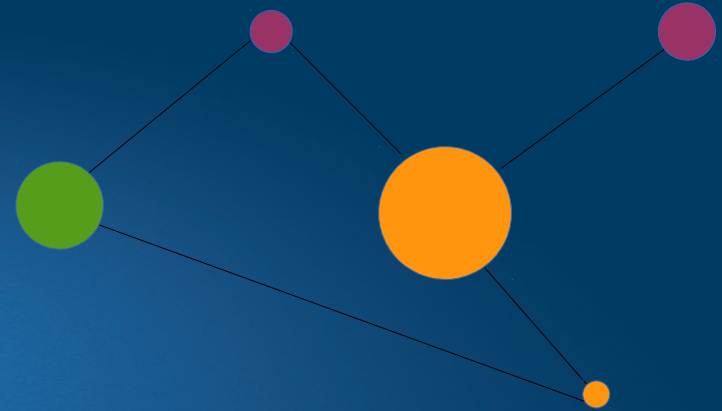
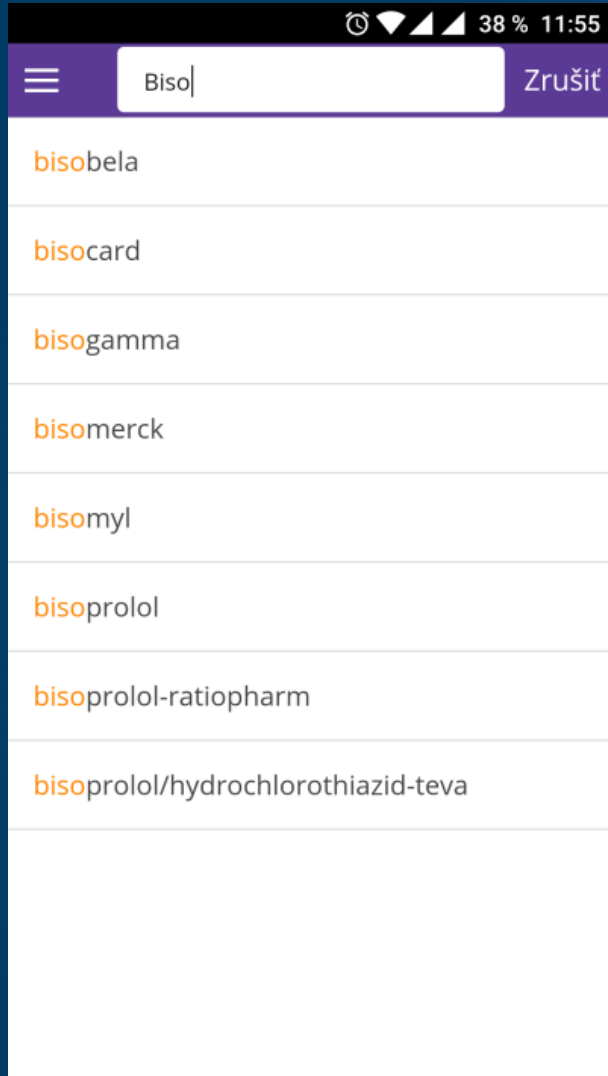


PharmaGuard

Mobile personal medication & drug safety assistant

Miroslav Líška, Marek Šurek
Datalan (Bratislava, Slovakia)

PharmaGuard

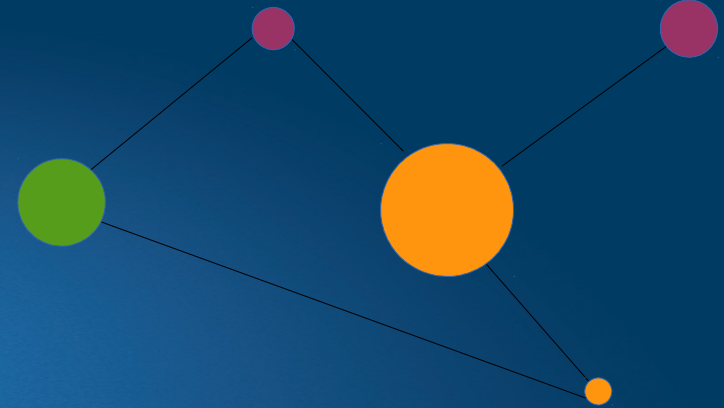


Semantic search:

- searching by various drug properties (name, classification, diseases referenced in drug indications, contraindications)
- advanced NLP
- autocomplete

PharmaGuard

The screenshot shows the PharmaGuard mobile application interface for the drug Bisocard mg. At the top, there is a purple header with a back arrow, the text 'Bisocard mg', and a pharmacy icon. Below this is an orange warning banner with a shield icon and the text 'Užívate 1 interagujúci liek' (You are using 1 interacting drug). The main content area is white and contains the following information: 'Bisocard mg 5' with a price of '0.63 €', 'tbl flm 30x5 mg (blis.AI/PVC)', 'Účinná látka' (Active ingredient) with a right arrow, 'Forma' (Form) as 'Filmom obalená tableta', 'Počet v balení' (Number in pack) as '30 ks', and 'Spôsob podania' (Method of administration) as 'Ústa'. Below this is a table with three columns: 'Cena' (Price) at 1.71 €, 'Úhrada ZP' (Insurance contribution) at 1.08 €, and 'Doplatok' (Out-of-pocket) at 0.63 €. At the bottom, there are two buttons: 'NEUŽÍVAM' (I do not use) and 'NÁHRADY (7)' (Substitutions (7)).

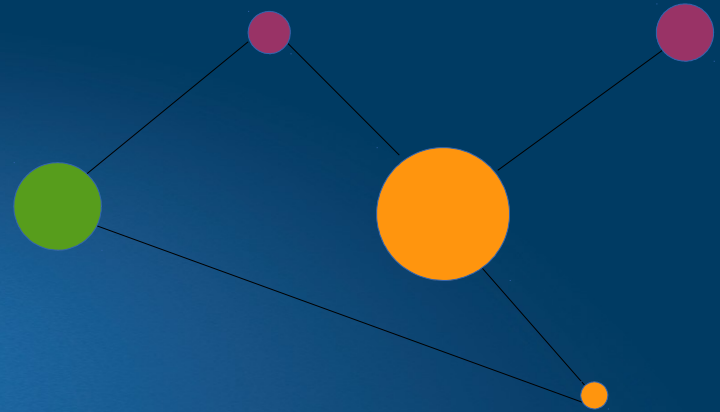


Drug detail

- extended drug information
- personalized warnings on possible drug interactions
- generic substitutions list

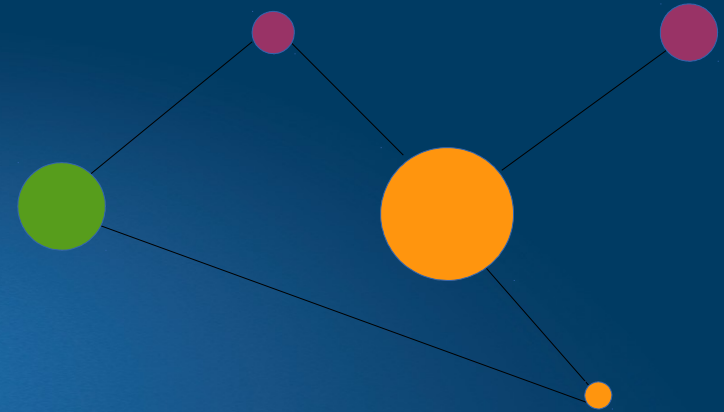
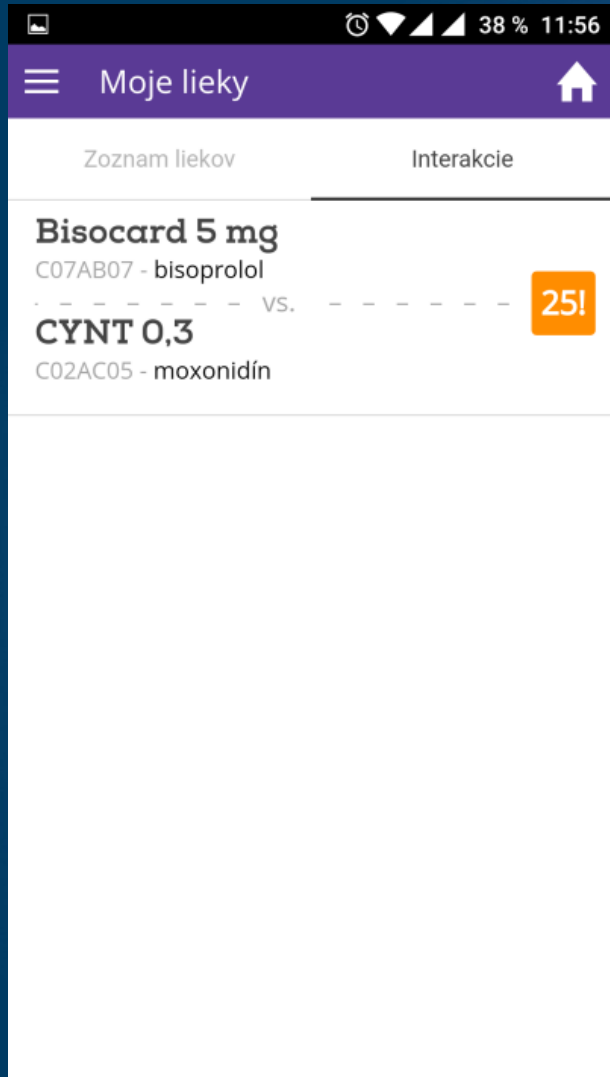
PharmaGuard

Brand Name	Price
Coronal 5 tbl flm 30x5 mg C07AB07 - bisoprolol	0.33 € 48 % ▼
Sobycor 5 mg filmom obalené tablety tbl flm 30x5 mg C07AB07 - bisoprolol	0.41 € 35 % ▼
TYREZ 5 mg tbl flm 30x5 mg C07AB07 - bisoprolol	0.5 € 21 % ▼
RIVOCOR 5 tbl flm 30x5 mg C07AB07 - bisoprolol	0.76 € 21 % ▲
Bisomerck 5 tbl flm 30x5 mg C07AB07 - bisoprolol	1.22 € 94 % ▲
Concor 5	2.59 €



Generic substitutions
- list of substitutable drugs

PharmaGuard



My drugs::interactions

- list of possible D2D (drug to drug) interactions
- interactions are inferred from slovak drug SPC (The Summary of Product Characteristics) together with ATC interactions from open DrugBank project



PharmaGuard

Moje lieky

Nepriame NLP interakcie zo zdroja Slovpedia

kombinácie, bisoprolol ↔ moxonidín

Medzi: Betapres 5 mg / 75 mg kapsuly (kombinácie, bisoprolol) a CYNT 0,3 (moxonidín)

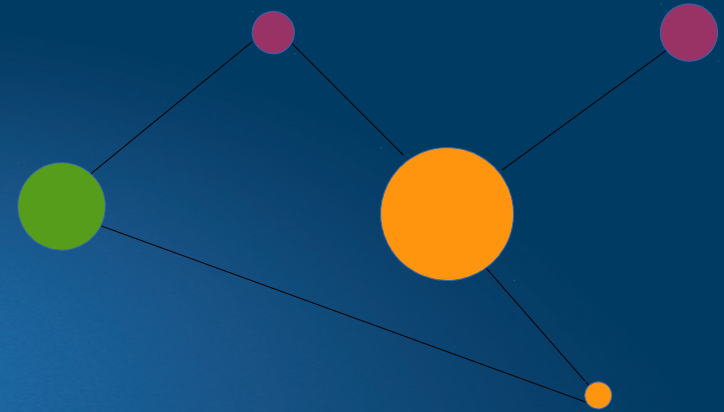
Neuskutočnili sa žiadne interakčné štúdie.

Bisoprolol

Neodporúčané kombinácie

Antagonisty kalcia verapamilového typu a v menšej miere diltiazemového typu: negatívny účinok na kontraktilitu a atrioventrikulárne vedenie. Intravenózne podávanie verapamilu u pacientov liečených betablokátormi môže viesť k vážnej hypotenzii a atrioventrikulárnej blokáde. Intravenózne podávanie verapamilu u pacientov liečených **betablokátormi** môže viesť k vážnej hypotenzii a atrioventrikulárnej blokáde.

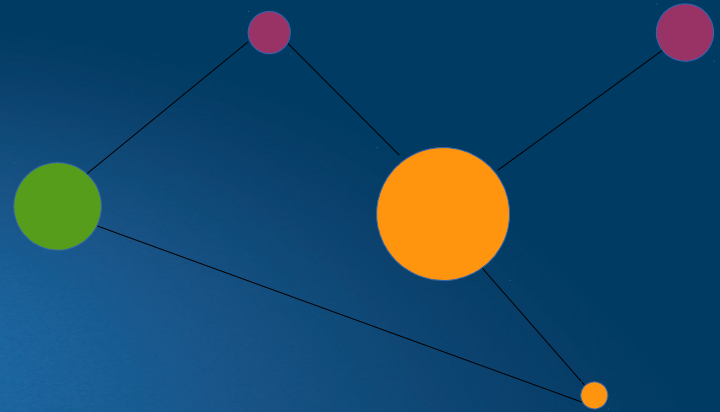
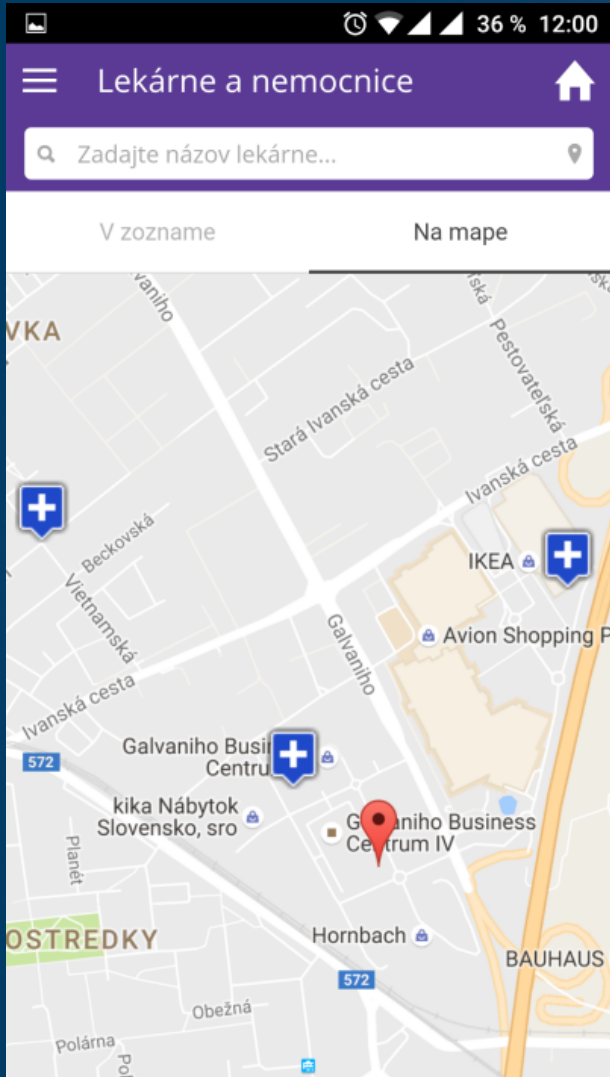
Centrálné pôsobiace antihypertenzíva (napr. Centrálné pôsobiace **antihypertenzíva** (napr. klonidín, metyldopa, **moxonidín**, rilmenidín): súbežné použitie centrálnych pôsobiacich antihypertenzív môže ďalej znižovať centrálny



Interaction detail

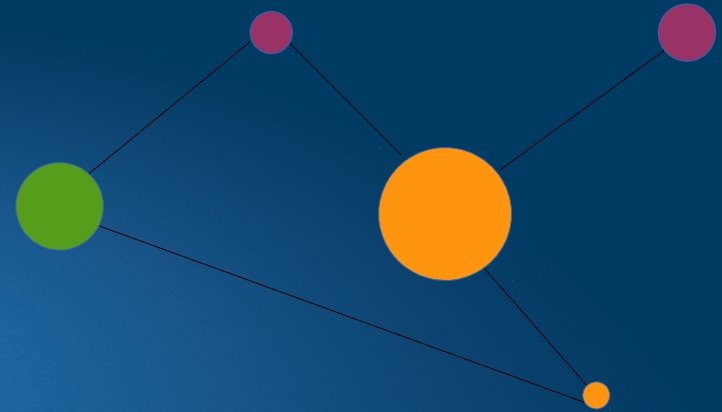
- an example of NLP drug2drug interaction: the subjected text is highlighted
- mined interaction relation between drugs is propagated to the other drugs that are based on the same active substances (ATC)

PharmaGuard



Pharmacies location
- PharmaGuard's geo-position services

PharmaGuard References



Android version:

<https://play.google.com/store/apps/details?id=com.ionicframework.pharmaguard654042>

iOS version:

<https://itunes.apple.com/sk/app/pharmaguard/id1042553013?mt=8>

<https://sk.linkedin.com/in/miroslavliska>
<https://sk.linkedin.com/in/mareksurek/en>