## V. Drug-Drug Interactions and Side Effects

## Guideline 16: Combining Medications in Older Patients Question 44

The experts recommended close monitoring for side effects when using the combinations listed in the table below. More than a quarter of the experts considered the following combinations to be contraindicated: clozapine + carbamazepine (rated as contraindicated by 39% of the experts), ziprasidone + a tricyclic antidepressant (TCA) (rated as contraindicated by 26%), and a low-potency conventional antipsychotic + fluoxetine (rated as contraindicated by 27%). Certain combinations of medications caused the experts more concern (e.g., drugs that are potent inhibitors of CYP drug-metabolizing enzymes and thus have increased potential to cause drug-drug interactions). These issues are discussed in more detail in the introduction to these guidelines.

Extra monitoring for side effects needed when combining an antipsychotic with:			
	An antidepressant	A mood stabilizer	Other drugs
Aripiprazole	Paroxetine, nefazodone, TCA, MAOI	Lithium, carbamazepine, lamotrigine	Codeine, ketoconazole, phenytoin
Clozapine	Fluoxetine, fluvoxamine, paroxetine, sertraline, bupropion, mirtazapine, nefazodone, trazodone, TCA, MAOI	Lithium, carbamazepine,* gabapentin, lamotrigine, valproate	Atenolol, caffeine, captopril, codeine, corticosteroids, digoxin, ketoconazole, loratadine, macrolide antibiotics, nifedipine, phenytoin, theophylline, tramadol, warfarin
Olanzapine	Fluoxetine, fluvoxamine, paroxetine, mirtazapine, nefazodone, TCA, MAOI	Lithium, carbamazepine, lamotrigine, valproate	Codeine, phenytoin, theophylline, tramadol
Quetiapine	Fluvoxamine, nefazodone, TCA, MAOI	Lithium, carbamazepine, lamotrigine, valproate	Codeine, ketoconazole, loratadine, phenytoin, tramadol
Risperidone	Fluoxetine, paroxetine, nefazodone, TCA, MAOI	Lithium, carbamazepine, lamotrigine	Codeine, phenytoin, tramadol
Ziprasidone	Fluoxetine, fluvoxamine, paroxetine, nefazodone, TCA,* MAOI	Lithium, carbamazepine, lamotrigine, valproate	Codeine, digoxin, ketoconazole, phenytoin, tramadol
High-potency conventional	Fluoxetine, fluvoxamine, paroxetine, TCA, MAOI	Lithium, carbamazepine, lamotrigine	Codeine, phenytoin, tramadol
Mid-potency conventional	Fluoxetine, fluvoxamine, paroxetine, nefazodone, TCA, MAOI	Lithium, carbamazepine, lamotrigine, valproate	Atenolol, captopril, digoxin, codeine, loratadine, nifedipine, phenytoin, tramadol
Low-potency conventional	Fluoxetine,* fluvoxamine, paroxetine, mirtazapine, trazodone, nefazodone, TCA, MAOI	Lithium, carbamazepine, gabapentin, lamotrigine, valproate	Atenolol, captopril, codeine, digoxin, loratadine, macrolide antibiotics, nifedipine, phenytoin, tramadol

<sup>\*</sup>These three combinations (clozapine + carbamazepine, ziprasidone + a TCA, and a low-potency conventional antipsychotic + fluox-etine) were rated as contraindicated by more than 25% of the experts. The editors note that these combinations should probably be avoided if possible or used very cautiously.