24th EAHP Congress

OVER 5 YEARS OF MEDICINES SHORTAGES IN A UNIVERSITY HOSPITAL

2SPD-037

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BACKGROUND

Drug shortages, widely reported by healthcare professionals and patients over recent years, are an increasing concern for hospital pharmacists.

PURPOSE

The aim is to verify the impact of a large number of long-term medicines shortages on the daily work of a hospital pharmacist, in a university hospital (858 beds, 1500 medicines).

MATERIALS AND METHODS

Since 2013, the hospital pharmacist has identified the medicines shortages and determined the time of unavailability which has resulted in the implementation of a method for managing medicine supply issues.

MATERIALS

- Spreadsheet = tool for traceability of all medicines shortages and alternatives

Gestion des RUPTURES DE STOCK et RETRAITS DU MARCHE

❶ Médicament **à délivrer** = médicament mis **en gras**
Médicament à encoder = médicament délivré
❷ Localisation du médicament à délivrer : PO = bureau du Pharmacien d'Officine; Arm RS = armoire ruptures de stock = PHOPO2; CMD = armoire commandes
❸ Informations : Info-casier (IC) - PharmInfo (PI) - Mail (M) - Rayon (R) - COPHAR (C)
Lien Infos-casiers : G:\PO\Info-casier\2018\Ruptures de stock et retraits de marché
Lien PharmaStock : G:\Modèles info Pharm\PharmaStock

Généralités : Médicament en RS et alternative disponibles (IC et/ou PI validés) : délivrance de l'alternative
RS terminée : écouler d'abord le stock de l'alternative

New 14/03/19 | Attention | RS terminée

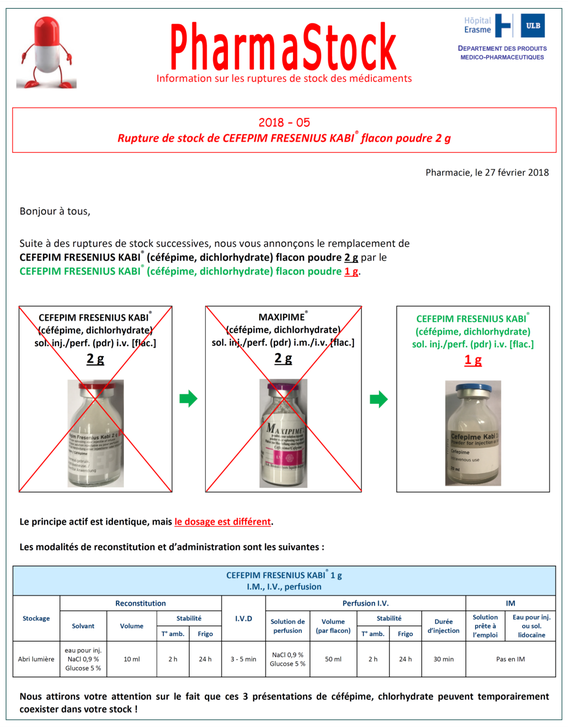
RUPTURES DE STOCK (RS)

❶ Médicament RS	Début RS	Fin RS	Consommation mensuelle	Stock (14/03/19)		❶ Alternative RS	Stock (14/03/19)	❷	❸
Aacidexam INJ 1 ml 5 mg	12-02-19	Mi avril-19	± 1700	0	→	**Dexamethasone rotexmedica BP INJ 1 ml 5 mg**	191+1400	rayon+cmd	**C**
Aciclovir Hospira INJ 10 ml 250 mg	18-01-19	Fin mars-19	± 218	0	→	**Zovirax INJ 250 mg**	**167**		**IC/PI/R/C**
Aspegic 500 mg inj 5 ml	26-02-19	Début avril-19	± 75	42	→	Grossiste			
						Délivrance 1/2			**R/C**
Biclar IV INJ 500 mg	07-02-19	Fin mars-19	± 35	38					
Biclar junior sirop 120 ml 125 mg/5 ml	12-02-19	Fin mars-19	0 à 3/mois	3					

- Information for healthcare professionals

PharmaStock

Information about medicines shortages sent by e-mail to prescribers and chief nurses, also available on intranet


PharmaStock
Information sur les ruptures de stock des médicaments
Hôpital Erasme – ULB – Département des produits médico-pharmaceutiques

2018 - 05
Rupture de stock de CEFEPIM FRESENIUS KABI® flacon poudre 2 g

Pharmacie, le 27 février 2018

Bonjour à tous,

Suite à des ruptures de stock successives, nous vous annonçons le remplacement de **CEFEPIM FRESENIUS KABI® (céfépime, dichlorhydrate) flacon poudre 2 g** par le **CEFEPIM FRESENIUS KABI® (céfépime, dichlorhydrate) flacon poudre 1 g**.

CEFEPIM FRESENIUS KABI® (céfépime, dichlorhydrate) sol. inj./perf. (pdr) i.v. [flac.] 2 g → MAXIPIME® (céfépime, dichlorhydrate) sol. inj./perf. (pdr) i.m./i.v. [flac.] 2 g → CEFEPIM FRESENIUS KABI® (céfépime, dichlorhydrate) sol. inj./perf. (pdr) i.v. [flac.] 1 g

Le principe actif est identique, mais le dosage est différent.

Les modalités de reconstitution et d'administration sont les suivantes :

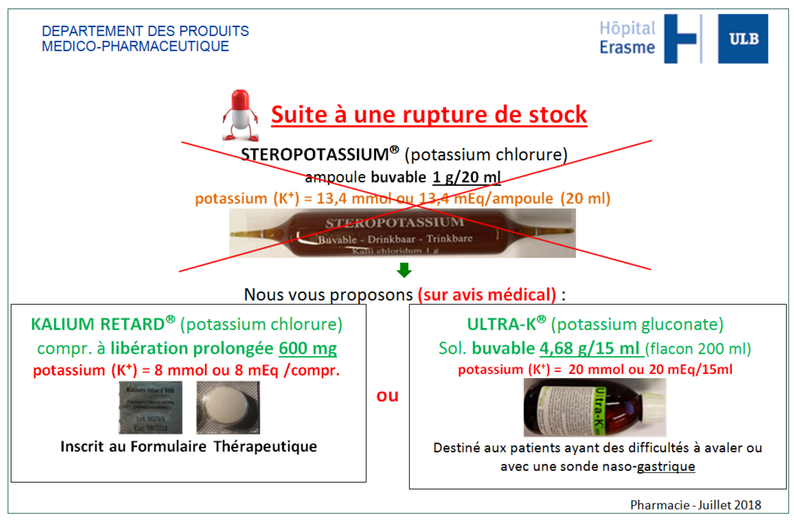
CEFEPIM FRESENIUS KABI® 1 g
I.M., I.V., perfusion

Stockage	Reconstitution				I.V.D	Perfusion I.V.					IM
	Solvant	Volume	Stabilité T° amb.	Stabilité Frigo		Solution de perfusion	Volume (par flacon)	Stabilité T° amb.	Stabilité Frigo	Durée d'injection	Solution prête à l'emploi	Eau pour inj. ou sol. lidocaïne
Abri lumière	eau pour inj. NaCl 0,9 % Glucose 5 %	10 ml	2 h	24 h	3 - 5 min	NaCl 0,9 % Glucose 5 %	50 ml	2 h	24 h	30 min	Pas en IM	

Nous attirons votre attention sur le fait que ces 3 présentations de céfépime, chlorhydrate peuvent temporairement coexister dans votre stock !

Info-casier

Information about medicines shortages accompanying the delivery of the medicine


DEPARTEMENT DES PRODUITS MEDICO-PHARMACEUTIQUE
Hôpital Erasme – ULB

Suite à une rupture de stock

~~**STEROPOTASSIUM®** (potassium chlorure)
ampoule **buvable 1 g/20 ml**
potassium (K^+) = 13,4 mmol ou 13,4 mEq/ampoule (20 ml)~~

Nous vous proposons **(sur avis médical)** :

KALIUM RETARD® (potassium chlorure)
compr. à **libération prolongée 600 mg**
potassium (K^+) = 8 mmol ou 8 mEq /compr.

Inscrit au Formulaire Thérapeutique

ou

ULTRA-K® (potassium gluconate)
Sol. **buvable 4,68 g/15 ml** (flacon 200 ml)
potassium (K^+) = 20 mmol ou 20 mEq/15ml

Destiné aux patients ayant des difficultés à avaler ou avec une sonde naso-gastrique

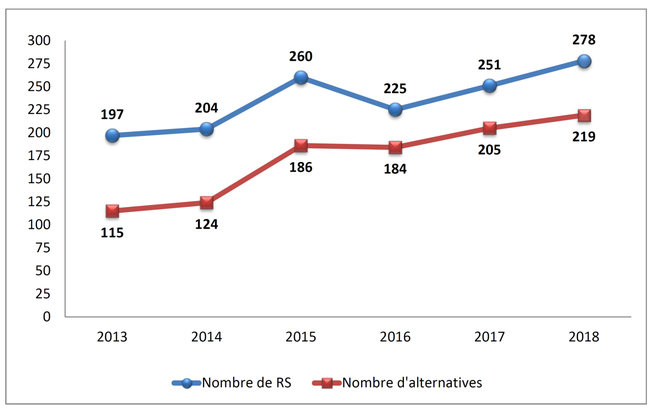
Pharmacie - Juillet 2018

METHODS

- Collecting information
  - Daily investigation of medicines shortages notified unexpectedly (back-order of one or more medicines from an order, contact by or to the pharmaceutical firm or wholesaler, information on the delivery note, …) and confirmation of data obtainable on www.afmps.be and www.cbip.be if needed.
  - Weekly analysis of internal data of order backlog (not received at 14 days).
- Analysis of the spreadsheet of medicines shortages
  - Daily update: adding new medicines shortages, modifying the eventual end-of-stock dates and removing completed medicines shortages.
  - Weekly counting the remaining stock of medicines shortages and alternatives : insert information about orders and chosen alternatives.

RESULTS

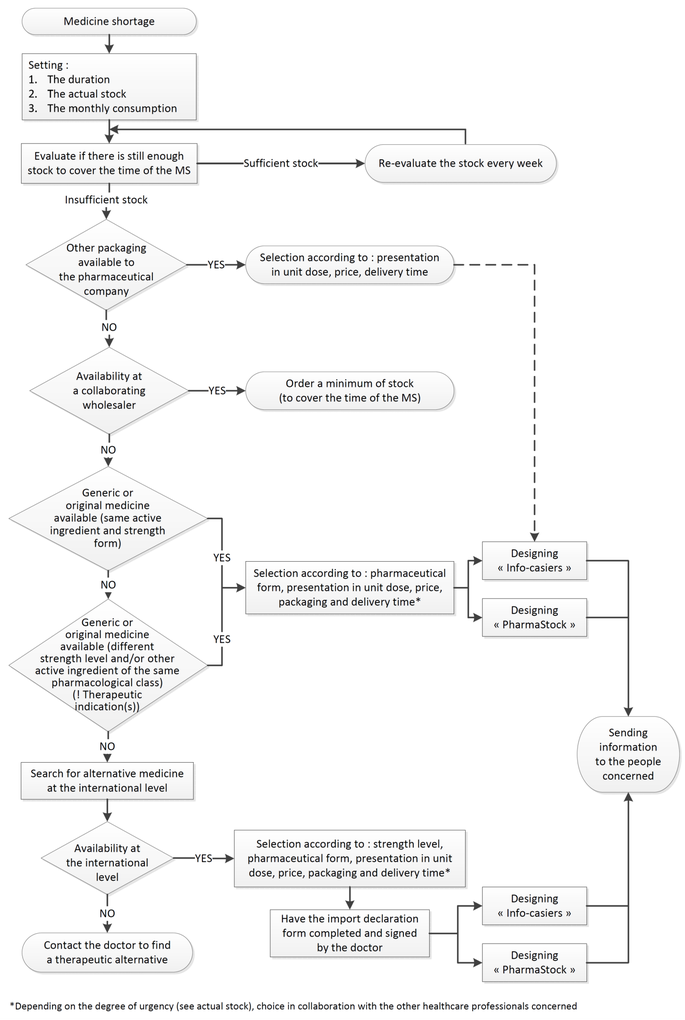
- Number of medicines shortages over 5 years illustrated in the graph below.
- Duration of drug shortages classified into minor (≤ 15 days), moderate (15 to 60 days) and major (≥ 60 days). The number of drug shortages with major duration is increasing over those years (37 in 2013, 53 in 2018).



These results require to develop an improvement strategy :

- **Drafting a decision-making** (algorithm : Medicines shortages management) supporting the choice of alternative
  → One alternative for 53% of medicines shortages, two for 7% and three for 1%.
- **A spreadsheet** including the results can easily be consulted to be informed about the proposed alternative.
- **Team building** : a team of hospital pharmacists, pharmacy technicians and administrative personnel has been deployed
  → The complexity of the management of this continuous activity requires a backup hospital pharmacist.
- **A communication platform** to secure supply chain potentially at risk of alternative treatment is developed and the multidisciplinary team is working in collaboration with the Medico-Pharmaceutical Committee to support clear communication to the other healthcare professionals.

Medicines shortages (MS) management



*Depending on the degree of urgency (see actual stock), choice in collaboration with the other healthcare professionals concerned

CONCLUSION

The medicines shortages management is a new activity for the hospital pharmacist.
The implementation of a management structure (putting in place a team of specialists, an update of a spreadsheet gathering all the information, drawing a decision algorithm and developing a communication platform) for medicine supply issues, lead by a hospital pharmacist, has become indispensable to deal with the significant number and duration of medicines shortages nowadays.

REFERENCES

Time spent by Belgian hospital pharmacists on supply disruptions and drug shortages : an exploratory study, E. De Weerdt and al., March 2017

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http://www.eahp.eu/24-2SPD-037