## RULES OF THE DRUG PRESCRIPTION

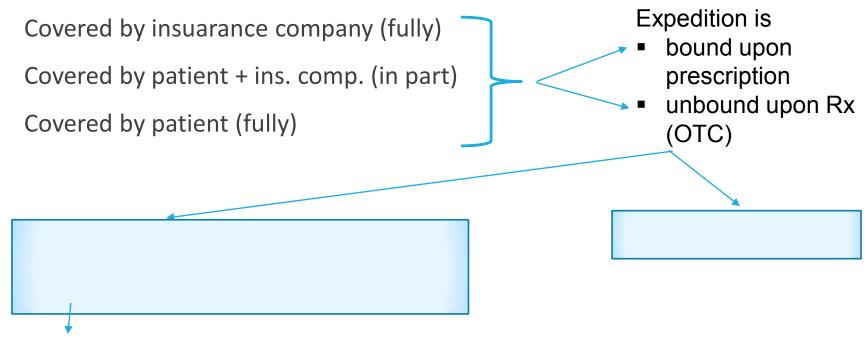
#### **Notes for Students**

This study material is exclusively for students of general medicine and stomatology in Pharmacology I course. It contains only basic notes of discussed topics, which should be completed with more details and actual information during practical courses to make a complete material for test or exam studies. Which means that without your own notes from the lesson this presentation IS NOT SUFFICIENT for proper preparation for neither tests in practicals nor the final exam.

## Drug incompatibilities

- Individually prepared preparations (IPP):
  - o prepared in the pharmacies on the base of individual medical prescriptions
- Ready-made drug preparations (RMP):
  - final preparations made by pharm. companies,
  - o ready to be issued by the pharmacy to patients without any further modifications

## Drug preparations



"earmarked drugs" (since 1998): act 378/ 2007, 106/2008 Sb.,

"about good practice of the sellers of earmarked drugs and about the specialized education of sellers of earmarked drugs"

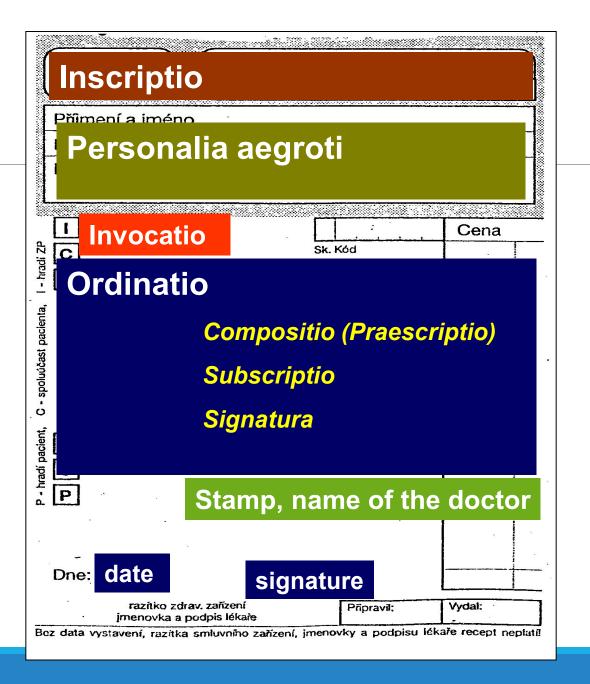
## RULES FOR DRUG PRESCRIPTION

- refers to the valid Pharmaceuticals Act 378/ 2007
- and from the related acts and regulations 54/2008 and 106/2008.

#### PRESCRIPTION

- official document compiled in accordance with fixed rules.
- written in Latin language
- must have all parts filled up, must be legible
- corrections should be signed by the physician
- following the abbreviation corr. (correxit-corrected)
- written in a non-erasible manner
- max. 2 kinds of medicines/one form of Rx

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## Prescription composition

#### Inscriptio

the heading of the prescription

#### Personalia aegroti

patient s personal data (name, surname, birth number and domicile)

#### Invocatio

induced by the abbreviation Rp. (recipe take).

#### Ordinatio

- the actual prescription of the healing preparation
  - = compositio + subscriptio + signatura

#### **SUBSCRIPTIO**

#### Instruction for the pharmacist

RMP – how many packages should be issued

4th case sg. or pl.

Expeditionem originalem numero unam – Exp.orig.No.I

**Expeditiones originales numero duas – Exp.orig.No.II (duas)** 

IPP – how the preparation should be made of the prescribed components

Misce fiat (sg) Misce fiant (pl) – mix to obtain ...

Different dosage forms:

- misce fiat pulvis - M.f.pulv., unguentum - M.f.ung.

solutio - M.f.sol., oculoguttae - M.f.oculogutt

In one-dose forms:

No. (numero) + Roman numeral for number of doses

Dentur tales doses numero decem – D.t.d.No.X (decem)

#### <u>Example</u>

D.ad vitrum guttatum

D.ad capsulam gelatinosam

Sometimes other instuctions: Sterilisetur!

## Prescription composition

#### compositio

- RMP
- the trade name in the nominative,
- specification of pharmaceutical dosage form,
- dose and package
- IPP
- list of pharmacopoeial (officinal) names of substances in the genitive of singular
- + dosages and package

#### **SIGNATURA**

#### D.S.

#### **Detur (et) Signetur**

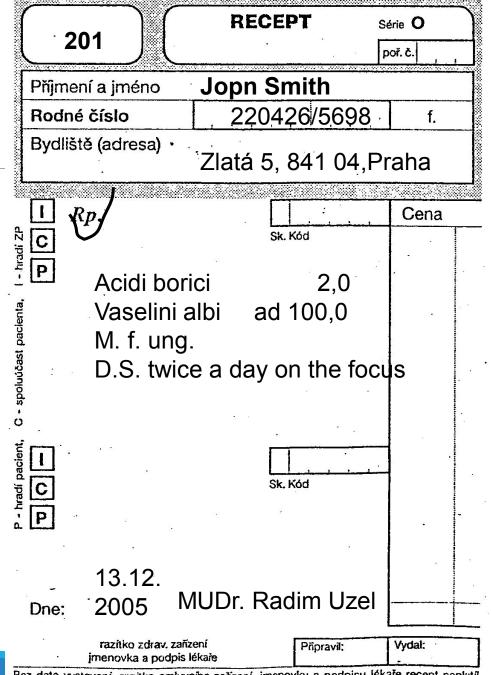
Exact use instruction for patient – dose, interval, where to apply instructions how the preparation should be used by the patients.

D.S. 3 times a day 1 tbl.

## Prescription composition

- date
- the stamp of the health facility
- the identification of the physician
- and the physician s personal signature

# preparatio ndividual



Bez data vystavení, razitka smluvního zařízení, jmenovky a podpisu lékaře recept neplatíl

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P Paralen 125 tbl. 20 x 125 MG Exp. orig. No. III (tres)  D.S. 1 tablet in pain, maximum 4 per day				
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Bez data vystavení, razitka smluvního zařízení, jmenovky a podpisu lékaře recept neplatíl

#### Drug preparations

- Fully paid by health insurance company (I)

- Not fully paid by health insurance comp. (C)

- Paid by patient (P)

## Validity of prescription

- Common Rx − 14 days
- ATB − 5 days
- ATB topically 14 days
- Narcotics, Psychotropics
- 14 days
- Rx for repeated issue 6 moths, max 1 Year
- Rx issued by emergency next day after the Rx issue
- (= max. 48 h)
- Date Rx not valid if missing
- Validity may be prologned by physician (pollen vaccinesallergology)

Prescription without date / stamp / signature is invalid!

### Rx for repeated issue

- Max. no. of medicines usually for 3 months (= usually max. 3 packages)
- If more packages to be issued "Rx. for repeated issue"
- 6 months of validity if not specified differently
- Max. number of issues has to be specified

## Rx for repeated issue

#### **REPETATUR** + číslice

2x bis

3x ter

4x quater

5x quinquies

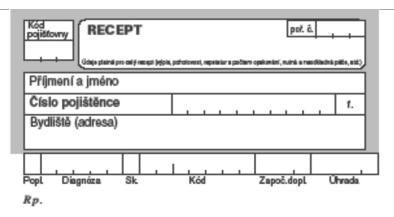
6x sexies

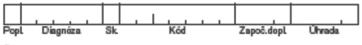
7x septies

8x octies

9x nonies

10x decies





Rp.

Dne:

razitko poskytovatele, jmenovka, podpis a telefon lékaře

Apravii: Vyo

#### Note....

- 1) dose Arabic numerals in grams
- 2) At least one decimal position
- 3) ad

Rp. Paracetamoli 0,1 Lactosi ad 0,5

4) q.s.

Rp. Paracetamoli 0,1 Lactosi q.s. 5) "aa" - ana partes aeqauales Rp.

Natrii sulfatis

Magnesii oxidi aa 50,0

6) combination "aa ad"

Rp.

Natrii sulfatis

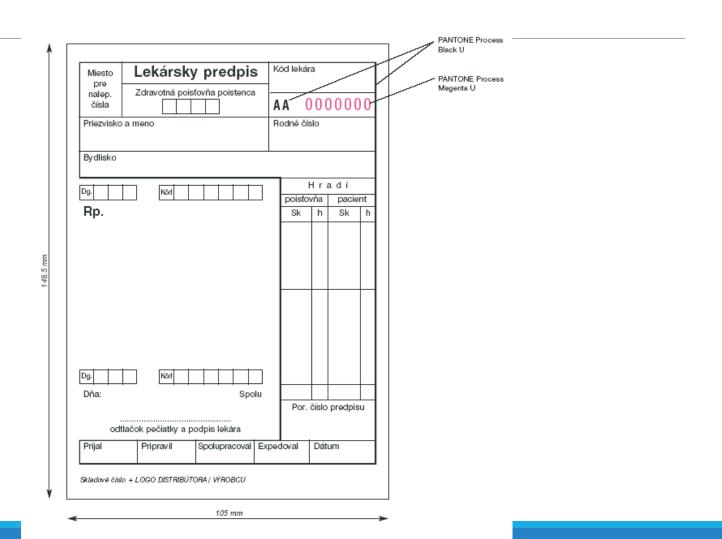
Magnesii oxidi aa ad 100,0

## Symbols in Rx formulary

- ! when max. dose was exceeded
- ® physician specify "not to be substituted with generic medicine"

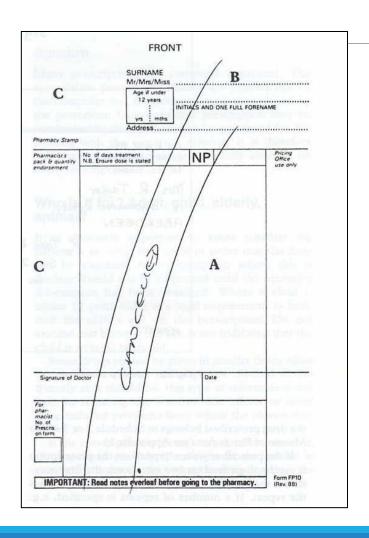
"PERICULUM IN MORA" – emergency situation, when normal form is not available

### Prescriptions Slovakia



### Prescriptions Great Britain

### Germany





## **Prescriptions USA**

	Robin Smith, M.D., F.A.C.P. Internal Medicine 11160 Warner Ave., Ste 209 Fountain Valley. CA 92708 Ph. (714) 549-4081 Fax (714) 735-8735 DEA #: AA3785 Lic #: A4564	1001-1
Patient Name		Phone No.
Address		Age Gender
		INITIAL QUANTITY  1-24  1-25-49  1-50-74  1-75-100  1-101-150  1-1518 over  Units  REFILL: NR 1 2 3 4 5
•	DATE	- D LABEL IN SPANISH
Prescription is void if	the register of medications is not most in the law	O DO NOT SUBSTITUTE

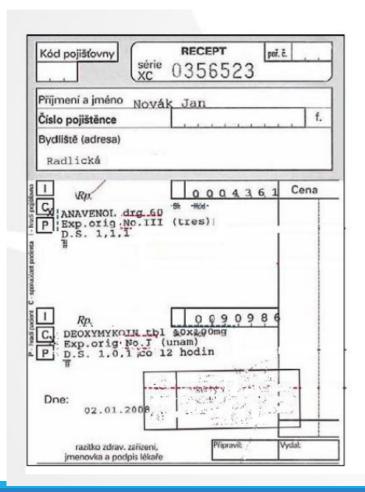
## **Prescription Greece**

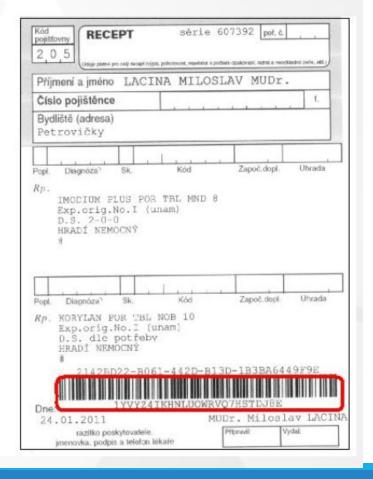


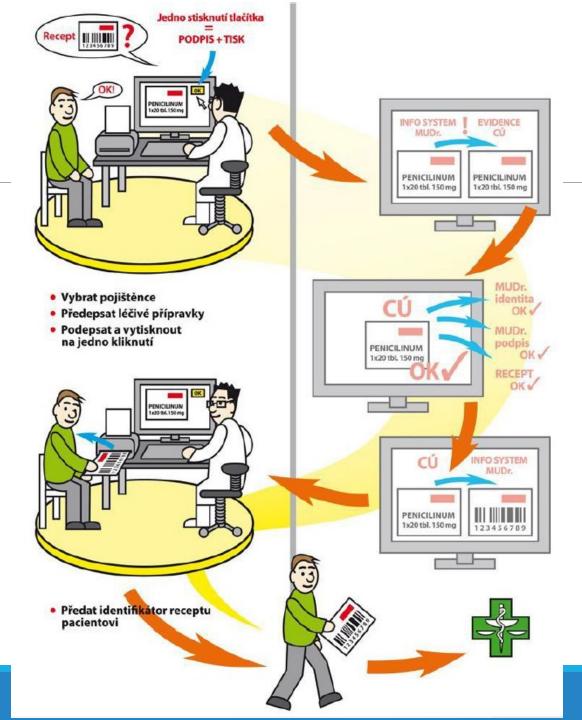
## **Electronic Prescription**

- Physician
- Central server for data storage (SÚKL)
- Pharmacy
- Patient + his password/PIN

## Common and E-prescription







## Prescription of narcotics and psychotropic drugs

## Narcotics and psychotropic drugs

#### → Law 466/2004 Sb. about addictive substances

> rules for handling with narcotisc and psychotropic drugs and their precursors

#### **Table I. Pharmacopeia 2009**

- >§§ narcotics
- ➤§ psychotropic drugs
- >(§) precursors

## Narcotics and psychotropic drugs

- Narcotics group I and psychotropic drugs groups II and III
  - Prescriptions with a blue band
  - Standard of the form: public notice No. 34/2004 Coll.
  - Form are personal delivered to the physician (or person with authorization form) with serial number of the form and code of the municipal office

## Prescription rules – be aware!

means group **ONE** of psychotropic drugs

- 103 drugs
- very strong effect

means group **TWO** of psychotropic drugs

- 18 drugs
- not so strong

#### **Narcotics**

#### List I N

opioids and other substances with high risk of development of addiction -

#### **List II N**

- popioids and other substances with lower risk of development of addiction
- normal prescriptions
- codeine, dextropropoxyphen, ethylmorphine, folkodine

Narcotics – List I
§§ Alfentanyl
§§ Diphenoxilate
§§ Fentanyl (Durogesic)
§§ Hydrocodone
§§ Cocaine
§§ Levorphanole
§§ Methadone
§§ Morphine (MST Continus)
§§ Opium
§§ Oxycodone (Oxycontin)
§§ Oxymorphone
§§ Pethidine (Dolsin)
§§ Piritramide
§§ Sufentanyl (Sufenta)
§§ Remifentanyl
§§ Tilidine

## Psychotropic drugs

#### List 5 PS

➤ Psychostimulants with high risk of development of physical addiction — amphetamine,

#### List 6 PS

- Barbiturates with possible development of addiction -
- >amobarbitale, buprenorphine, pentobarbitale

#### List 7 PS

- ►BZDs, some některé barbiturates and other substances with possible development of addiction in long term use normal Rx
- diazepam, oxazepam, meprobamate, phenobarbitale, methylphenobarbitale

## Psychotropic drugs – List 5 § Amphetamine § Buprenorphine (Subutex) § Dronabinole § Phencyclidine § Phenmetrazine § Flunitrazepam (Rohypnol) § Methamphetamine § Secobarbitale

#### Precursors

- **Pephedrine**
- pseudoephedrine
- ergotamine
- ergometrine
- Hysergic acid

## Prescription requirements

blue band on the form

very strict accounting

three copies

only one preparation

14 days of validity

Kód zdravotní pojišťovny	Recept na léčtv obsahující oma a psychotropní	mné látky sk. l	00000 Série A#
Jméno a příjme	ní		
Identifikační číslo pojištěnce		Des	lum narození
Adresa			
Rp.		Kéd	Úhrada pojišťovnou Kč
Datum		Razitko poskytovatek Jmenovka* a podpis předeplaujicho lekaře * jestitže poskytovate je právnická osoba	Celkern Kč
Přijel:	Připravil:	Vydal:	Pot. c.

## Narcotics and psychotropic drugs

#### Blue band prescription forms:

- have to be stored in a safe place (safe) in order to prevent theft of loss
- theft of loss has to be reported to the local municipal office and police
- >unfilled forms cannot be signed or stamped
- in case of death of the physician, the form have to be returned to the municipal office in 10 days

## Narcotics and psychotropic drugs

The form has 2 copies

Only one preparation can be prescribed to such form

## **Never to forget:**

```
insurance code
patient data
Rp.
#
date
your signature
```

### Drug information databases

EMA http://www.ema.europa.eu/ema/

#### **Dynamed**

http://web.ebscohost.com/dynamed/search/basic?sid=d3fod39b-dd7c-4bab-9f4f-3478d4639a2e%4osessionmgr4oo8&vid=o&hid=4107

Medicines.org.uk

Drugs.com https://www.drugs.com/

Micromedex <a href="http://www.thomsonhc.com/hcs/librarian">http://www.thomsonhc.com/hcs/librarian</a>

#### National databases

**SÚKL** www.sukl.cz

AISLP www.aislp.cz

**Pharmindex Remedia** 

Pharmindex Brevíř