Background Anxiolytic and hypnotic drugs consumption in our country, Spain, is over the European average and it has increased by 57.4% between 2000 and 2012. The elderly is the group with a higher risk to develop the problems caused by these drugs; one of the main risks is falling due to the intake of benzodiazepines. This could be increased by the effect of other CNS depressor or hypotensive drugs.

Purpose The main objective of this study is to find potentially inappropriate prescriptions of benzodiazepines in older patients and detect situations with an increased risk of adverse effects such as the excessive sedation or falling.

Method A retrospective study is carried out without any intervention (PCNE type 1), reviewing the pharmacological treatment of the patients, whose data is taken from a community pharmacy in Gandía (Valencia, Spain). The selection criteria are: ? Having a pharmacotherapeutic history registered in the pharmacy. ? Being 65 or older. ? Having been dispensed at least 3 packages of benzodiazepines per patient during the dates of the study (01/01/2017 to 31/10/2017). From STOPP/START criteria, STOPP ones are applied to detect interactions, duplicities or contraindications that could aggravate the adverse effects of benzodiazepines. To do so, we focus on reviewing other drugs that have a depressor affect on the central nervous system and hypotensive drugs because of their increased risk of falling.

Findings Benzodiazepines were dispensed to 268 patients during the studied period, 90 of them met the inclusion criteria. According to STOPP criteria, these 90 patients have an inappropriate prescription due to a prolonged length of the treatment. The falling risk is increased in 18 of these due to the association with opioids and in 46 of them due to hypotensive drugs. This means that 34% of the patients have a potentially inappropriate benzodiazepine prescribed and, in this group, 71% have a higher falling risk by associating it with another drug that can produce it and 24% combine the benzodiazepine with 2 or more of these drugs.

Conclusion Due to the prolonged length of the treatments we have detected, a detoxication programme should be tackled. Patients taking opioids or antihypertensive drugs should have a pharmacological monitoring to evaluate them with his medication individually.