

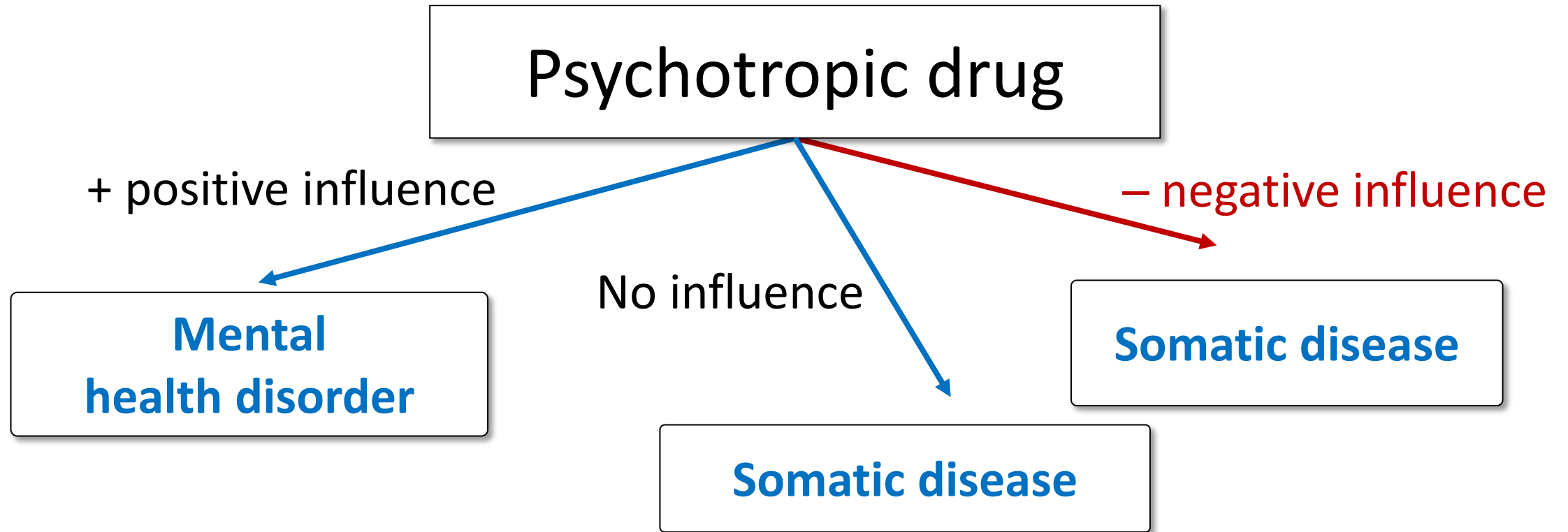


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# Optimization of Psychological Distress Treatment Using the FORCOM Classification

23.08.2022

## Effect of drugs on comorbid diseases



**Drug selection in the presence of multimorbidity  
is a difficult task for physicians**

## FORTA classification of drug appropriateness for older people

BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA (BPSD)	FORTA Class	Nr. of raters	Consensus coefficient, Round 1 (cutoff 0.800)	Expert ratings on a numerical scale: A=1, B=2, C=3, D=4  Mean; Mode
DEPRESSION				
Substance/group				
SSRI (Selective Serotonin Reuptake Inhibitors) Citalopram/escitalopram, sertraline, fluoxetine in the usual dosages	C	20	0.900	2.8; 3
Mirtazapine (15-45mg/d)	C	20	0.925	2.9; 3
SNRI (Serotonin-Noradrenalin-Reuptake-Inhibitors) Venlafaxine, duloxetine	D	20	0.875	3.8; 4

The FORTA list combines positive and negative labeling (A, B, C, D) of drugs chronically prescribed to older patients

# Pregnancy risk categories

## FDA pregnancy risk categories

Category	
<b>A</b>	Adequate and well-controlled studies have failed to demonstrate a risk to the fetus in the first trimester of pregnancy (and there is no evidence of risk in later trimesters).
<b>B</b>	Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and well-controlled studies in pregnant women.
<b>C</b>	Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.
<b>D</b>	There is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience or studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks.
<b>X</b>	Studies in animals or humans have demonstrated fetal abnormalities and/or there is positive evidence of human fetal risk based on adverse reaction data from investigational or marketing experience, and the risks involved in use of the drug in pregnant women clearly outweigh potential benefits.

## Australian Drug Evaluation Committee (ADEC)

*Box* The Australian categories for prescribing medicines in pregnancy <sup>1</sup>

### Category A

Drugs which have been taken by a large number of pregnant women and women of childbearing age without any proven increase in the frequency of malformations or other direct or indirect harmful effects on the fetus having been observed.

### Category B1

Drugs which have been taken by only a limited number of pregnant women and women of childbearing age, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed.

Studies in animals have not shown evidence of an increased occurrence of fetal damage.

### Category B2

Drugs which have been taken by only a limited number of pregnant women and women of childbearing age, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed.

Studies in animals are inadequate or may be lacking, but available data show no evidence of an increased occurrence of fetal damage.

### Category B3

Drugs which have been taken by only a limited number of pregnant women and women of childbearing age, without an increase in the frequency of malformation or other direct or indirect harmful effects on the human fetus having been observed.

Studies in animals have shown evidence of an increased occurrence of fetal damage, the significance of which is considered uncertain in humans.

### Category C

Drugs which, owing to their pharmacological effects, have caused or may be suspected of causing, harmful effects on the human fetus or neonate without causing malformations. These effects may be reversible. Accompanying texts should be consulted for further details.

### Category D

Drugs which have caused, are suspected to have caused or may be expected to cause, an increased incidence of human fetal malformations or irreversible damage. These drugs may also have adverse pharmacological effects. Accompanying texts should be consulted for further details.





### Category X

Drugs which have such a high risk of causing permanent damage to the fetus that they should not be used in pregnancy or when there is a possibility of pregnancy.



The FDA classification divides drugs into classes A, B, C, D, and X depending on the risk to the fetus and newborn

# Risk Categories for Drugs that Prolong QT & induce Torsades de Pointes







**AVAILABLE TDP RISK CATEGORIES**  
*You can select multiple categories.*

-  **Known Risk of TdP** [Definition of this Category](#)
-  **Possible Risk of TdP** [Definition of this Category](#)
-  **Conditional Risk of TdP** [Definition of this Category](#)
-  **Drugs to Avoid in Congenital Long QT** [Definition of this Category](#)

**SELECTED TDP RISK CATEGORIES**

-  **Drugs to Avoid in Congenital Long QT** [Remove](#) 

**FILTER:**  All drugs  Only Marketed Drugs  Only Drugs on US Market  Only Drugs Removed from US Market

Generic Name	Brand Names (Partial List)	Drug Class	Therapeutic Use	PubMed Search	Risk Category
Dextroamphetamine (Dexamfetamine)	Dexedrine, dexamphetamine, dexamfetamine, (S)-(+)-amphetamine, Dextrostat, Dexedrine, Metamina, Attentin, Zenzedi, Procentra, Amfexa	CNS stimulant	ADHD, obesity	<a href="#">LINK</a>	
Escitalopram	Cipralex, Lexapro, Nexito, Anxiset-E, Exodus, Esto, Seroplex, Elicea, Lexamil, Lexam, Entact, Losita, Reposil, Animaxen, Esitalo, Lexamil	Antidepressant, SSRI	Depression (major), anxiety disorders	<a href="#">LINK</a>	 
Albuterol (salbutamol)	Proventil, Ventolin, Ventolin-HFA, Accuneb, Combivent, Vospire-ER, ProAir HFA, Duoneb	Bronchodilator	Asthma	<a href="#">LINK</a>	
Pasireotide	Signifor	Somatostatin analog	Cushing's Disease	<a href="#">LINK</a>	 

**Arizona Center for Education and Research on Therapeutics (AzCERT) maintains the drug list that have a risk of QT prolongation and malignant cardiac arrhythmias**

# FORCOM (Fit for COMorbidity) classification of drugs

Class	Drug's effect	Influence on comorbid disease
<b>A</b>	Favourable	Pronounced positive effects
<b>B</b>	Possible	The drug may have a positive effects
<b>C</b>	Neutral	Drugs without any significant effects or contradictory effects on comorbid disease
<b>D</b>	Undesirable	Rare non-severe adverse effects
<b>X</b>	Unfavourable	High incidence ( $\geq 1\%$ ) of severe adverse effects

**FORCOM is a universal drug classification system based on the effects of different drugs on comorbidities**

Ф.И. БЕЛЯЛОВ

ЛЕЧЕНИЕ БОЛЕЗНЕЙ  
В УСЛОВИЯХ  
КОМОРБИДНОСТИ

12-е издание,  
переработанное  
и дополненное



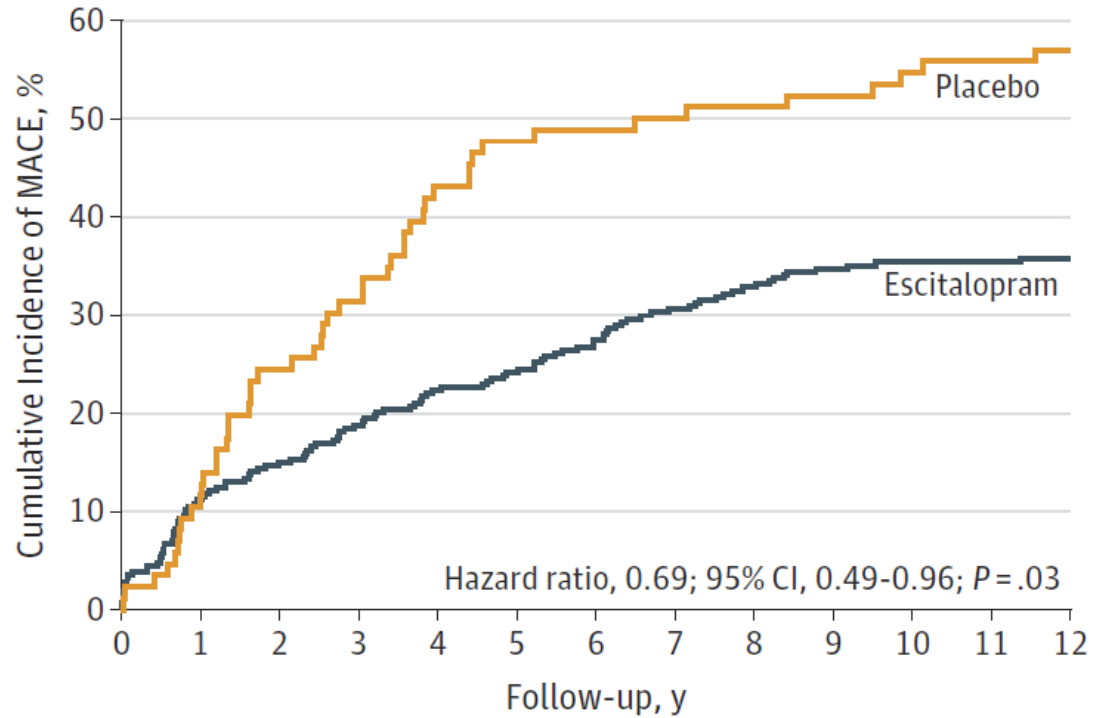
ИЗДАТЕЛЬСКАЯ ГРУППА  
"ГЭОТАР-Медиа"

## FORCOM (Fit FOR COMorbidity) classification of drugs

Class	Drugs	Psychiatric Disorder	Somatic Disease
<b>A</b>	Valproic acid	Bipolar disorder	Migraine
<b>B</b>	Amitriptyline, clomipramine, venlafaxine	Depressive, anxiety disorders	Migraine, tension-type headache
<b>C</b>	Selective serotonin reuptake inhibitor	Depressive, anxiety disorders	Coronary artery disease
<b>D</b>	Tricyclic antidepressants	Depressive, anxiety disorders	Coronary artery disease
<b>X</b>	Antipsychotics	Psychosis	Heart failure

**Classification of psychotropic drugs in comorbid mental disorders and common somatic diseases**

# Effect of Escitalopram on Long-term Cardiac Outcomes in Patients With Acute Coronary Syndrome and Depression

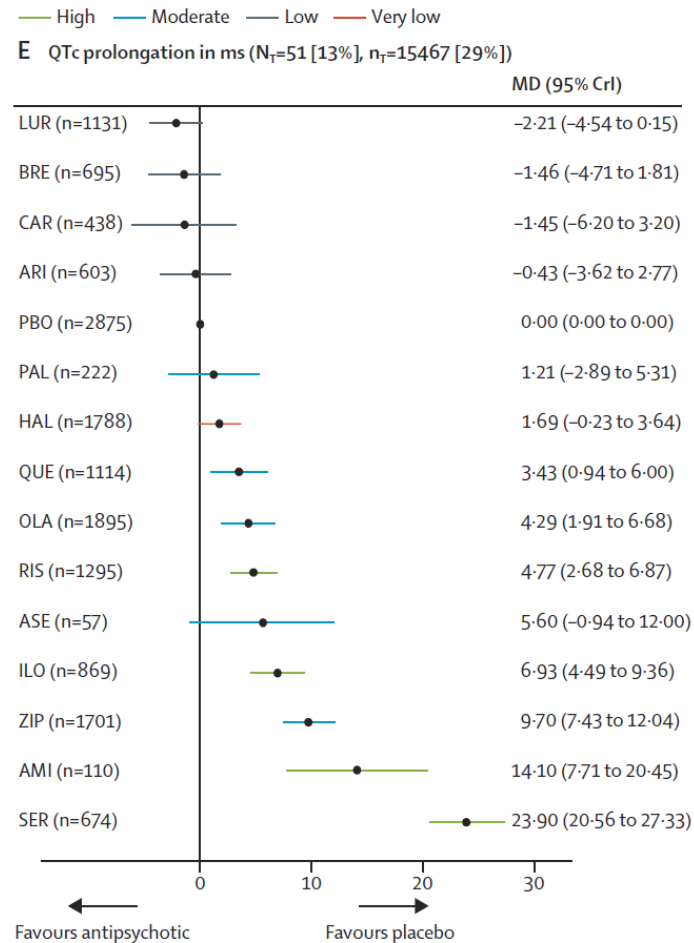


Korean randomized trial DEPACS

**Among patients with depression following acute coronary syndrome, treatment with escitalopram resulted in a lower risk of major adverse cardiac events**



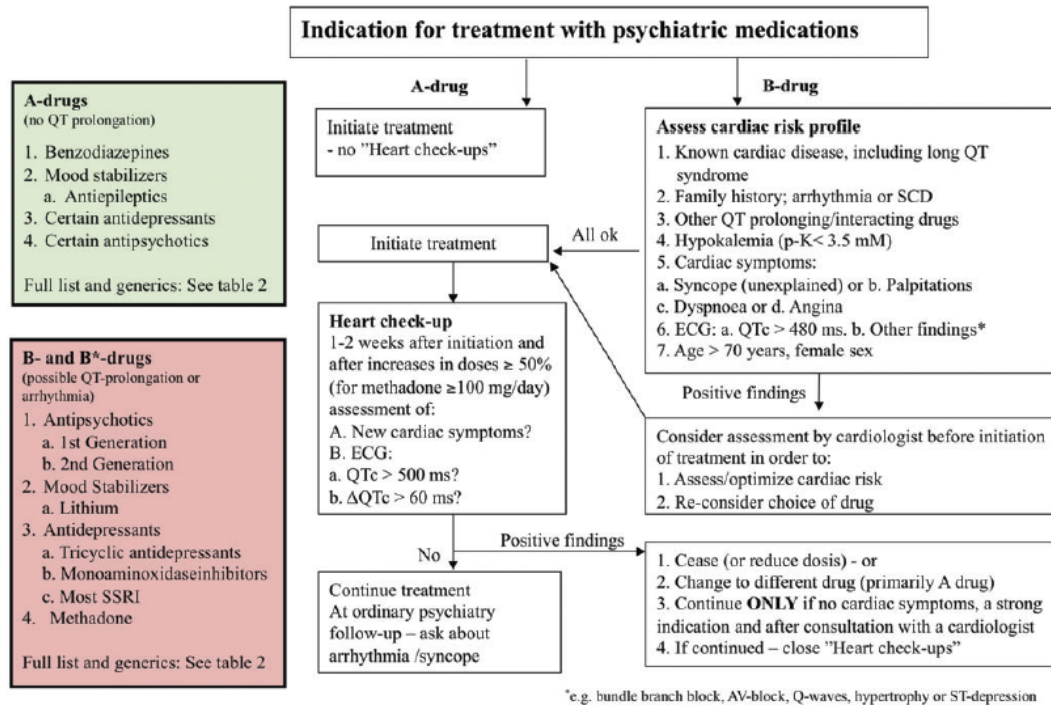
# Effect of antipsychotics on QTc prolongation



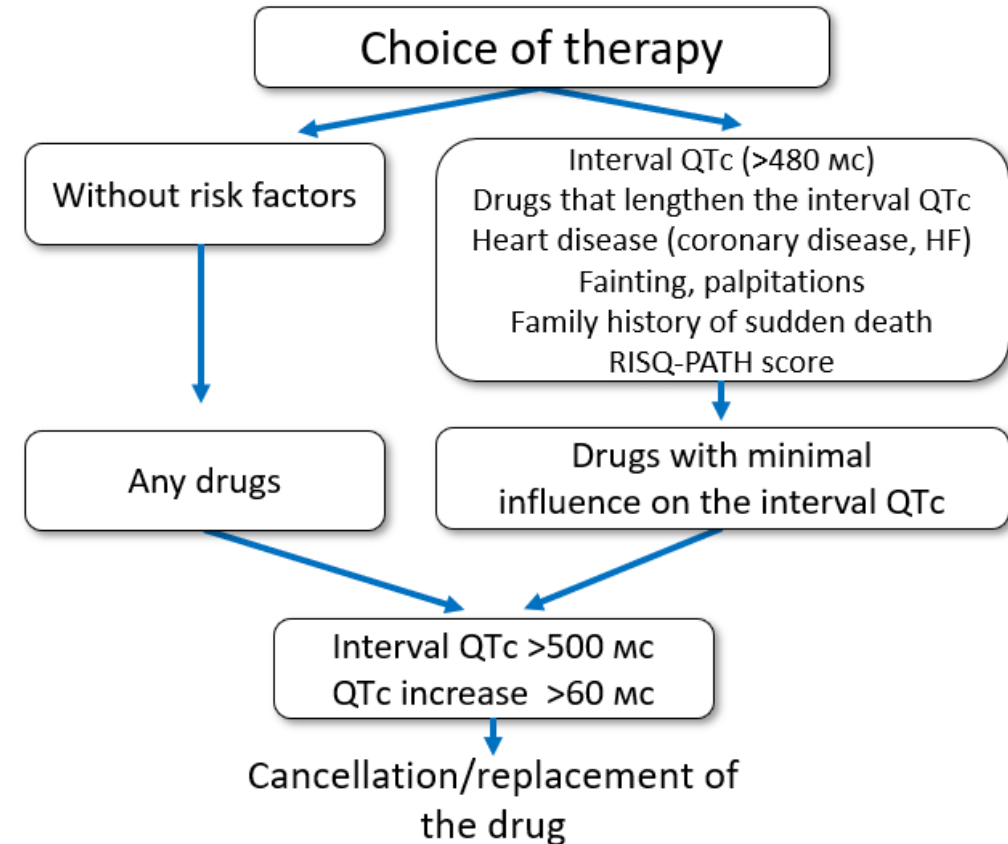
Comparative effects of 32 oral antipsychotics for the influence on QT interval are presented in meta-analysis

# An algorithm for lowering the risk of cardiac arrhythmia during treatment with psychotropic medications

## Original algorithm



## Modified algorithm

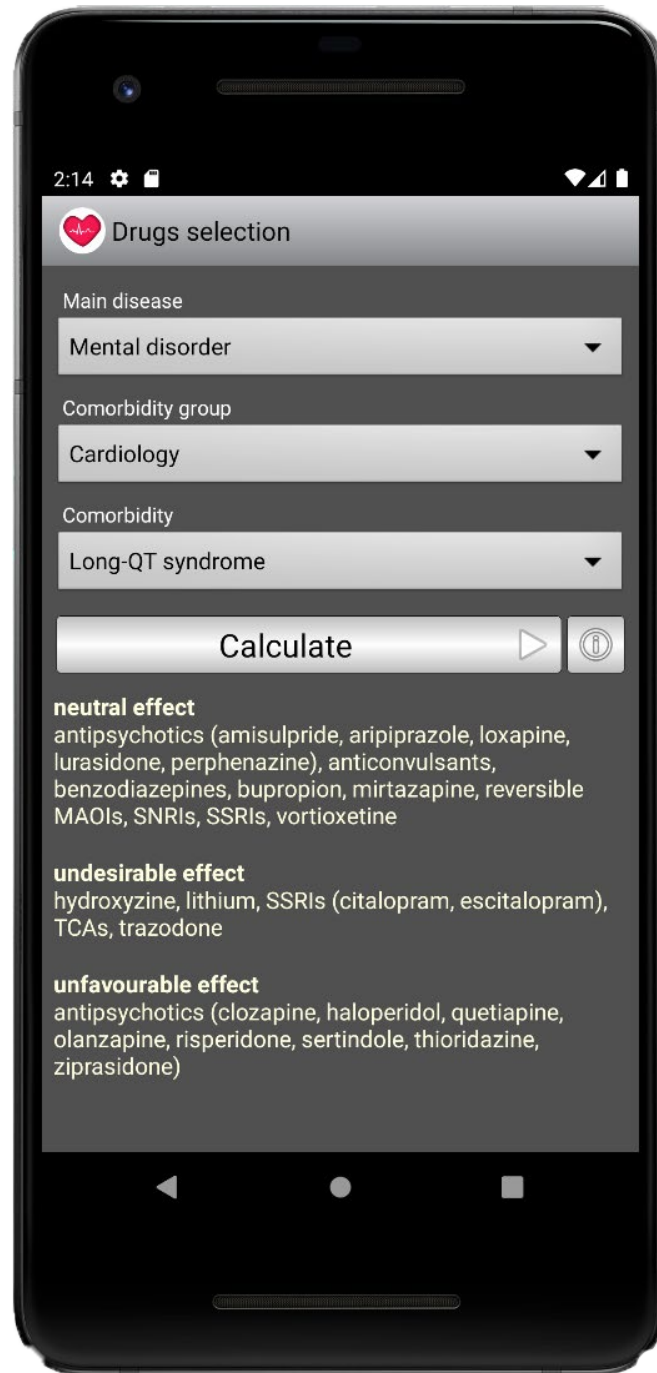


# Modified algorithm for lowering the risk of cardiac arrhythmia during treatment with psychotropic medications

## FORCOM (Fit for COMorbidity) classification of drugs

Class	Drugs
C	Antipsychotics (aripiprazole, cariprazine, lurasidone, perphenazine), benzodiazepines, bupropion, vortioxetine, reversible IMAO, SNRIs, mirtazapine, SSRIs, anticonvulsants
D	Hydroxyzine, TCA, trazodone, SSRIs (citalopram, escitalopram), lithium
X	Antipsychotics (haloperidol, ziprasidone, quetiapine, clozapine, olanzapine, risperidone, sertindole, thioridazine)

**Many antipsychotics can significantly increase the QT interval, the risk of Torsades de pointes, and sudden cardiac death**



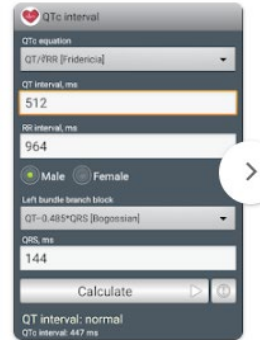
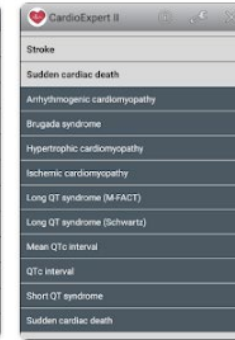
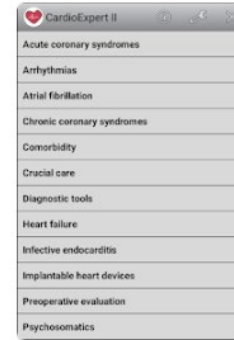
# CardioExpert II

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4.9★  
83 reviews

500+  
Downloads

3+  
Rated for 3+ Ⓞ



## FORCOM (Fit for COMorbidity) classification of drugs

Class	Drug's effect	Influence on comorbid disease
<b>A</b>	Favourable	Drugs are used for the treatment of comorbidities
<b>B</b>	Possible	Drugs have positive effect on comorbid disease
<b>C</b>	Neutral	Drugs without any significant effect or contradictory effect on comorbid disease
<b>D</b>	Undesirable	Drugs with possible rare non-severe adverse effects or unexplored drugs
<b>X</b>	Unfavourable	Drugs with severe adverse effects

**FORCOM classification unifies existent narrow classifications, simplifies information from guidelines, and helps to select optimal drugs for patients with comorbidities**

