug | Enzyme | Phenotype | Clinical implications | Reccomendation for therapy modification | CPIC guidance |
|---|---|---|---|---|---|
| Clopidogrel | CYP2C19 | UM | Increased clopidogrel active metabolite formation<br>lower on- treatment platelet reactivity<br>no association with higher bleeding risk | Use standard dose (75 mg/day) | Strong |
| | | RP | Normal or increased clopidogrel active metabolite formation<br>normal or lower on-treatment platelet reactivity<br>no association with higher bleeding risk | Use standard dose (75 mg/day) | Strong |
| | | NM | Normal clopidogrel active metabolite formation<br>normal on-treatment platelet reactivity | Use standard dose (75 mg/day) | Strong |
| | | IM | Reduced clopidogrel active metabolite formation<br>increased on-treatment platelet reactivity<br>increased risk for adverse cardiac and cerebrovascular events | Avoid Clopidogrel if possible; use Prasugrel or Ticagrelor at standard dose if no contraindication | Strong |
| | | PM | Significantly reduced clopidogrel active metabolite formation<br>increased on-treatment platelet reactivity<br>increased risk for adverse cardiac and cerebrovascular events | Avoid Clopidogrel if possible; use Prasugrel or Ticagrelor at standard dose if no contraindication | Strong |

*UM: Ultrarapid Metabolizer; RP: Rapid Metabolizer; NM: Normal Metabolizer; IM: Intermediate Metabolizer; PM: Poor Metabolizer.*

**Table S2.** Dosing recommendations for Statins (CPIC guidelines) [1]

| Drug | Enzyme | Phenotype | Clinical implications | Reccomendation for therapy modification | CPIC guidance |
|---|---|---|---|---|---|
| Atorvastatin | SLCO1B1 | PF | Increased atorvastatin exposure as compared with normal and decreased function, which may translate to increased myopathy risk | Prescribe ≤20 mg as a starting dose and adjust doses of atorvastatin based on disease-specific guidelines. If dose >20 mg is needed for desired efficacy, consider rosuvastatin or combination therapy | Moderate |
| Fluvastatin | SLCO1B1 | PF | Increased fluvastatin exposure as compared with normal and decreased function; typical myopathy risk with doses ≤40 mg | Prescribe ≤40 mg per day as a starting dose and adjust doses of fluvastatin based on disease- specific guidelines. If patient is tolerating 40 mg per day but higher potency is needed, a higher dose (>40 mg) or an alternative statin (see **Figure 1** for recommendations for alternative statins) or combination therapy could be considered. Prescriber should be aware of possible increased risk for myopathy with fluvastatin especially with doses >40 mg per day | Moderate |
| | CYP2C9 | PF | Increased fluvastatin exposure as compared with normal and intermediate metabolizer, which may translate to increased myopathy risk. | Prescribe ≤20 mg per day as a starting dose and adjust doses of fluvastatin based on disease-specific guidelines. If dose >20 mg needed for desired efficacy, consider an alternative statin or combination therapy | Moderate |
| Lovastatin | SLCO1B1 | PF | Increased lovastatin acid exposure as compared with normal and decreased function, which may translate to increased myopathy risk | Prescribe an alternative statin depending on the desired potency | Moderate |
| Pravastatin | SLCO1B1 | PF | Increased pravastatin statin exposure as compared with normal and decreased function; typical myopathy risk with doses ≤40 mg | Prescribe ≤40 mg as a starting dose and adjust doses of pravastatin based on disease-specific guidelines. If patient is tolerating 40-mg dose but higher potency is needed, a higher dose (>40 mg) or an alternative statin (see **Figure 1** for recommendations for alternative statins) or combination therapy could be considered. Prescriber should be aware of possible increased risk for myopathy especially with pravastatin doses >40 mg | Moderate |

| | | | | | |
|---|---|---|---|---|---|
| Rosuvastatin | SLCO1B1 | PF | Increased rosuvastatin exposure as compared with normal function and decreased function; typical myopathy risk with doses ≤20 mg | Prescribe ≤20 mg as a starting dose and adjust doses of rosuvastatin based on disease-specific and population-specific guidelines If dose >20 mg needed for desired efficacy, consider combination therapy | Moderate |
| | ABCG2 | PF | Increased rosuvastatin exposure compared with normal and decreased function; unknown myopathy risk; increased lipid-lowering effects | Prescribe ≤20 mg as a starting dose and adjust doses of rosuvastatin based on disease-specific and population-specific guidelines. If dose >20 mg needed for desired efficacy, consider an alternative statin or combination therapy | Moderate |
| Simvastatin | SLCO1B1 | PF | Increased simvastatin acid exposure compared with normal and decreased function; highly increased myopathy risk | Prescribe an alternative statin depending on the desired potency | Strong |

*PF: Poor Function*

**Table S3.** Patient characteristics utilized in IWPC algorithm [1]

| **Age** |
| --- |
| Height |
| Weight |
| VKORC1 genotype |
| CYP2C9 genotype |
| Race |
| Taking Enzyme Inducer |
| Taking Amiodarone |