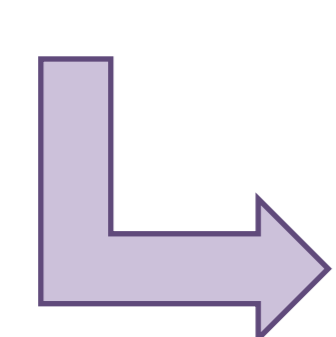


Complete or partial drug shortages are harmful for patients. The last few years, increasing drug shortages have been reported in several studies. In this context, a quantitative and descriptive analysis of these shortages in our teaching hospital was performed. **This analysis aims to confirm this rise from 2007 to 2015 and to characterise the shortages in 2014.**

The pharmacy supply chain team (1 pharmacist, 2 pharmacy residents, 2 pharmacy technicians) gathered, **selected** and **analysed shortages data** from Health authorities, Purchase groups, Pharmaceutical factories :



### CREATION OF AN EXCEL WORKSHEET

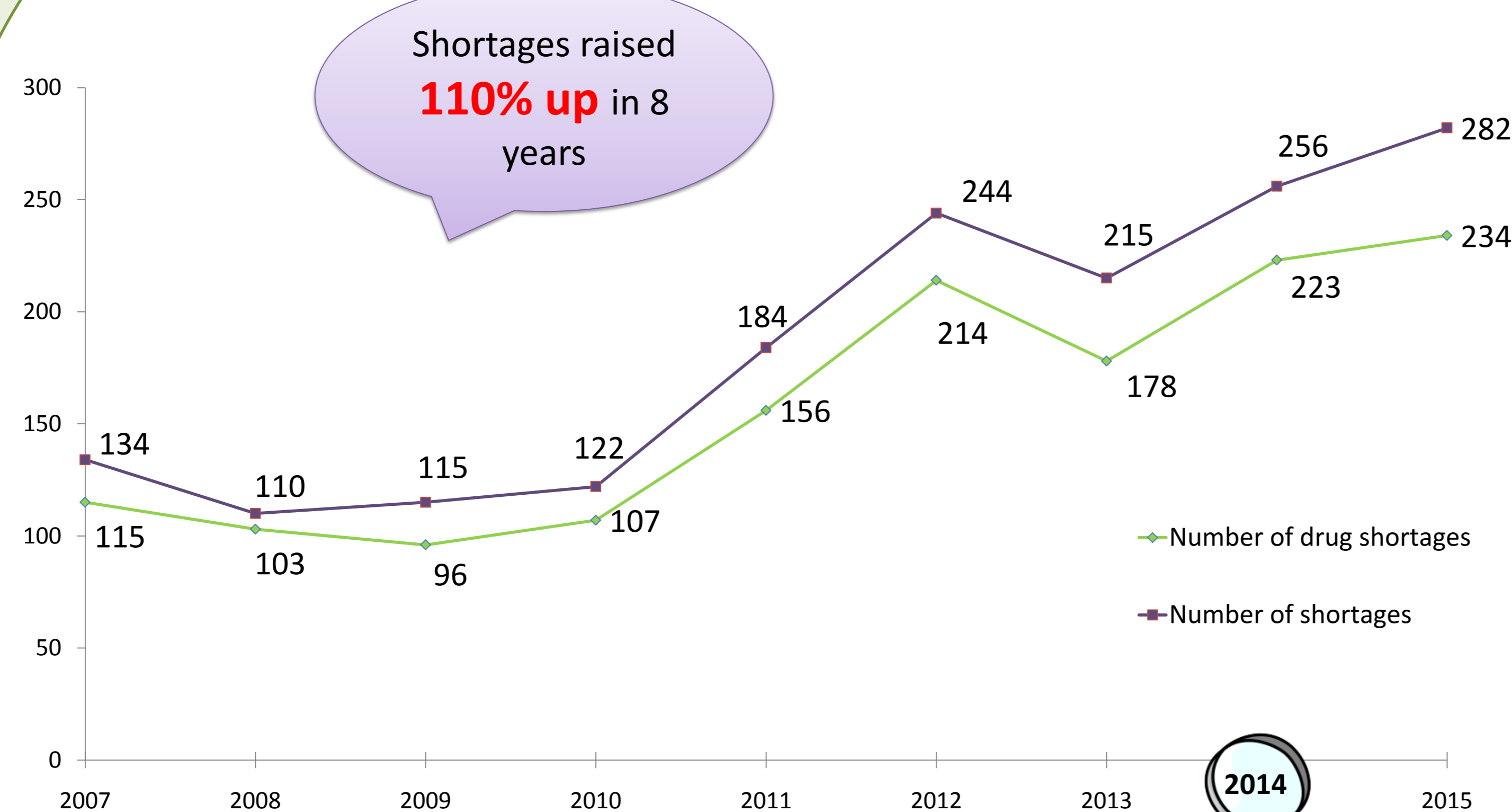
Daily updated since 2007  
Listing of shortages impacting our stock  
Available for the whole hospital pharmacy team



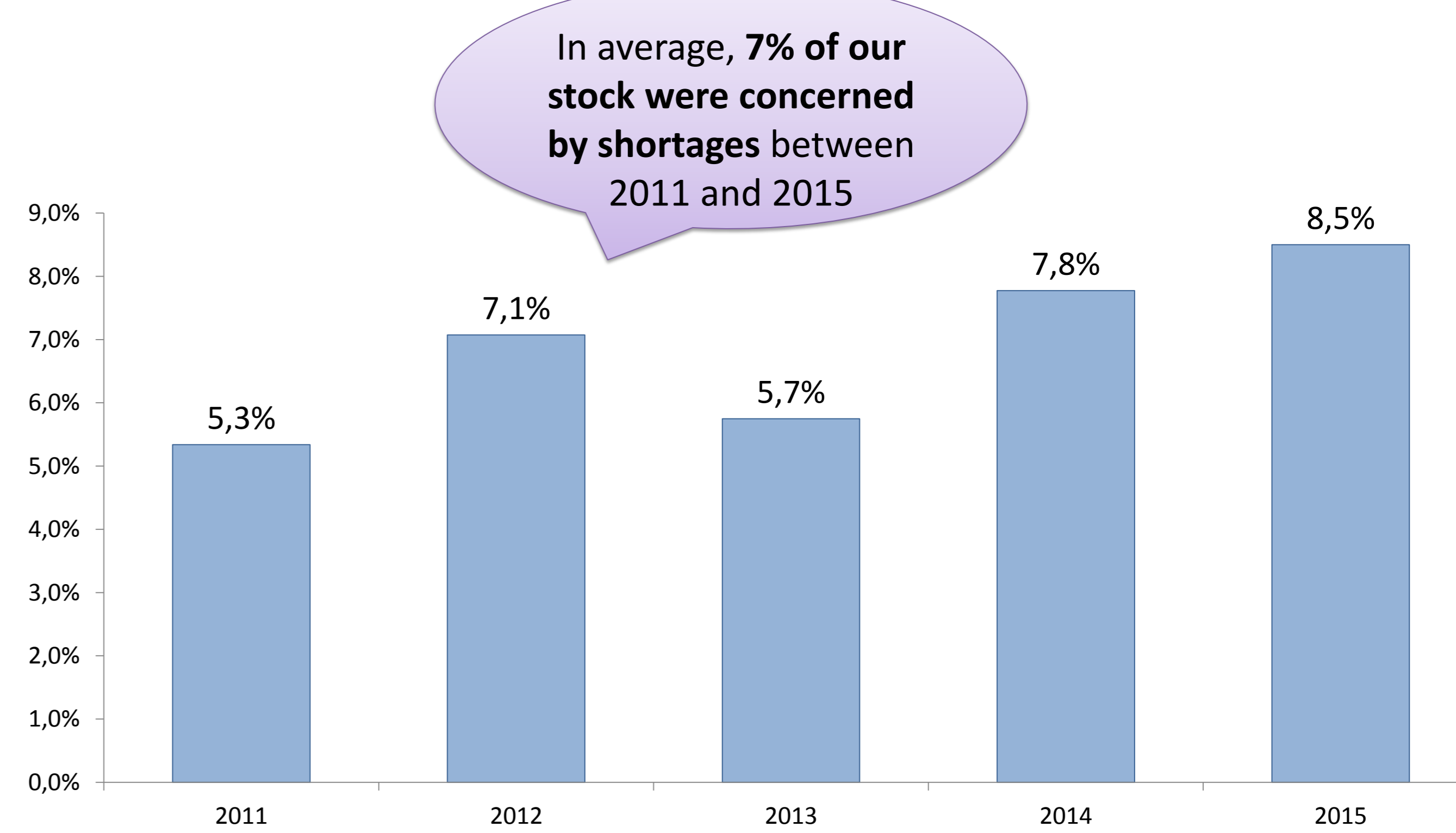
### WRITING OF BRIEFING NOTES

Sent to caregivers  
Including strict or non-strict alternative drugs and complete shortages without alternatives

## DRUG SHORTAGES EVOLUTION BETWEEN 2007-2015

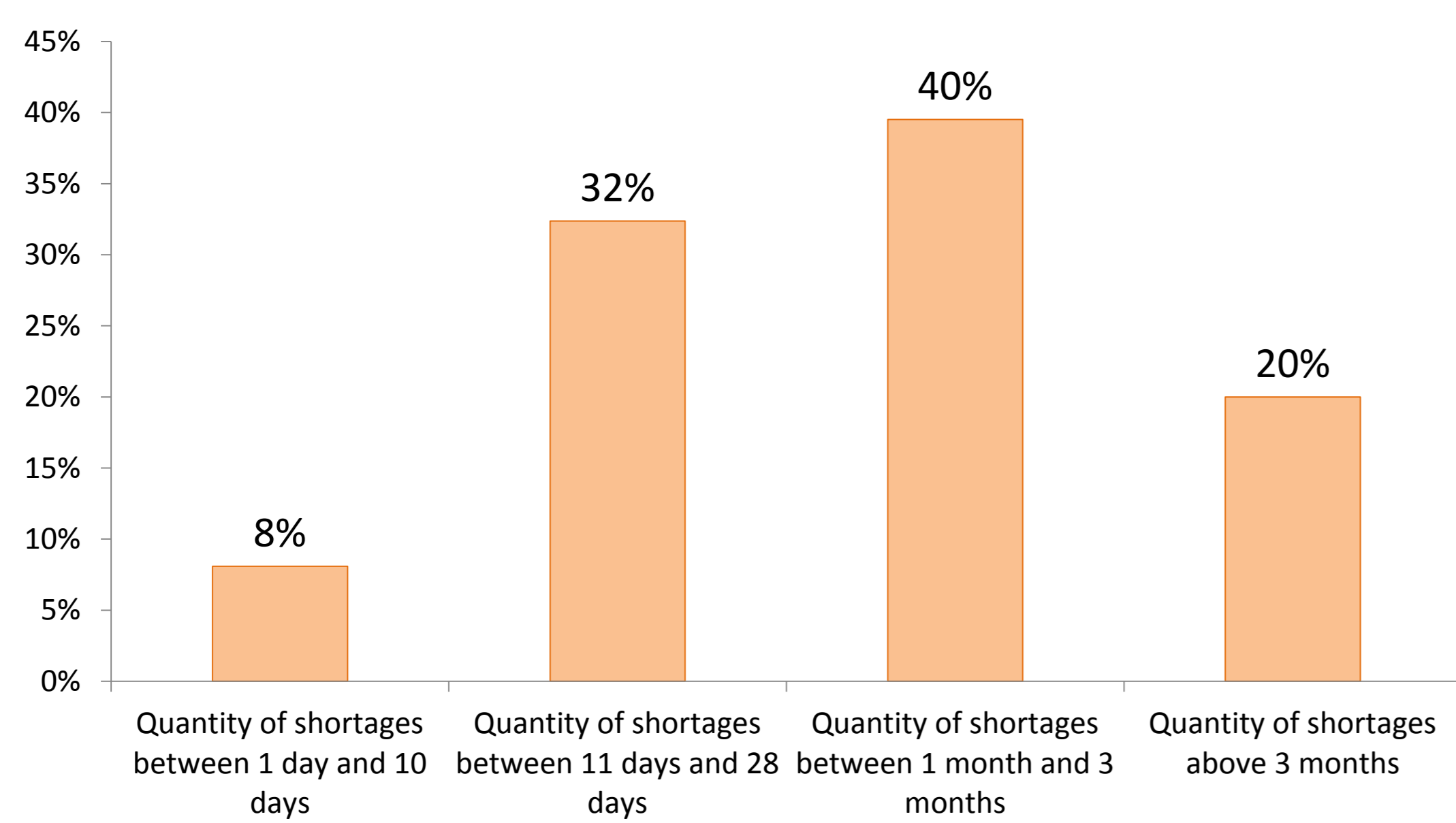


Evolution of shortages and drugs concerned by these shortages between 2007 and 2015



Percentages of drug shortages compared to the pharmacy drugs stock between 2011 and 2015

## FOCUS ON 2014

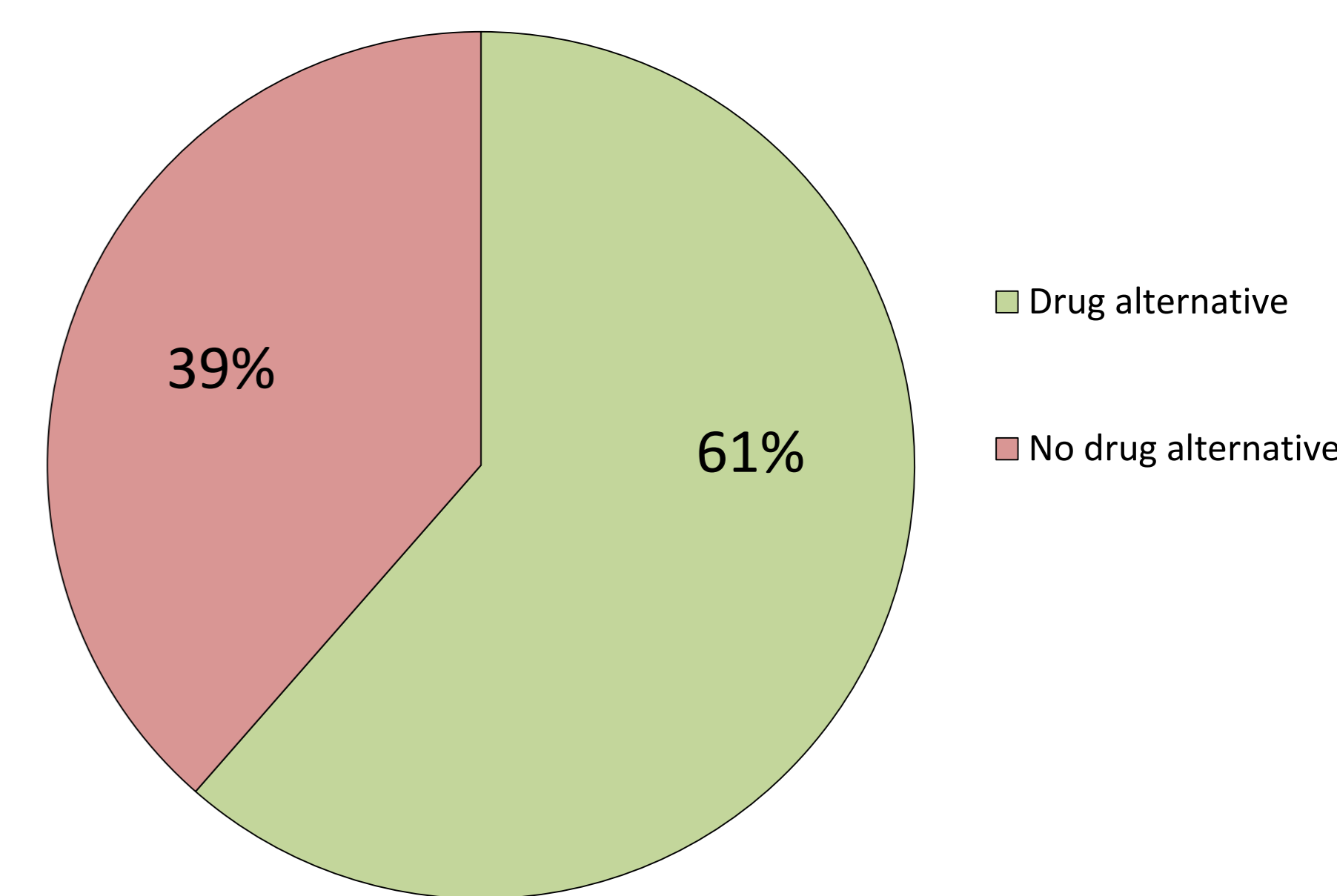


Quantity of shortages according to their duration in 2014

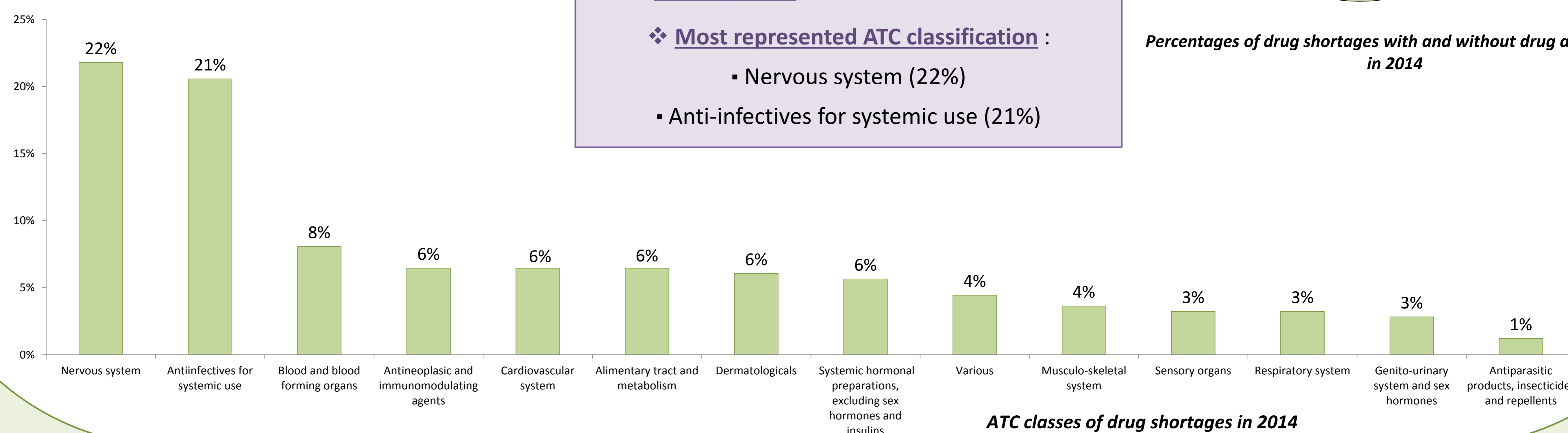
- ❖ **Average duration of a shortage :**
  - Drugs **not** subjected to quotas : **64 days** (1-720 days)
  - Drugs **with** quotas : **180 days** (1-792 days)
- ❖ **Amount of purchase account : 145 000 €**
- ❖ **Drug alternative : possible in 61% of cases**
- ❖ **WHO classification : 43% of shortages impacted essential medicines**

19<sup>th</sup> edition  
WHO Model List of Essential Medicines

- ❖ **Briefing notes : 38** were sent in care units
- ❖ **Most represented ATC classification :**
  - Nervous system (22%)
  - Anti-infectives for systemic use (21%)



Percentages of drug shortages with and without drug alternative in 2014



ATC classes of drug shortages in 2014

The number of drug shortages increases every year. Finding a fast and most cost effective alternative to drug shortages is the responsibility of the pharmacists. In our hospital, shortages increased by 110% in 8 years (2007-2015) and the amount of purchases account was 145000€ in 2014. The creation of a daily update Excel worksheet shared with the whole pharmacy team, allows a better reactivity of the pharmacists working in care units. The distribution to caregivers of briefing notes including alternative drugs (strict or non-strict alternative, complete shortages without alternative) can help caregivers therapeutic decisions. These two tools could improve quality of patient management.