The EMA Geriatric Medicines Strategy

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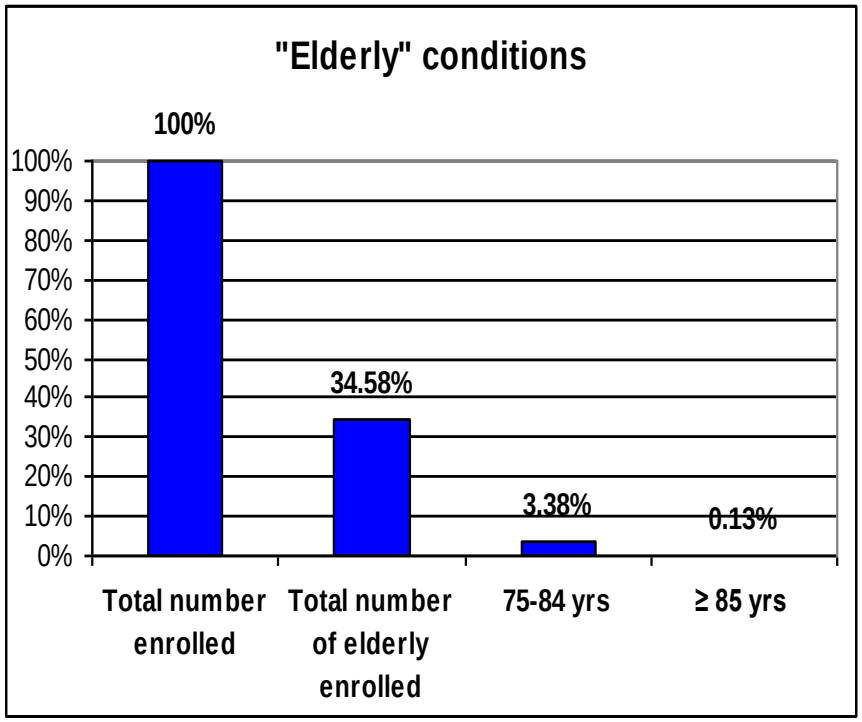
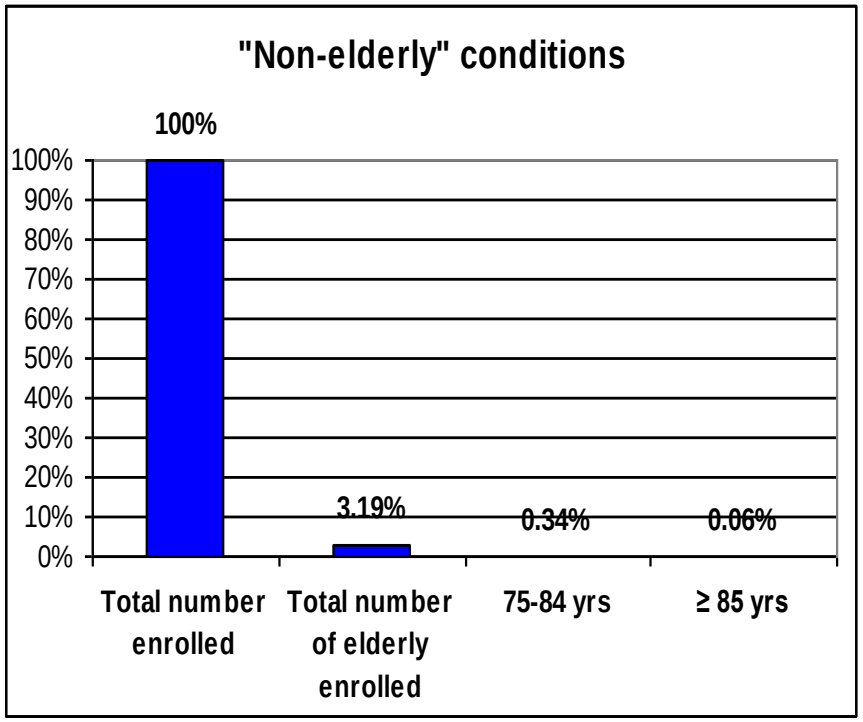
Evidence Biased Medicine?

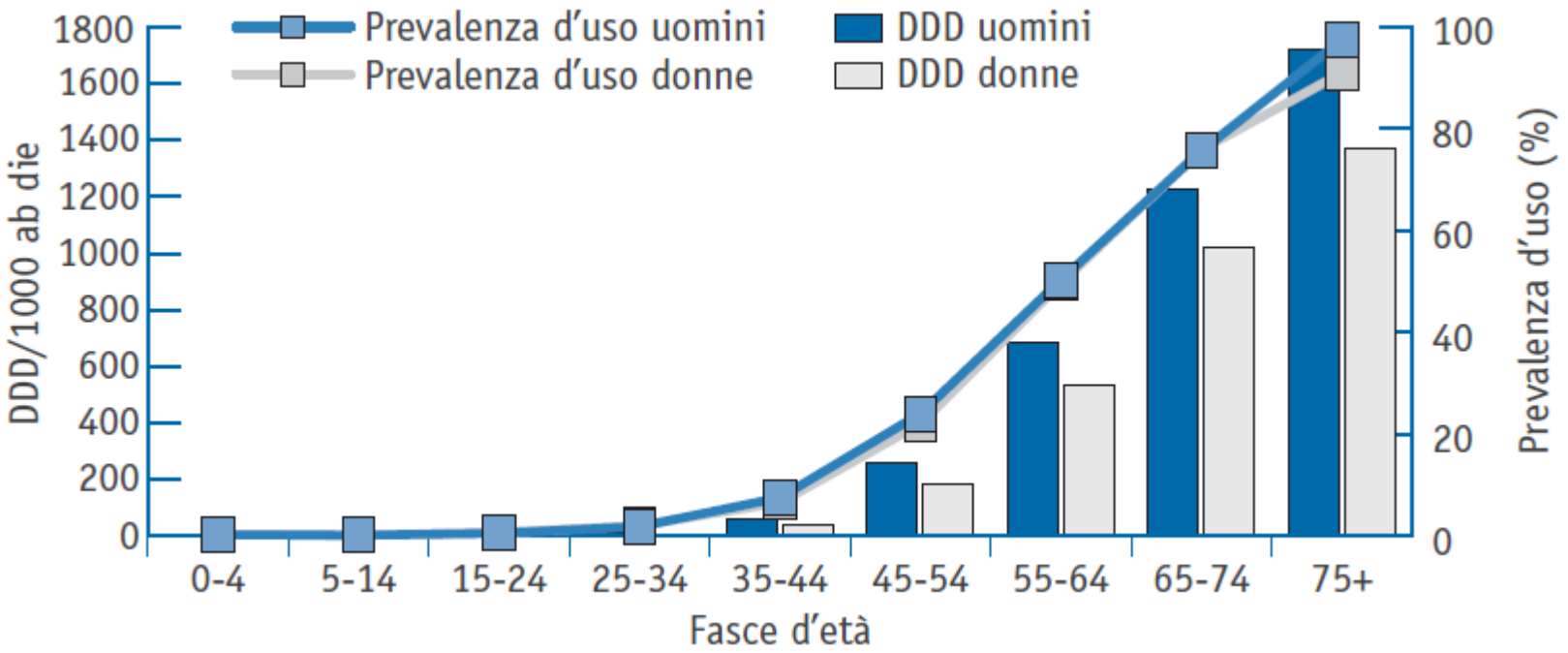
Baseline findings mid-2009 to present: "elderly" *vs.* "non-elderly" conditions



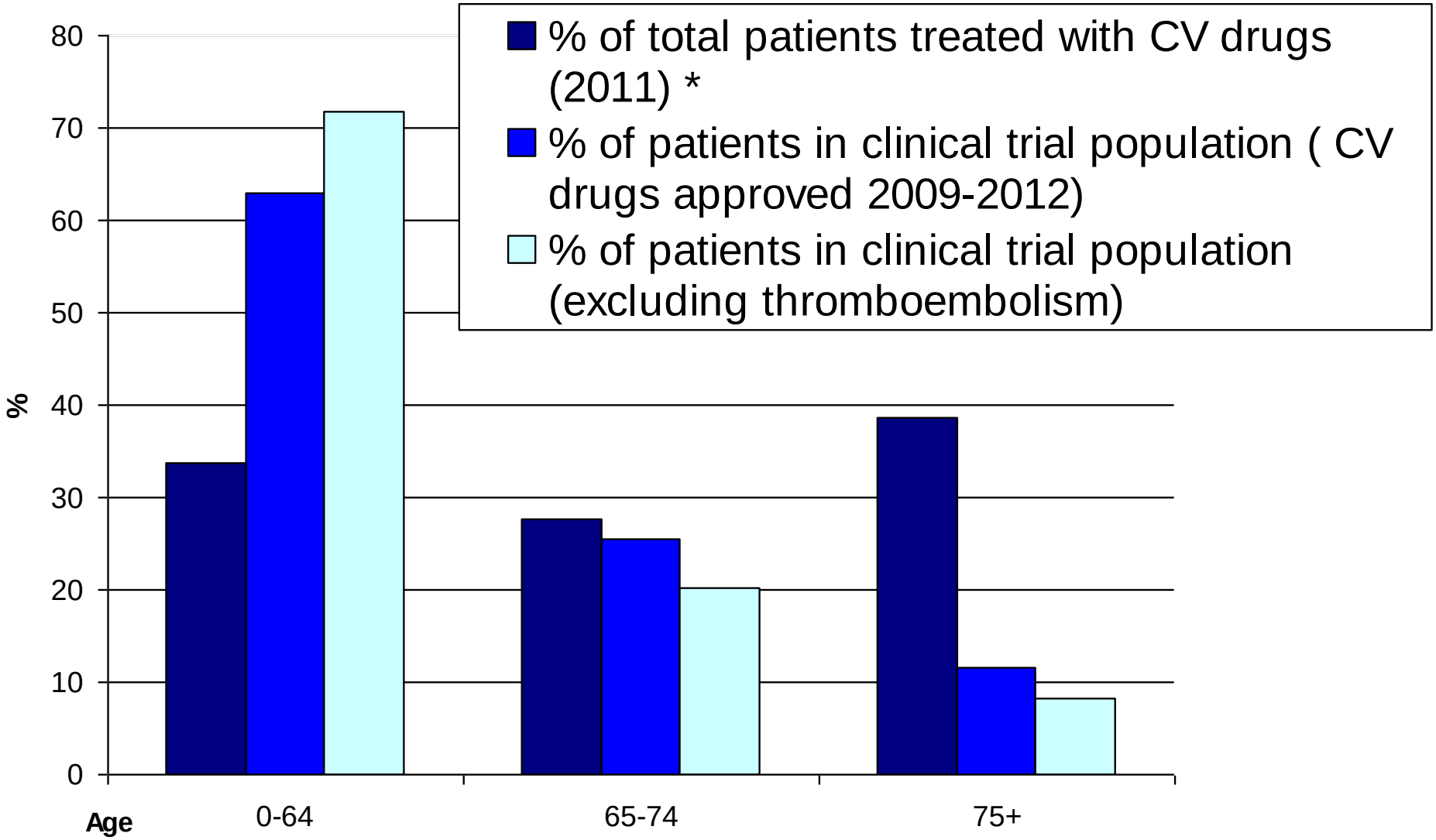


The evidence-base for clinical decision-making in this age group is poor even though older patients are the core business of health services

Prevalence of use of CV Drugs in Italy (2011)



Cardiovascular drugs



* Extracted from "L'uso dei farmaci in Italia 2011" and Italian census 2011

Not all 70 year olds are the same….

Asking the right questions

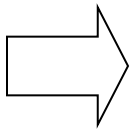
What about the benefit / risk balance in the older population?

- Is the benefit/risk substantiated for the population that will actually use the product?
- Which studies have been carried out? Are they in line with current guidelines?
- Can relevant information be found in the EMA approval documents?
- What would prescribers, patients and payers like to know?

Getting the right answers

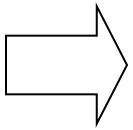
EMA Vision for a geriatric strategy: TWO PRINCIPLES

Medicines used by geriatric patients must be of high quality, and appropriately researched and evaluated.. **for use in this population**.



Evidence based medicine

Improve the availability of **information** on the use of medicines for older people



Informed prescription

Getting the right answers
EMA Geriatric Medicines Strategy
Key points

1. "..ensuring that the development and evaluation of new medicines takes into account specific safety and efficacy aspects related to aging, in accordance with current guidelines, particularly ICH E7"
2. "..identifying gaps in regulatory and scientific knowledge and taking appropriate measures to tackle them"
3. "..consideration for the need of specific pharmacovigilance activities"
4. "..fostering and utilising a relevant experts' pool to address specific issues as requested by the CHMP."

Better use of existing framework

We already have good regulatory tools. We need to use them better, and focus on the actual patient population:

- Industry: follow guidelines. Discuss bridging and modelling solutions with the regulators

- Regulators: coordinate activities and improve communication to the patient and to the prescriber
Supportive environment to cross data analysis (obstacles from data protection?)

EMA geriatric medicines workshop March 2012

General Considerations

- Older people in many cases constitute the main users of a drug
- Older adults are underrepresented in clinical trials (relative to disease prevalence) but the situation seems to be improving.
- Following ICH E7 (guideline on studies in older population), a representative number of patients should be studied pre-authorisation.
- Data should be presented for the entire age spectrum
- There is a learning curve to gather data and modulate risk
- Clinician often acts as gatekeeper in recruitment, and determines a selection bias
- Population PK or specific PK study including the very elderly should be performed and will help informed prescription

Other considerations from workshop

- Functional endpoints might be more relevant in certain cases - and treatment decisions might be different depending on frailty
- Consensus on frailty definition and evaluation tools is needed
- commonly prescribed co-medications in this population should be allowed in inclusion criteria
- More effort is needed to recruit patients 75+ in clinical trials
- Data expected in the MAA, postmarketing conditions will depend on target population

2012: Strengthening pharmacovigilance

- Benefit/risk evaluation – dedicated consideration of elderly population; specific patient values placed on benefits and risks
- Risk management – based on the risk profile – plan to fill knowledge gaps through post-authorisation studies; targeted risk minimisation
- Data collection – optimise all possible data sources – facilitate reporting of suspected side effects, patient reporting; drug utilisation; electronic health records (NB: Data protection?!)
- Detecting new safety issues – huge potential to better use spontaneously reported adverse reactions: drug-drug and drug-disease interactions; focus on off-label use, medication errors, event clusters (e.g. falls dizziness);
- Communications –target communication and risk minimisation

Next steps

- CHMP will further consolidate actions and consideration of older population in assessment
- Reporting of results in regulatory documents will be improved
- CHMP will consider strengthening existing disease specific guidelines, with particular regard to older-old, comorbidities, frailty
- Pharmacovigilance activities, based in particular on new legislative tools
- Frailty: need to agree on scale(s) for regulatory purpose
- EMA will consider age-appropriateness of formulations and packaging
- Report in Q2 2013 on strategy impact as compared to baseline

Thank you!

Questions?

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Backup slides

Focusing the Data Assessment

Changes to the CHMP AR

Aim is to focus attention of reviewer on geriatric data:

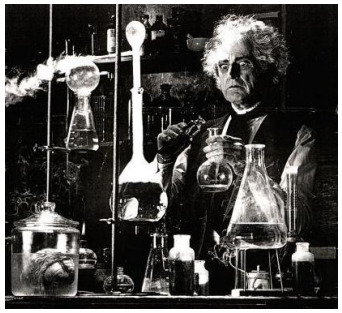
- **Amount**
- **Context**
- **Missing information**

Scientific Guidelines

- Comments on 11 guidelines together with the GEG
- Exploratory analysis on frailty tools (ongoing)
  - **Anticancer medicinal products** (guideline)
  - **Depression** (guideline)
  - **diabetes mellitus** (guideline)
  - **HIV** (guideline)
  - **influenza vaccines** (Concept paper)
  - **Nociceptive** and **neuropathic pain** (Concept paper)
  - **bacterial infections** Concept paper on an addendum to address indication-specific clinical data requirements
  - prevention of stroke and systemic embolic events in patients with **non-valvular atrial fibrillation** (Guideline)
  - prevention of **venous thromboembolism (VTE)** in patients undergoing high VTE-risk surgery (Guideline)
  - **Urinary incontinence** (Guideline)
  - **Excipients** in the label and package leaflet of medicinal products for human use (Concept paper)

Appropriate formulations

(with thanks to Sven Stegemann, Capsugel)



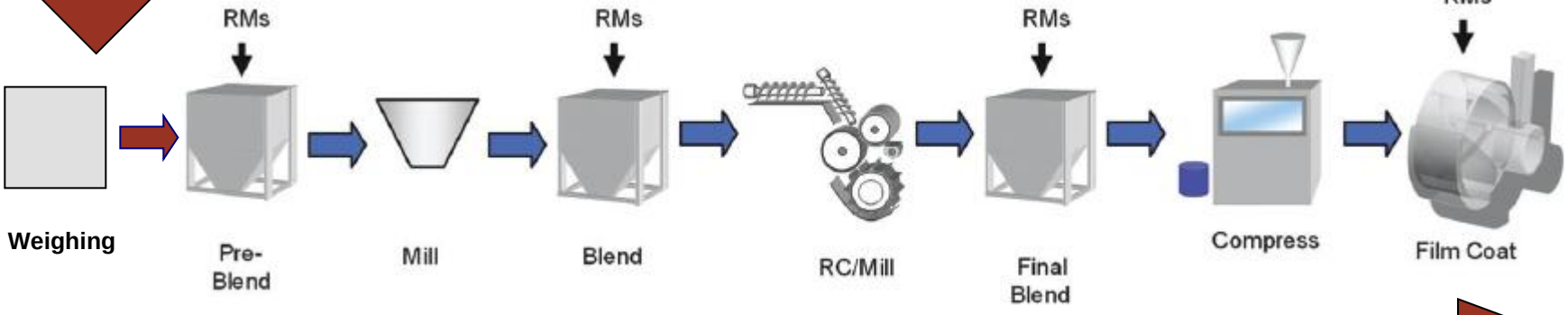
Formulation Development

Drug

Drug application

High quality pharmaceutical product

Process Development



Manufacturing

Patient/prescriber information

Good information is not possible if there are no good data

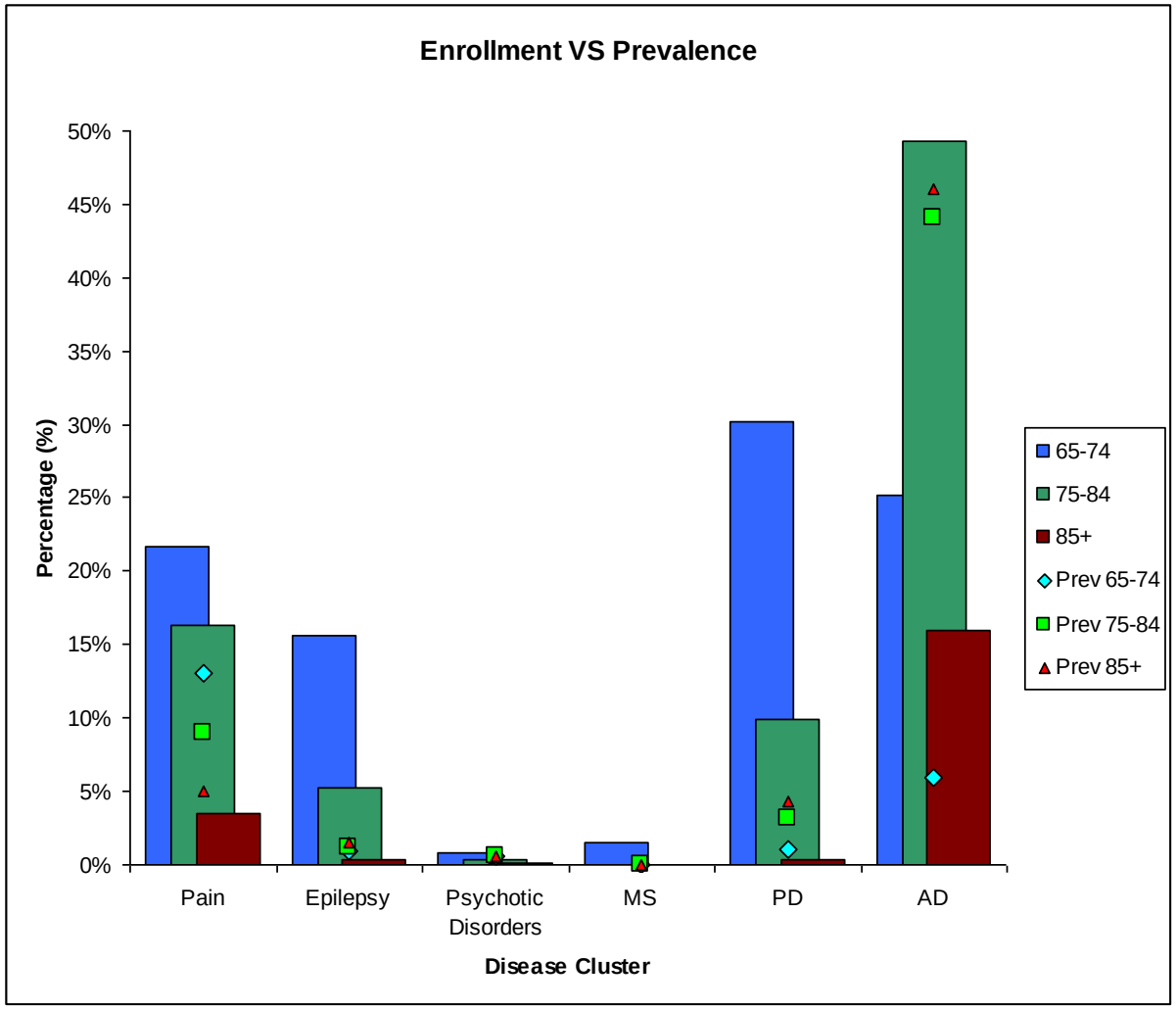
SmPC 4.2 should provide relevant, specific information, dosage adjustment or precaution recommended in older population

BUT

Do not forget the Package Leaflet !!!!!!!!!!!!!

- The PIL is the most widely read of the regulatory documents
- This is a vulnerable population (memory, font size, treatment compliance, cognitive impairment, dysphagia)
- This is a population less amenable to "modern" methods of getting information

Enrolment *vs* Prevalence – CNS examples



Data collected through eCTD clinical data (patient listing of all trials in the Module 5) of 13 CNS products assessed during the past 4 years, taking into account the requirements of the ICH E7 guideline on age subsets.

Conditions clustered according to the following: Pain (peripheral neuropathic pain, breakthrough pain in cancer), Epilepsy (partial onset seizures), Psychotic Disorders (bipolar disorder, schizophrenia), Multiple Sclerosis, Parkinson's Disease and Alzheimer's Disease.

Prevalence rates gathered from the following sources: Pain (*Breivik et al, 2005*), Epilepsy (*Forsgren et al, 2005*), Psychotic Disorders (*Meesters et al, 2011*), Multiple Sclerosis (*Torkildsen et al, 2007*), Parkinson's Disease (*Von Campenhausen, 2005*) and Alzheimer's Disease (*Alzheimer's Association report*).