

POLIFARMACOTERAPIA NELL'ANZIANO IN FVG: LETTURA CRITICA E PROPOSTE

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Udine 09 Ottobre 2014

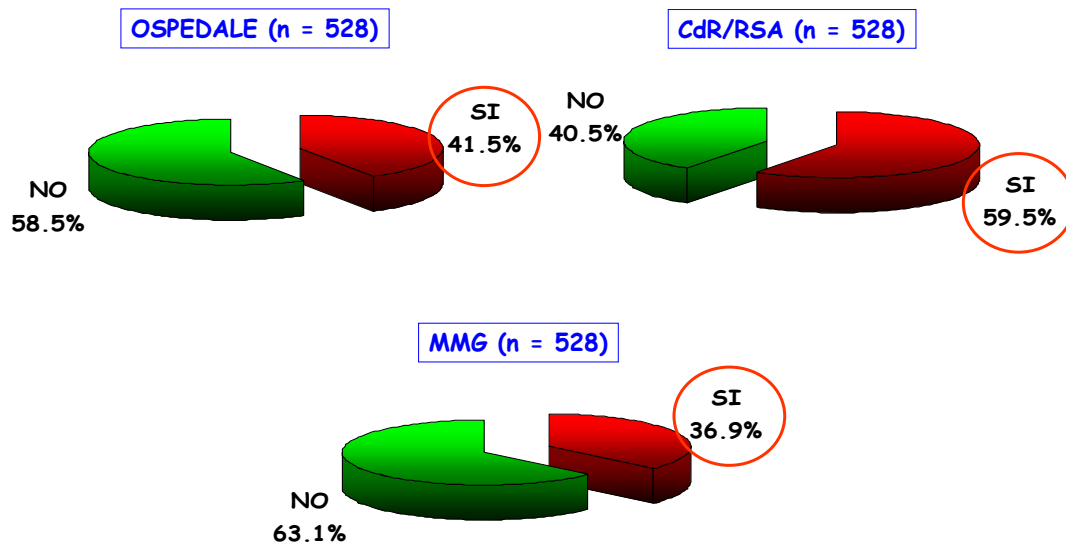
AMERICAN GERIATRICS SOCIETY UPDATED BEERS CRITERIA FOR POTENTIALLY INAPPROPRIATE MEDICATION USE IN OLDER ADULTS

American Geriatrics Society 2012 Beers Criteria Update Expert Panel
J Am Geriatr Soc. 2012 Apr;60(4):616-31

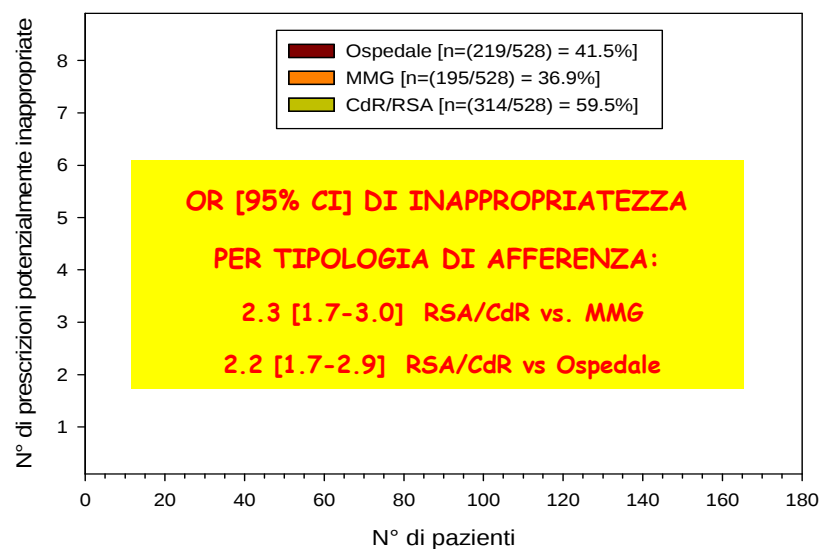
RESULTS

- 53 medication or medication classes encompass the final updated 2012 AGS Beers Criteria, which are divided into three categories:
- 34 potentially inappropriate medications and classes to avoid in older adults.
- potentially inappropriate medications and classes to avoid in older adults with certain diseases and syndromes that the drugs listed can exacerbate.
- 14 medications and classes to be used with caution in older adults.

**PAZIENTI CON ALMENO 1 FARMACO POTENZIALMENTE INAPPROPRIATO (FPI)
SECONDO IL 1° CRITERIO DI BEERS**



**NUMERO DI FARMACI POTENZIALMENTE INAPPROPRIATI (FPI)
PER PAZIENTE**



WHAT DOES FRAIL ELDERLY PERSONS MEAN ?

DEFINITION

- Frailty can be defined as an increased risk of adverse effects due to a decline in functional reserves and somatic, psychological and social limitations.
- Frailty is an important factor in inappropriate prescribing in elderly patients

Rockwood K et al. *Drugs Aging* 2000; 17: 295-302

Gobbens RJ et al. *J Nutr Health Aging* 2010; 14: 175-81

Fried LP et al. *J Gerontol A Biol Sci Med Sci* 2004; 59: 255-63



WHICH SPECIFIC ISSUES
IN THE FRAIL ELDERLY PATIENTS ?

CRITERIA FOR DRUG SELECTION IN FRAIL ELDERLY PERSONS

Huisman-Baron M et al. *Drugs Aging* 2011; 28 (5): 391-402

RELEVANT CONSIDERATIONS FOR CHOICE OF PHARMACOTHERAPY IN FRAIL ELDERLY PERSONS

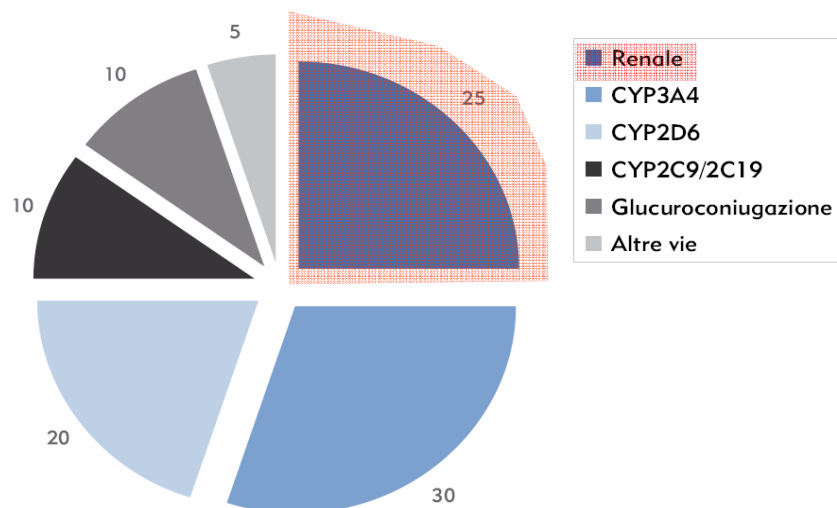
Pharmacokinetic assessment

Is there a risk of drug accumulation because the drug has a long half-life?

Is elimination of the drug dependent on renal function?

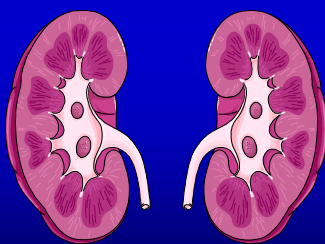
Is there a narrow therapeutic window?

INCIDENZA (%) DELLE PRINCIPALI VIE DI ELIMINAZIONE DEI FARMACI



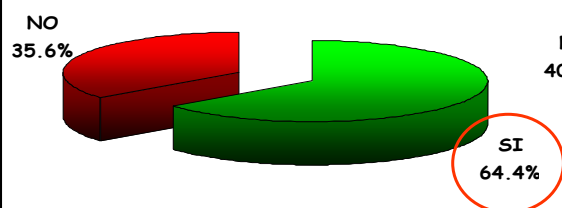
Pea F. Farmacocinetica: utilità nella pratica clinica quotidiana. 2007; Seed Editore, Torino

VALUTAZIONE DELLA FUNZIONE RENALE

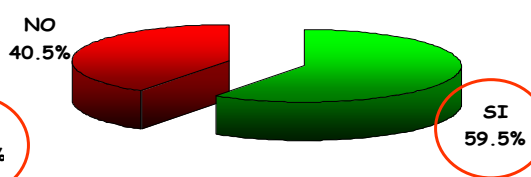


PAZIENTI CON VALUTAZIONE RECENTE DELLA FUNZIONALITA' RENALE

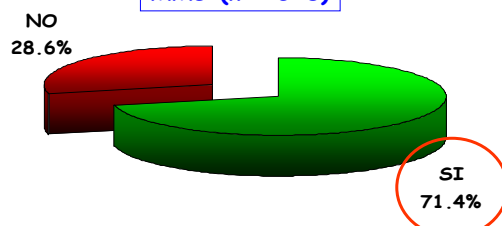
OSPEDALE (n = 528)



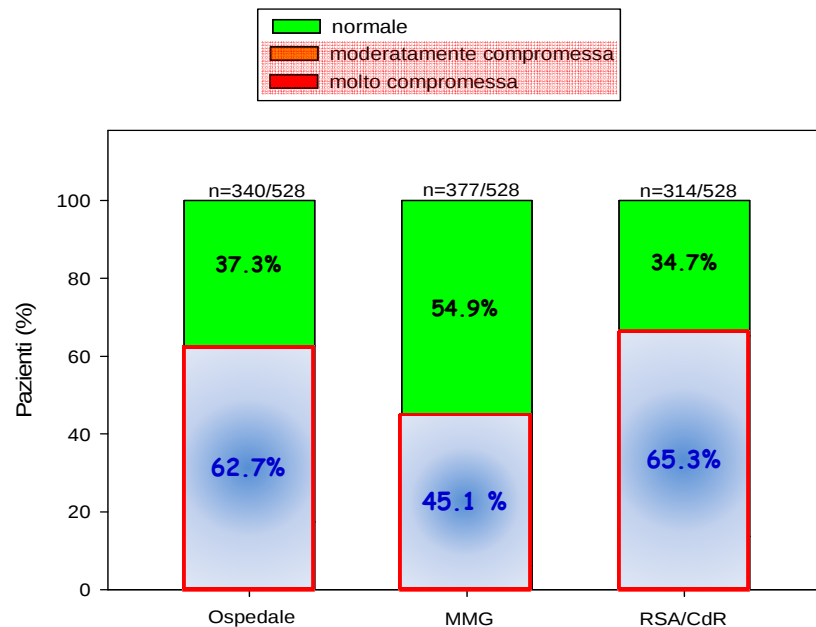
CdR/RSA (n = 528)



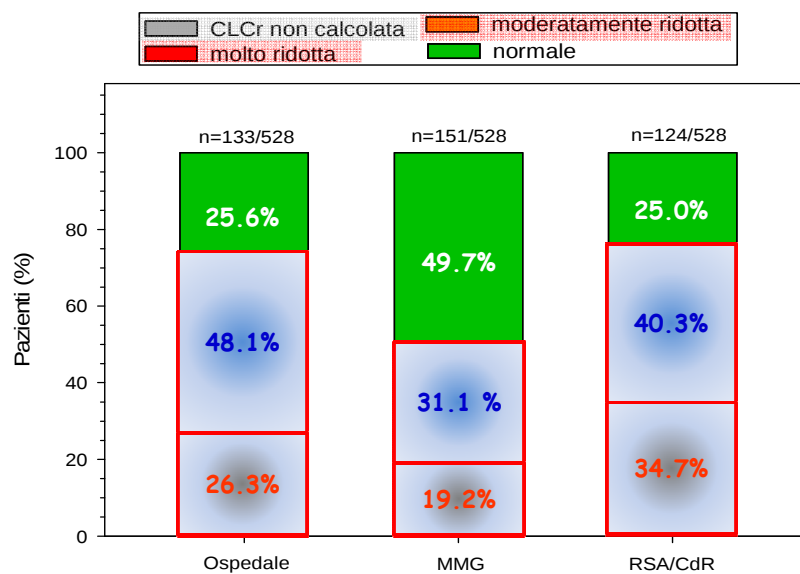
MMG (n = 528)



STRATIFICAZIONE DEL CAMPIONE PER GRADO DI FUNZIONALITA' RENALE



VALUTAZIONE DELLA FUNZIONALITÀ RENALE NEI PAZIENTI DIABETICI (N=408/1584; 25.8%)





Standard italiani per la cura del diabete mellito 2014

Questo testo è disponibile, in forma elettronica e interattiva, presso il website di riferimento: www.standarditaliani.it, raggiungibile anche dai website di AMD e SID

Data di rilascio: 28 maggio 2014



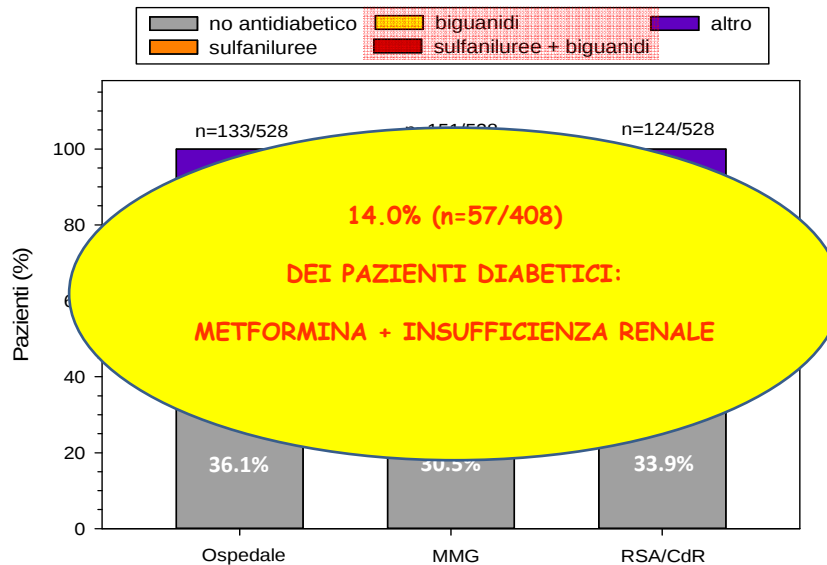
Standard italiani per la cura del diabete mellito 2014

Tabella 13. Terapia farmacologica

1. Iniziare una terapia farmacologica orale quando gli interventi sullo stile di vita non sono più in grado di mantenere il controllo della glicemia ai valori desiderati (in genere HbA_{1c} 53 mmol/mol o $<7\%$). Mantenere e rinforzare sempre l'orientamento del paziente verso un corretto stile di vita. Valutare l'eventuale inizio o aumento della dose del farmaco orale ogni 2-6 mesi, con il fine di raggiungere e mantenere nel tempo valori di HbA_{1c} 53 mmol/mol o $<7\%$.

2. Iniziare con i **BIGUANIDI** (prima scelta) partendo con basse dosi da incrementare nel tempo al fine di evitare intolleranza gastrointestinale. Ove tollerata e non controindicata, raggiungere sempre la dose di almeno 2 g/die, indipendentemente dagli obiettivi glicemici raggiunti. Controllare periodicamente la funzione renale (eGFR con CKD-EPI). Utilizzare particolare cautela per filtrato glomerulare <60 ml/min/ $1.73m^2$ e sospendere per filtrato glomerulare <30 ml/min/ $1.73m^2$ o in pazienti a rischio di insufficienza renale acuta; in caso di controindicazioni o di intolleranza, passare direttamente al paragrafo successivo.

USO FARMACI ANTIDIABETICI NEI PAZIENTI DIABETICI (N=408/1584; 25.8%)



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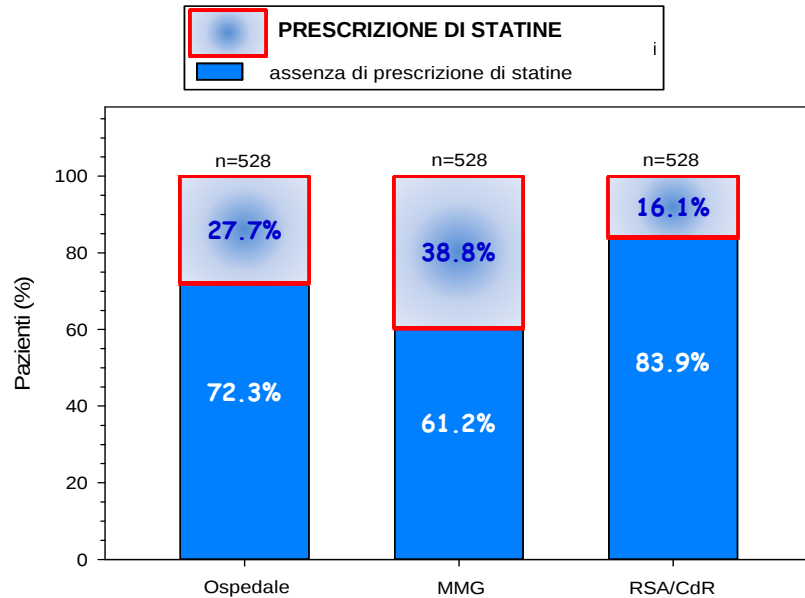
II. Potential negative effects: safety

What are the most relevant side effects in frail elderly patients (where possible, expressed as incidence or number needed to harm)?

Which important drug-drug interactions can be expected that increase risk in frail elderly patients (e.g. is the drug an inducer, inhibitor or substrate of the CYP enzyme system)?

Are there important drug-disease interactions?

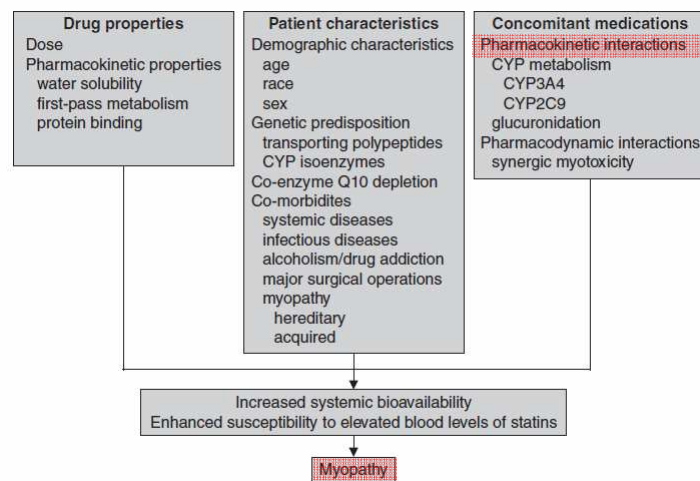
PRESCRIZIONE STATINE NELLA POPOLAZIONE INCLUSA NELLA VALUTAZIONE



RISK FACTORS AND DRUG INTERACTIONS PREDISPOSING TO STATIN-INDUCED MYOPATHY: IMPLICATIONS FOR RISK ASSESSMENT, PREVENTION AND TREATMENT

Chatzizisis YS et al. *Drug Saf* 2010 Mar 33 (3): 171-187

RISK FACTORS FOR STATIN-INDUCED MYOPATHY



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SUBSTANCES THAT MAY PRECIPITATE STATIN-INDUCED MYOPATHY

Non-hypolipidaemic medicines

Ciclosporin
 Macrolide antibacterials (erythromycin, clarithromycin)
 Azole antifungals (itraconazole, ketoconazole, fluconazole)
 Calcium channel antagonists (diltiazem, verapamil)
 Nefazodone
 HIV protease inhibitors (ritonavir, nelfinavir, indinavir)
 Warfarin
 Histamine H₂ receptor antagonists (cimetidine, ranitidine)
 Omeprazole
 Amiodarone

Hypolipidaemic medicines

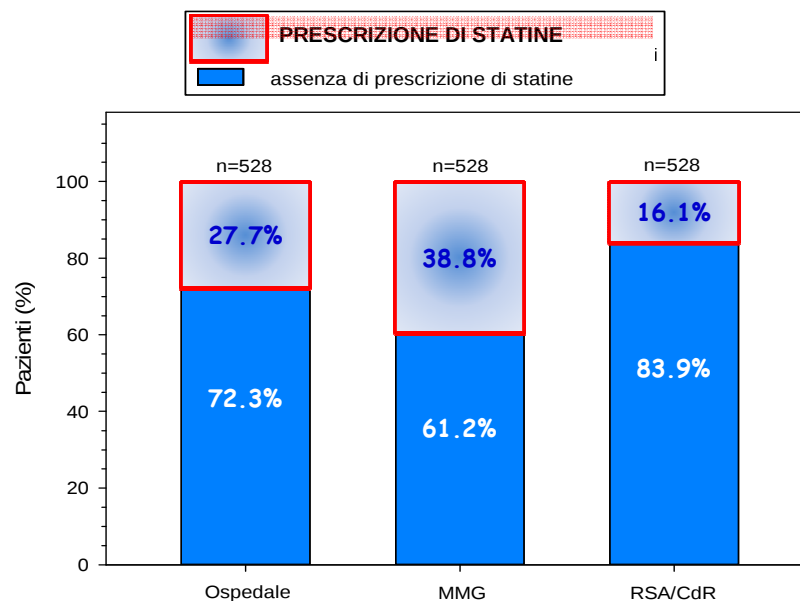
Fibrates (gemfibrozil > bezafibrate, clofibrate, fenofibrate)
 Niacin

Other substances

Grapefruit juice
 Over-the-counter medications (Chinese red rice fungus)

icology - University of Udine - Italy

PRESCRIZIONE STATINE NELLA POPOLAZIONE INCLUSA NELLA VALUTAZIONE



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BENZODIAZEPINE USE AND RISK OF ALZHEIMER'S DISEASE: CASE-CONTROL STUDY

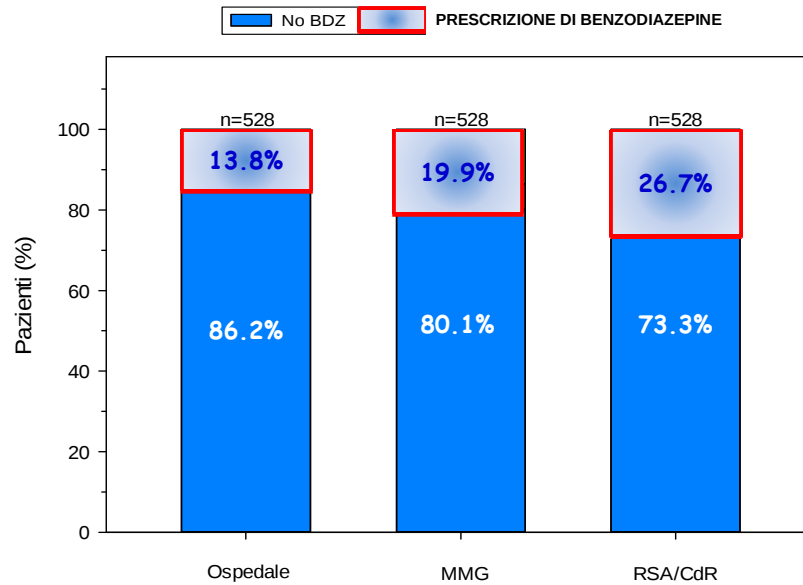
Billioti de Gage S et al. *BMJ* 2014 Sep 9 on line published

SUMMARY

- 1796 people with a first diagnosis of Alzheimer's disease and followed up for at least six years before were matched with 7184 controls on sex, age group, and duration of follow-up. Both groups were randomly sampled from older people (age >66) living in the community in 2000-09.
- Benzodiazepine ever use was associated with an increased risk of Alzheimer's disease (adjusted OR 1.51, 95% CI 1.36 to 1.69).
- No association was found for a cumulative dose <91 prescribed daily doses.
- The strength of association increased with exposure density
 - 1.32 (1.01 to 1.74) for 91-180 prescribed daily doses
 - 1.84 (1.62 to 2.08) for >180 prescribed daily doses)
- and with the drug half life
 - 1.43 (1.27 to 1.61) for short acting drugs
 - 1.70 (1.46 to 1.98) for long acting ones.

Institute of Clinical Pharmacology and Toxicology - University of Udine - Italy

PRESCRIZIONE BENZODIAZEPINE NELLA POPOLAZIONE INCLUSA NELLA VALUTAZIONE



TAKE HOME MESSAGES

- Ridurre numero di prescrizioni → contenere numero di inappropriatezze prescrittive
- Rischio di inappropriatezza prescrittiva variabile per tipologia di afferenza
- Necessità di incrementare la valutazione periodica della funzione renale per contenere il rischio di inappropriatezza nel paziente anziano fragile → diabetico
- Necessità di contenere le situazioni a più elevato rischio di interazioni farmacocinetiche causa di gravi reazioni avverse → statine
- Contenere il più possibile la prescrizione di benzodiazepine nel paziente anziano → prevenire una potenziale causa di morbo Alzheimer