



# THE VALUE OF PHARMACEUTICAL EXCIPIENTS

a European perspective

## **WHAT IS AN EXCIPIENT?**

"Any constituent of a medicinal product other than the active substance and the packaging material."

(Article 1(1)(a)3b DIRECTIVE 2011/62/EU on falsified medicinal products)

## **WHAT ABOUT EXCIPIENTS?**

**1200 1200** 

There are more than **1,200 excipients** used in medicines





Those used depend on many factors including the drug type, route of administration and dosage form



Excipients are diverse materials from many origins, animal, vegetable or mineral





Many are not exclusive to medicines, but are used widely in **food** and **cosmetic industries** 



Whatever their origin, however they are developed, made and handled, excipients must not compromise quality or harm patients

## **WHAT CAN EXCIPIENTS DO?**



Act as filler/diluent for highly potent medicines



Enhance solubility for poorly soluble medicines



Control the rate of drug release and bioavailability

#### INNOVATION & DEVELOPMENT

**Excipients can boost research and innovation into medicines and:** 



Increase access to new drugs (for poorly soluble, unstable drugs)



**Provide alternative routes** of delivery and dosage forms (easier to use, taste better)



Improve patient compliance

(reduce frequency of dosing, extend duration of action)

It can take 10-15 years for such a new drug formulation to move from the laboratory to the market

## **HOW ARE THEY MANUFACTURED?**



Excipients are mostly produced on a large scale using traditional chemical or biosynthetic processes

## **REGULATIONS**

Excipient manufacturers in general are not covered by EU law directly. The manufacturer of the medicinal product must ensure excipients and their suppliers are controlled appropriately







The key EU excipients regulatory references are: 2011/62/EU Falsified Medicines Directive, European Commission Guidelines on Risk Assessment EC2015/C95/02 and Eudralex Vol 4, Part 1, Chapter 5 Starting Materials

## **GMP & QUALITY STANDARDS**

Medicines must be safe, effective and of high quality. So all ingredients including excipients should be made according to Good Manufacturing Practices (GMP)



Excipients manufacturers may apply standards from a wide range of markets including food and cosmetics. For medicines, the voluntary guidance in the IPEC/PQG GMP Guide is an important reference

#### **EXCIPIENTS MATTER!**



They can represent the biggest part of the medicines (up to 95%)



The patient can consume more excipient than active ingredient



They have an important influence on drug safety



IT IS ESSENTIAL THAT EXCIPIENT MANUFACTURERS, DISTRIBUTORS AND EXCIPIENT USERS COMPLY WITH ALL EXCIPIENTS STANDARDS AND REGULATIONS TO PROTECT PATIENTS

THAT'S THE VALUE EXCIPIENTS BRING TO MEDICINES AND PATIENTS!



