



# Od osobných AI-asistentov k suverénnej AI

3 výzvy pre verejnú správu



Martin Čmejrek

**ITAPA AI 2025**

Zimná jazdiareň, Bratislavský hrad 2, 9. prosince 2025

[online](#)

# MAMA AI Team History

(Prague, Czech Republic)



## IBM Research (1992-2021)

Basic research in the fields of  
Speech recognition, Speech  
synthesis, Conversational AI,  
Machine Translation

## IBM Watson (2014-2021)

Conversational, Speech & NLP  
on IBM Cloud:

- Watson Assistant
- Watson Speech To Text
- Watson Text To Speech
- Watson Language Translator



## The MAMA AI (2021-present)

European Group that build **secure, practical and sustainable AI**  
AI Products and Services for **on-prem and SaaS**  
Trusted and **top-skilled international** partner



100+ patents &  
publications

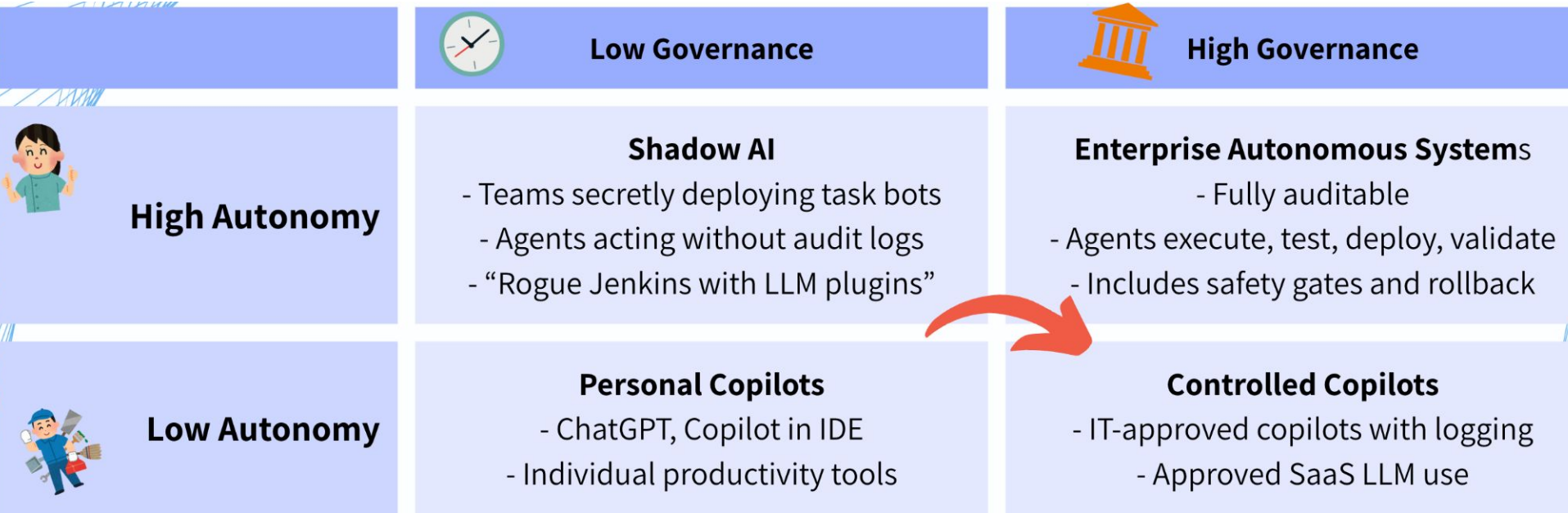
T3 AI Award  
Winner 2023

AI Award Winner  
2024

CEE Newcomer  
2023

# Bezpečnost

# Autonomy vs. Governance



**Shadow AI happens when autonomy increases before governance does.**

**Enterprises that “ban AI” just push the top-left quadrant underground.**

**Mature orgs move from the left to right by adding auditability, monitoring, and policy frameworks.**

## Clauses &amp; Exclusion Library

## Document Related

Armed Forces

Asbestos

Communicable Diseases

Delegation of underwriting  
authority (Line Slips, Binding  
Authorities, Open Covers)Downstream Exclusion and  
Limited WritebackEmployers Liability/Workmen's  
Compensation

Extracontractual Obligations

Financial Guarantee

Information Technology  
HazardsInherent Defects, Decennial  
Liability

IT and Cyber Risk

Law Enforcement Vehicles

Marine Cyber Exclusion  
Clause

2

Total Clauses Found

20

Total Exclusions Found

17

Total Unfound Clauses &amp; Exclusions

39

Total Clauses &amp; Exclusions Checked

## Wording Analysis Assessment

| Type      | Clauses & Exclusions   | Found | Page | Confidence Level |
|-----------|------------------------|-------|------|------------------|
| Exclusion | IT and Cyber Risk      | ✓     | 14   | Medium           |
| Exclusion | NBC and NBCR Terrorism | ✓     | 6    | High             |
| Exclusion | Nuclear Energy Risk    | ✓     | 11   | Medium           |
| Exclusion | Obligatory Reinsurance | ✓     | 6    | High             |

IT and Cyber Risk Found: ✓



14 of 39



AI Reasoning (hover to display full detail)

The contract does contain a specific exclusion that aligns with the definition of IT and Cyber Risk, specifically referenced as the Information Technology Hazards (Risk) Exclusion Clause. This clause directly excludes losses arising out of damage to computer systems, aligning with the exclusion of c...

## Provide Feedback

Is this analysis correct?



Correct



Incorrect

Submit Feedback

Reason (optional)

Please explain why you think this analysis is correct or incorrect...



treaty.pdf

IT and Cyber Risk

Losses arising, directly or indirectly, out of: (i) loss of, alteration of, or damage to or (ii) a reduction in the functionality, availability or operation of a computer system, hardware, programme, software, data, information repository, microchip, integrated circuit or similar device in computer equipment or non-computer equipment...

# Clauses & Exclusions Library

## Modular and Extensible Approach

### Clauses & Exclusion Library



IT and Cyber Risk



Law Enforcement Vehicles



Marine Cyber Exclusion Clause



Marine Technology, Submarine Cables



Military Vessels



NBC and NBCR Terrorism



Nuclear Energy Risk



### DEFINITION

#### IT and Cyber Risk Exclusion

The exclusion of coverage for losses caused directly or indirectly from malicious and non-malicious cyber events (cyber risks).

The clause can also be titled IT Hazard Clarification Clause or IT and Cyber Clarification Clause (in the DACH market).

Preferred Cyber exclusion: LMA 5410

Criteria for acceptable Cyber exclusions:

The intention of the Cyber exclusion is to exclude cyber risks from whatever cause (including cyber acts and cyber incidents)

cyber act (malicious) = unauthorised, malicious or criminal act involving a computer system

cyber incident (non-malicious) = any error,

### EXAMPLES

*"Cyber Loss Limited Exclusion Clause IUA 09-082*

*Notwithstanding any provision to contrary within this contract, this contract excludes any Cyber Loss.*

*Cyber Loss means any loss, damage, liability, expense, fines or penalties or any other amount directly caused by:*

*the use or operation of any Computer System or Computer Network:*

*the reduction in or loss of ability to use or operate any Computer System, Computer Network or Data;*

*access to, processing, transmission, storage or*

# Clause extraction and tagging

Assess compliance, clarity, and risk exposure by flagging unclear or missing clauses against regulatory and internal guidelines

Provide reasoning, ensure transparency, maintain user interactions, audit trails, version histories for all assessments to ensure transparency and governance. Facilitate **human-in-the-loop** workflow

## Wording Analysis Assessment

| Type      | Clauses & Exclusions           | Found | Page | Confidence Level |
|-----------|--------------------------------|-------|------|------------------|
| Exclusion | Information Technology Hazards | ✓     | 14   | Low              |
| Exclusion | IT and Cyber Risk              | ✓     | 14   | Medium           |
| Exclusion | NBC and NBCR Terrorism         | ✓     | 6    | High             |
| Exclusion | Nuclear Energy Risk            | ✓     | 11   | Medium           |
|           |                                | ✓     | -    |                  |

## IT and Cyber Risk Found: ✓

< 14 of 39 >

## Provide Feedback

Is this analysis correct?

☐ Correct ☐ Incorrect

Submit Feedback

Reason (optional)

Please explain why you think this analysis is correct or incorrect...

AI Reasoning (hover to display full detail)

The contract does contain a specific exclusion that aligns with the definition of IT and Cyber Risk, specifically referenced as the Information Technology Hazards (Risk) Exclusion Clause. This clause directly excludes losses arising out of damage to computer systems, aligning with the exclusion of c...

Slavia.pdf 22 Clauses & Exclusions detected

Page 14

## IT and Cyber Risk

Losses arising, directly or indirectly, out of: (i) loss of, alteration of, or damage to or (ii) a reduction in the functionality, availability or operation of a computer system, hardware, programme, software, data, information repository, microchip, integrated circuit or similar device in computer equipment or non-computer equipment...

# Inovace



# Collaboration of Business and AI Tech Experts

## Business Expertise

- Define strategic priorities & **use cases**
- Provide **domain knowledge**
- Set KPIs tied to **business outcomes**
- Ensure **adoption** across teams & customers

## Shared Roles & Responsibilities

- **Use Case** Definition
- **Data Understanding**
- Validation & Testing
- Governance & **Risk**
- Change Management
- Continuous **Improvement**

## Data/Tech Expertise

- Assess **data quality** & **readiness**
- **Build and validate** models / AI systems
- Ensure **scalability**, integration & automation
- Implement **security**, compliance & **governance**

Stodská nemocnice, a.s.

Hradecká 600, 333 01 Stod, fax: 377 19 99 10

IC: 26361086, info@nemocnice-stod.cz, www.nemocnice-stod.cz

Chirurgické oddělení

Kooperativa

strana: 1/1

25-01-2022

KANCELÁŘ STŘEBRO

Tel: 377193563

MUDr. David Šmíd, Ph.D.

Identifikace: Narození: Pohlaví: Písmo: F 205

Adresa:

23.7.2021 09:31 Návštěva ambulance / ordinace

Nynější onemocnění: Dnes se omylem poranila o rozbitou skleničku v mezi prsti IV.-V. PHK

Objektivně: Řezná rána v oblasti meziprstí IV.-V. prstu, délky cca 30 mm, hloubky cca 3mm, nezasahuje hluboké struktury. Rána čistá. Hybnost intaktní. Prokrvení v normě. Inervace intaktní.

Dg: vulnus scissum manus lat.dx.  
sutura kůže monofilamentem, krytí s VT

Th: toleta, LA 1% Mesokainem, revze.

Doporučení: Krytí ponechat 2 dny, poté opschravit a převázat s Betadine roztokem. Kontrola chirurgem, dle místa bydliště v pondělí. Při zhoršení stavu kontrola ihned. Poučena. Konzultováno s prim. MUDr. Šmídem

Kontroly a převazy jsou ve vledních dnech 7-12 hod.

MUDr. Tomáš Kanyžovský

Stodská nemocnice, a.s.  
Hradecká 600, 333 01 Stod  
Chirurgické oddělení  
Chirurgická ambulance  
Tel: 377193563

13,8 cm

Medicína - Ruč 3809K

27-07-2021

opět rána  
sutura + revze

1. zobrazení 29. 7. 2021 7730

č. PU: 433 1011201  
(č. Hlášení PU):

č. PS:

SPZ/RZ:

tel.:

-5-08-2021

opět rána  
24. 8. 2021

24-08-2021

sutura kůže  
sutura - impale to kůže  
1. zobrazení 14. 9. 2021

14. 9. 2021 Dnes se rána zhojila

Docteur Olivier ROBERT  
CENTRE MEDICAL DES BERGERS  
38750 ALPE D'HUEZ FRANCE

tel : 00 33 4 76 80 69 29

## MEDICAL REPORT

DATE:

19.1.2023

SURNAME:

[redacted]

DOB:

TEL:

HOME ADDRESS:

Country:

CIRCUMSTANCES:

SK. ACCIDENT

ALCOHOL/DRUGS INVOLVED OR NOT:

YES

NO

DIAGNOSIS:

FRACTURE P1 5° sk. manu. gv.

TREATMENT:

POLCA MANO

EXTENSION ATTEL. THENO FOURTE  
pneumat. septaxylie 6.6V

FURTHER TREATMENT RECOMMENDATIONS:

suivi chir. de la main.

ADVISED FORM OF TRANSPORT:

normal car-train-bus

ambulance

normal flight

air ambulance

sitting position

lying position

leg elevated/leg rest/extra seat

ASSIST REQUIRED:

no assist

civil person

nurse

doctor

Can the patient be transported home?

YES

NO

Should be the patient transported to the hospital?

YES

NO

TOTAL COAST OF TREATMENT:

PAID BY THE PATIENT

395€

Stav analýzy: **✓ Všechny požadavky zpracovány** Počet vyhotovených analýz: **1** Počet v analýze: **0**

## VÝSLEDKY ANALÝZY

Stav: **✓ Úspěšně dokončeno** Zadal: **Automat Život [svc\_aut5]** Datum zadání: **03.07.2025 13:00:10** Vyhotoveno: **03.07.2025 13:00:22**

Jméno: **✓ Dalibor f** Rodné číslo: **✓** Datum úrazu: **✓ 25.06.2025** Alkohol: **✓ bez alkoholu**

Popis úrazu: **pořezal kotoučovou pilou v práci na pravé ruce** Poraněná část těla: **pravá ruka** Léčebné období: **-** Dopravní nehoda: **Ne**

## Popis ošetření:

Sutura rány provedena za aseptických kautel., Inadine a krytí doporučeno doma v suchu a čistotě., Fyzické šetření poranění končetiny, analgetika doporučena., Převaz za 2 dny cestou praktického lékaře (PL)., Pokud tetanus více jak 5 let prosím přeočkovat. Stehy odstranění za 7-10 dní cestou PL.

## ČASOVÁ OSA

**25.06.2025**

Vznik úrazu

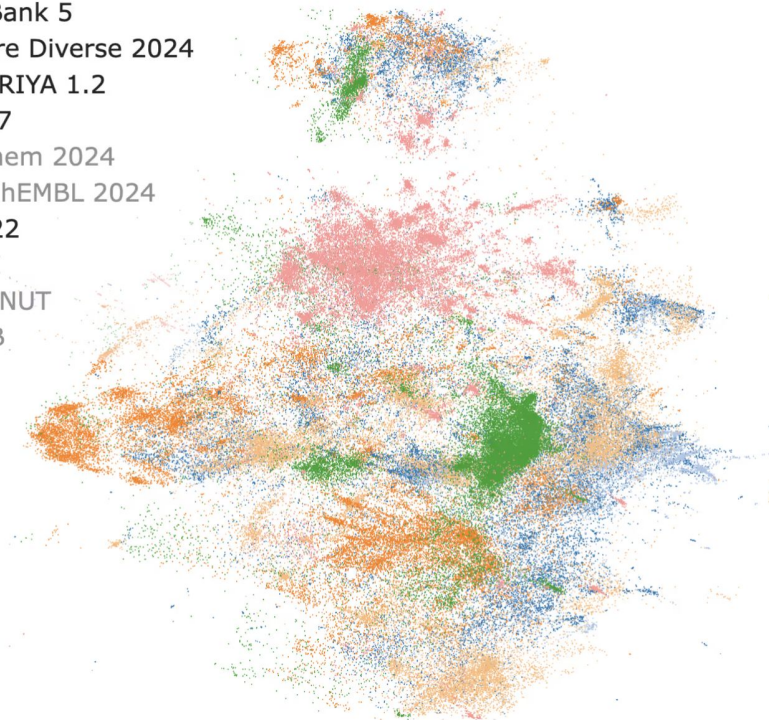
**25.06.2025****Diagnóza:** S618 Otevřená rána jiných částí zápěstí a ruky**Vyšetření:** sutra rány, inadine krytí**Léčba:** za aseptických kautel, v la mesocain 1%, provedena sutura rány, inadine, krytí dop. doma krytí v suchu a čistotě, fyz šetření poranění končetiny, analgetika dp, převaz za 2 dny cestou PL, pokud více jak 5 let prosím přeočkovat, stehy ex za 7-10 dní cesotu PL**Lékař:** Katarína**Lékařská zpráva:** Zdr. poj .: 205 Ur - uryenun prgem !! T/T :PHPNC ě Nemocnice Kyjov Nemocnice Kyjov, příspěvková orga [\[Zobrazit více\]](#)



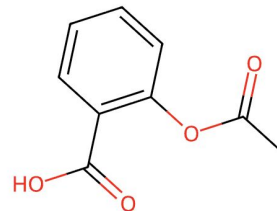
# Vysvětlitelnost, audit

|        |   |
|--------|---|
| 1 EASY | According to the medical documentation, the patient sustained a laceration on the head on October 28, 2021, which was treated with suturing, and the stitches were later removed. There are no mentions of any complications following the initial medical examination; therefore, this is not a diagnosis with complications.  |
| 1 EASY | According to the medical documentation, the patient sustained an occupational injury in which he pinched his left hand with a wood clamp, resulting in a longitudinal wound between the second and third fingers. The wound was treated by revision without structural damage, rinsing with hydrogen peroxide, and closure with sutures. In subsequent visits, no complications were mentioned; only dressing changes were performed, and finally, the patient was advised to apply an ointment to soften the scab. Therefore, the classification is sutured wound without complications. |
| 1 EASY | According to the medical documentation, the patient sustained a cut wound on a finger, which was treated with suturing (adaptive revision). During the course of treatment, complications were observed in the form of inflammation and the administration of the antibiotic Augmentin. Since this is a sutured wound with complications, the diagnosis is classified as Category 4.  |
| 1 EASY | According to the medical documentation, the patient sustained a wound on the lower leg that was treated with suturing (revision and stitches). Later, complications occurred in the form of wound dehiscence and necrosis. The presence of complications is confirmed by the use of terms such as "dehiscence," "coating," and "necrosis."  |

- ChEMBL 34
- DrugBank 5
- eXplore Diverse 2024
- CHEMRIYA 1.2
- GDB17
- PubChem 2024
- SureChEMBL 2024
- ZINC22
- ChEBI
- COCONUT
- FooDB



Query Molecule  
Query Molecule



1.00

CC(OC1C(C(=O)=O)=CC=C1)C(=O)O

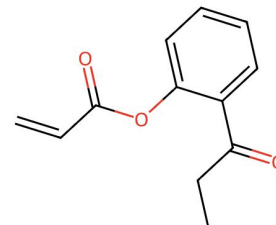
hERG: 0

AMES: 0.001

DILI: 0.013

LD50: 2.161

Aurigene Virtual Library  
AV002779615534-DMCH



0.80

C=CC(=O)Oc1ccccc1C(=O)O

hERG: 0

AMES: 0.154

DILI: 0.129

LD50: 1.938

hERG : hERG Inhibition (%)

Green 0 - 0.3 (Low risk) Yellow 0.3 - 0.7 (Medium risk) Red > 0.7 (High risk)

AMES : AMES Mutagenicity (%)

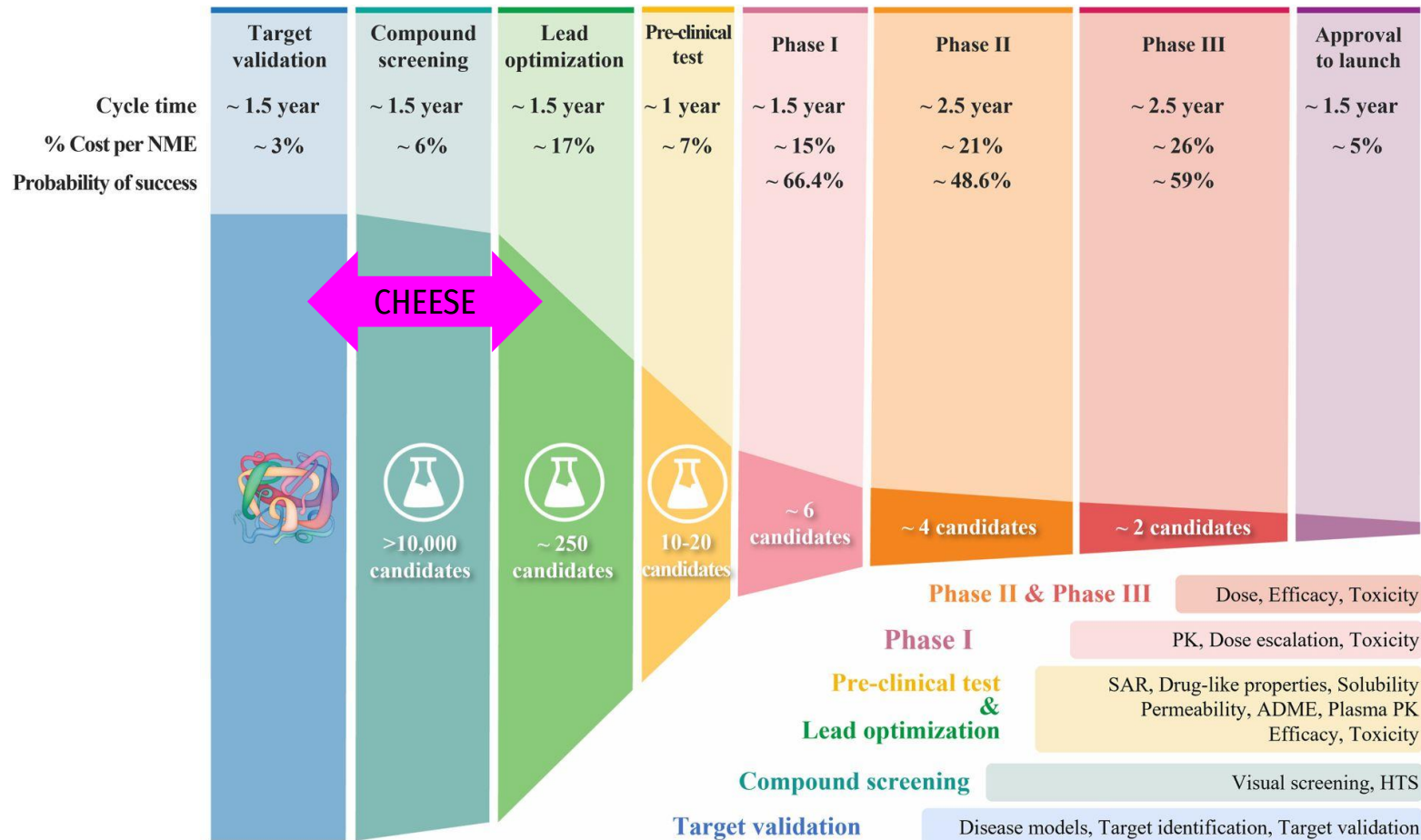
Green 0 - 0.3 (Low risk) Yellow 0.3 - 0.7 (Medium risk) Red > 0.7 (High risk)

DILI : Drug Induced Liver Injury (%)

Green 0 - 0.3 (Low risk) Yellow 0.3 - 0.7 (Medium risk) Red > 0.7 (High risk)

LD50 : LD50 in Rat (-Log mol/kg)

Green ≥ -2.4 Red < -2.4



## Insights for ZOLPIDEM TARTRATE

Found 183 pharmaceutical products across 6 countries

Database Info

## Filters

Active Ingredient Variant

ZOLPIDEM TARTRATE

## APIs

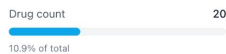
☐ ZOLPIDEM TARTRATE☐ ZOLPIDEM

## Form

## Geographical Distribution



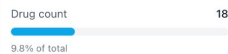
Czechia



Germany



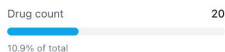
Italy



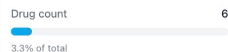
Japan



United Kingdom



Russia



## Products clusters based on composition similarity

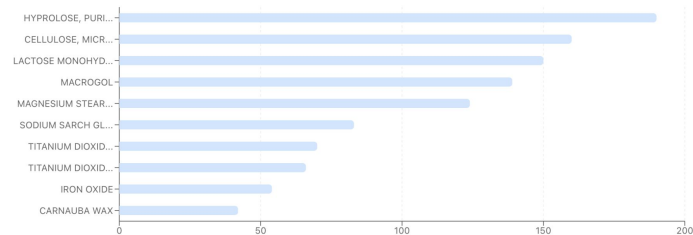


## Substance Frequency

Active Ingredients

Excipients

Substances to show



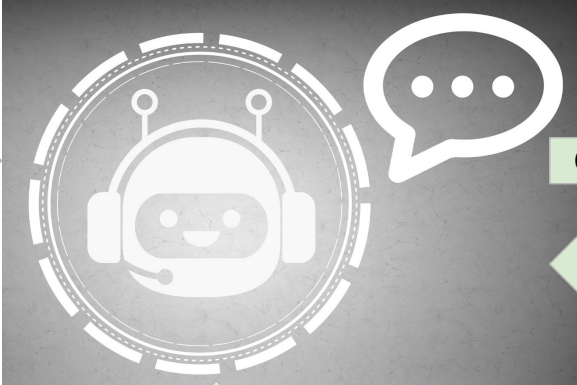
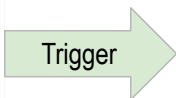
This chart displays the frequency of excipients found in pharmaceutical products.

## Packaging

- |  |   |
|--|---|
| <input type="checkbox"/> Child resistant HDPE bottle   | <input type="checkbox"/> Film-coated tablet                                 |
| <input type="checkbox"/> Pvc-al blister  | <input checked="" type="checkbox"/> Orodispersible tablet                   |
| <input type="checkbox"/> Clinical pack   | <input type="checkbox"/> Sublingual tablet                                  |
| <input checked="" type="checkbox"/> HDPE container with child-resistant, tamper-evident PP closure | <input type="checkbox"/> Tab.   |
|  | <input type="checkbox"/> Oral drops, solution                               |
|  | <input type="checkbox"/> Oral solution                                      |
|  | <input type="checkbox"/> Orally disintegrating film/film agent/internal use |
|  | <input type="checkbox"/> Drops for oral administration                      |

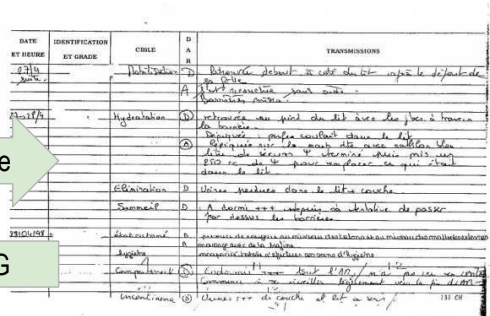
# Demografie



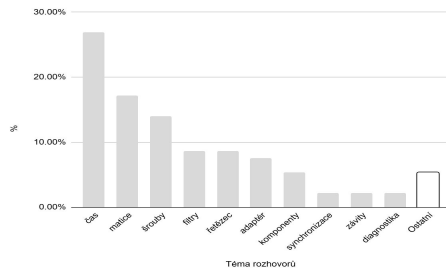


Generate

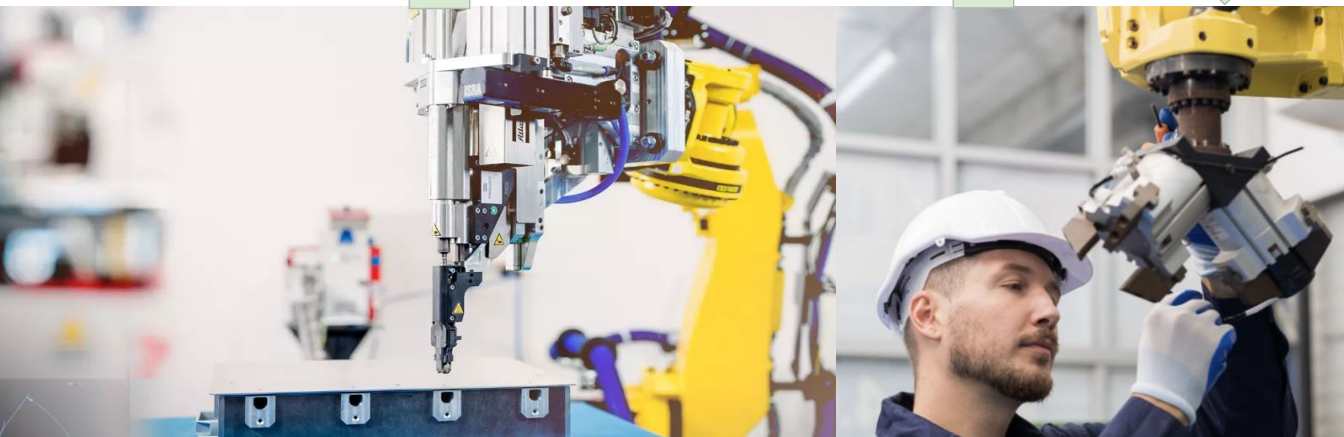
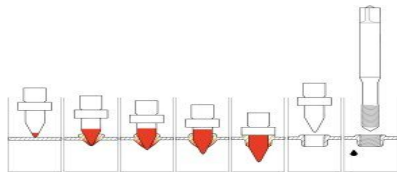
## RAG



Top 10 témat na operaci 1000



Flowdrill®



# Doménová adaptace, finetuning

behalter

zetovka

weber

anšlus

šimsy

hokejka

motýlek

tucker

belhof

bracket

CMC

gappad

ausheber

olapování

šteft



<https://themama.ai>  
[mama@themama.ai](mailto:mama@themama.ai)