

PHARMACEUTICAL REVIEW AND PHARMACEUTICAL INTERVENTION IN A NURSING HOME TO ENHANCE THE MEDICATION MANAGEMENT OF RESIDENTS.

E. CASTEX ⁽¹⁾, V. FRAPART ⁽²⁾, L. BERTIN ⁽¹⁾, J. SIAUVE ⁽¹⁾, B. FORGET ⁽¹⁾

⁽¹⁾ PHARMACIE HOSPITALIERE DU CH DE MONTREUIL SUR MER, RANG DU FLIERS, FRANCE – ⁽²⁾ EHPAD LES PLÉIADES, CH DE MONTREUIL SUR MER, RANG DU FLIERS, FRANCE

BACKGROUND

Geriatrics is particularly concerned by iatrogenic medication accidents, especially in nursing homes where residents are often polypathological and rarely reevaluated.

AIM AND OBJECTIVES

Enhance the medication management of nursing home (NH) residents.

MATERIEL AND METHODS

- Pharmaceutical review (PR) conducted during multidisciplinary meetings, based on computerized prescriptions, biological and clinical data from the electronic patient record, and then compared to national references.
- Quantification and analysis of the pharmaceutical interventions (PI) carried out.
- Calculation of the anticholinergic score (AS) for each resident using two assessment scales :

ACB scale

Central anticholinergic side effects
Cognitive impact considered meaning if score > 3

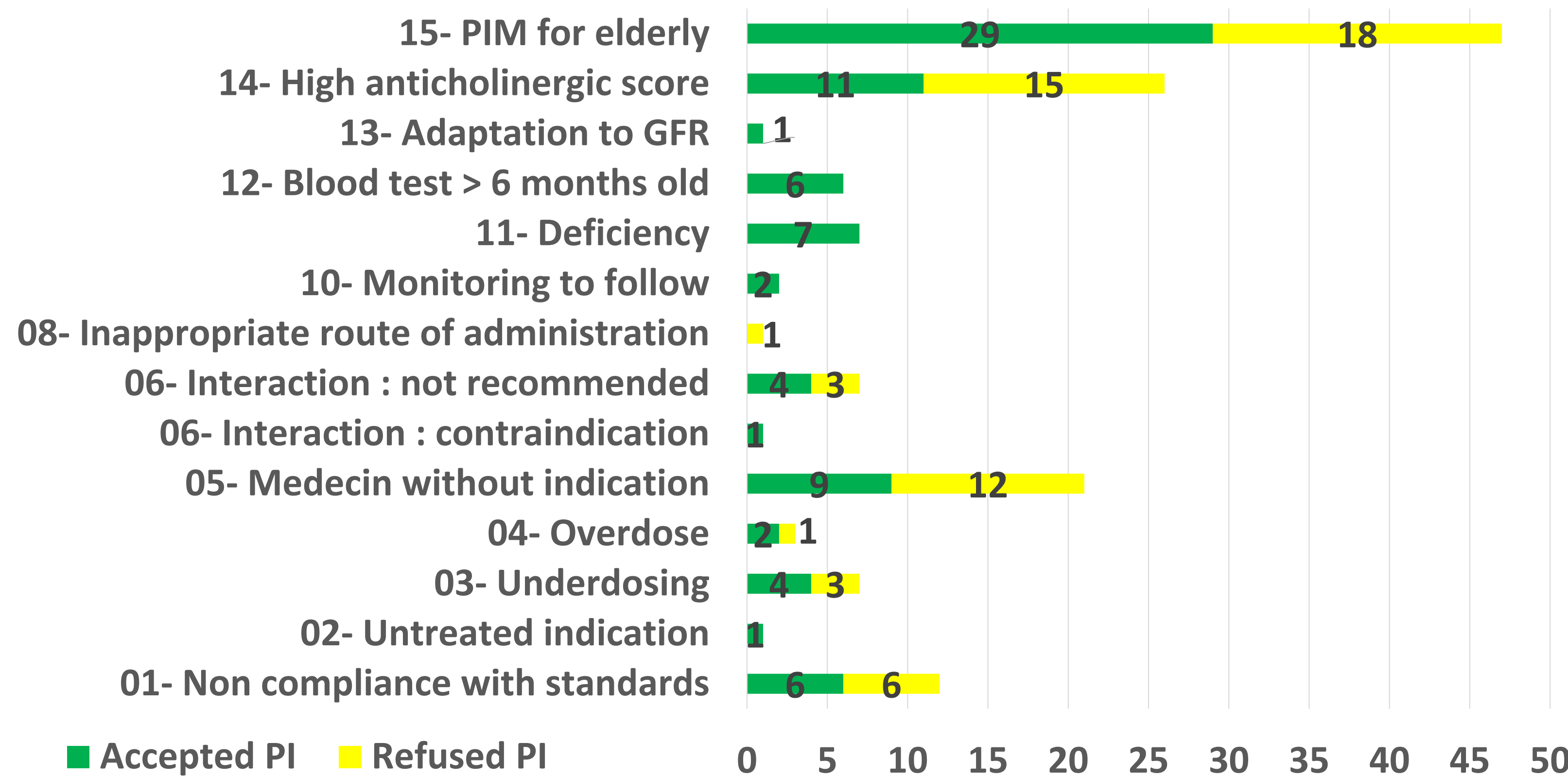
CIA scale

Peripheral anticholinergic side effects
High Anticholinergic impregnation if score > 4

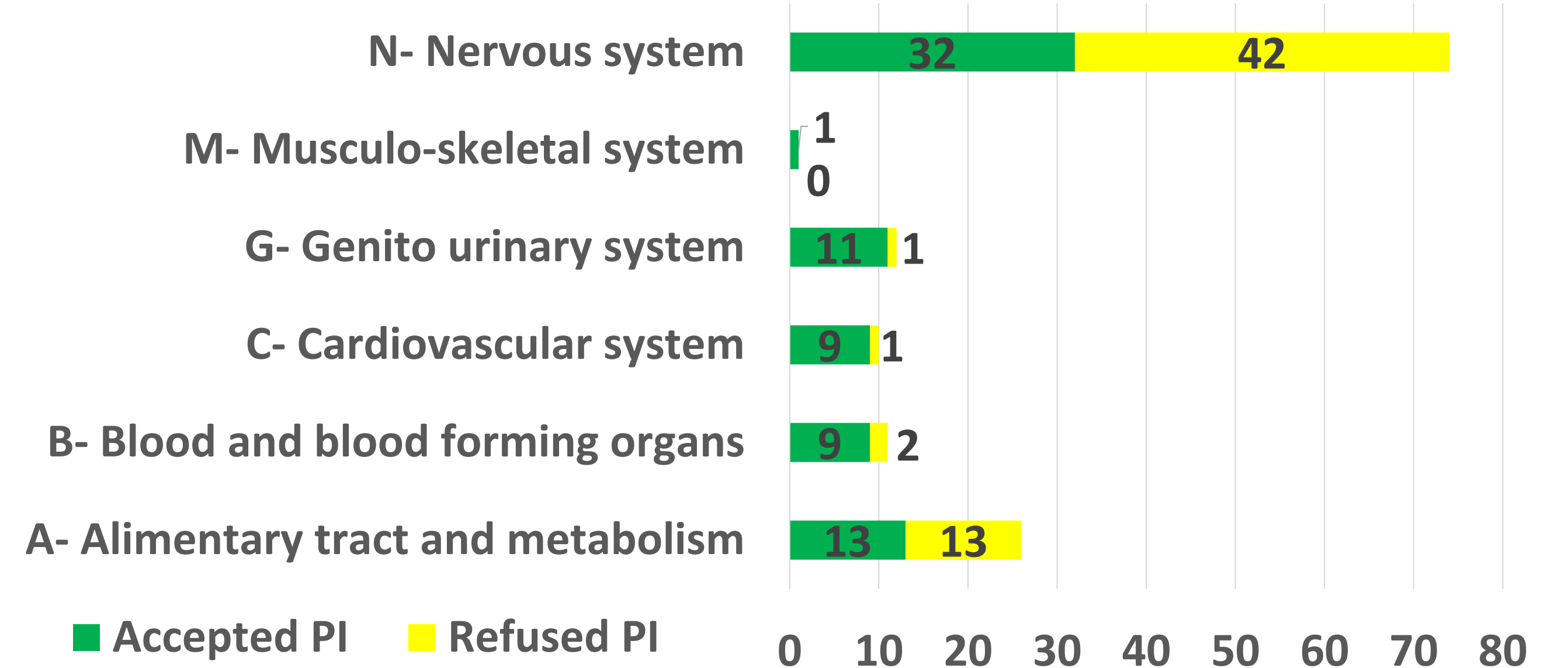
RESULTS

Among 71 residents, 142 PIs were carried out, with a 58.5% acceptance rate (n=83) of the physician. Most PIs concerned unsuitable medication for the elderly (33.1%; n=47), with a 61.7% acceptance rate; and significant score anticholinergic (18,3%; n=26), with a 42,3% acceptance rate. The majority of the PIs (52,1%; n=74) were related to nervous system drugs with the psychotropic drugs.

Number of accepted and refused PI depending on the type of problem identified



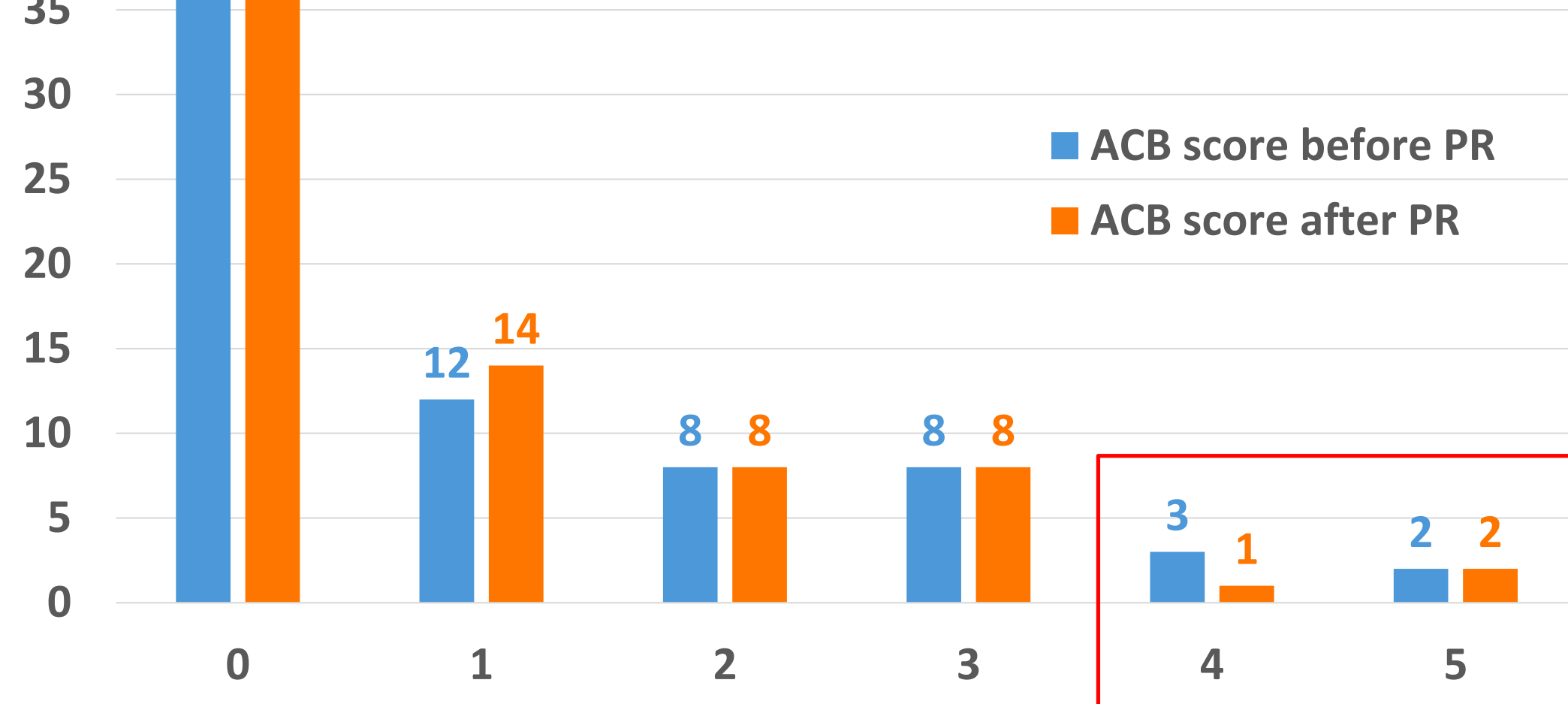
Number of accepted and refused PI depending on the ATC classification



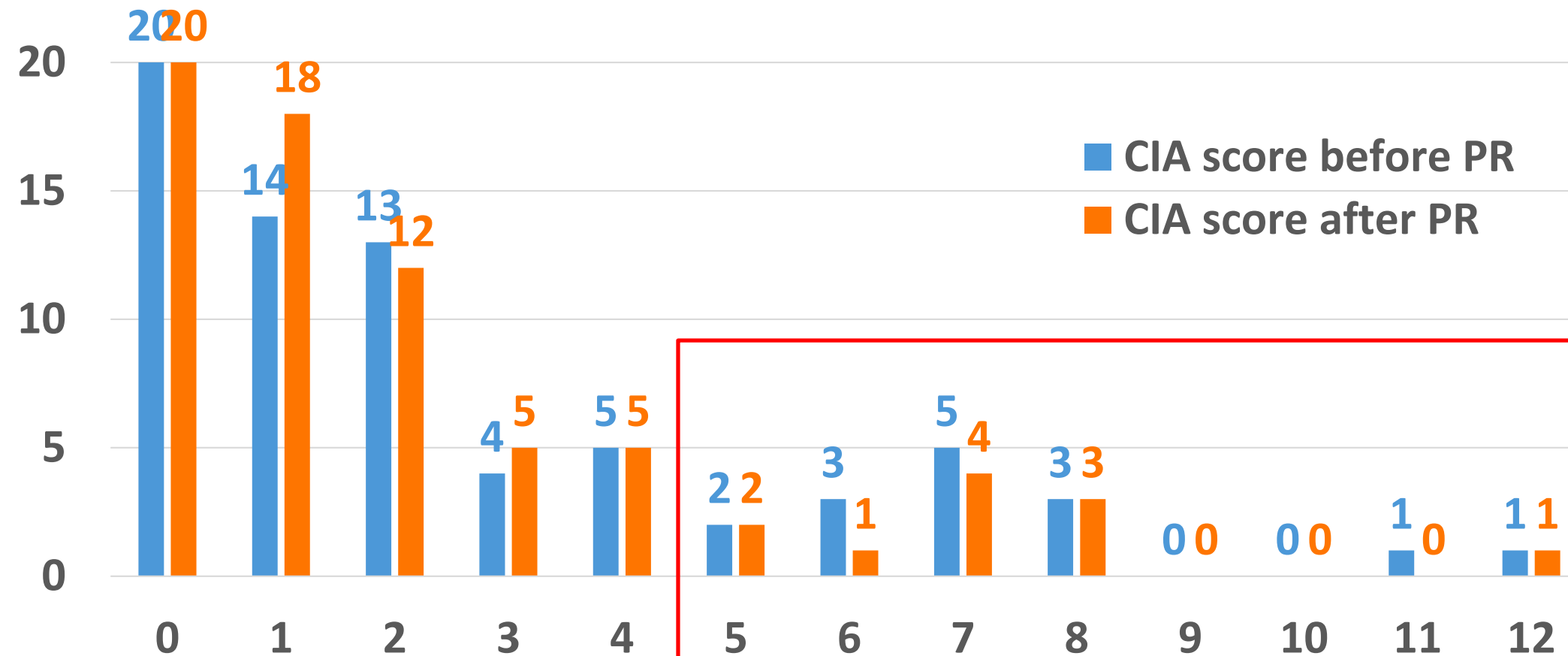
1. Significant anticholinergic score.

A significant AS was found for 16 residents, with 4 of them having a significant ACB and CIA score. After PR it was reduced to 11 residents, thus decreasing the danger of geriatric syndrome's apparition.

Number of patient with ACB score before and after PR



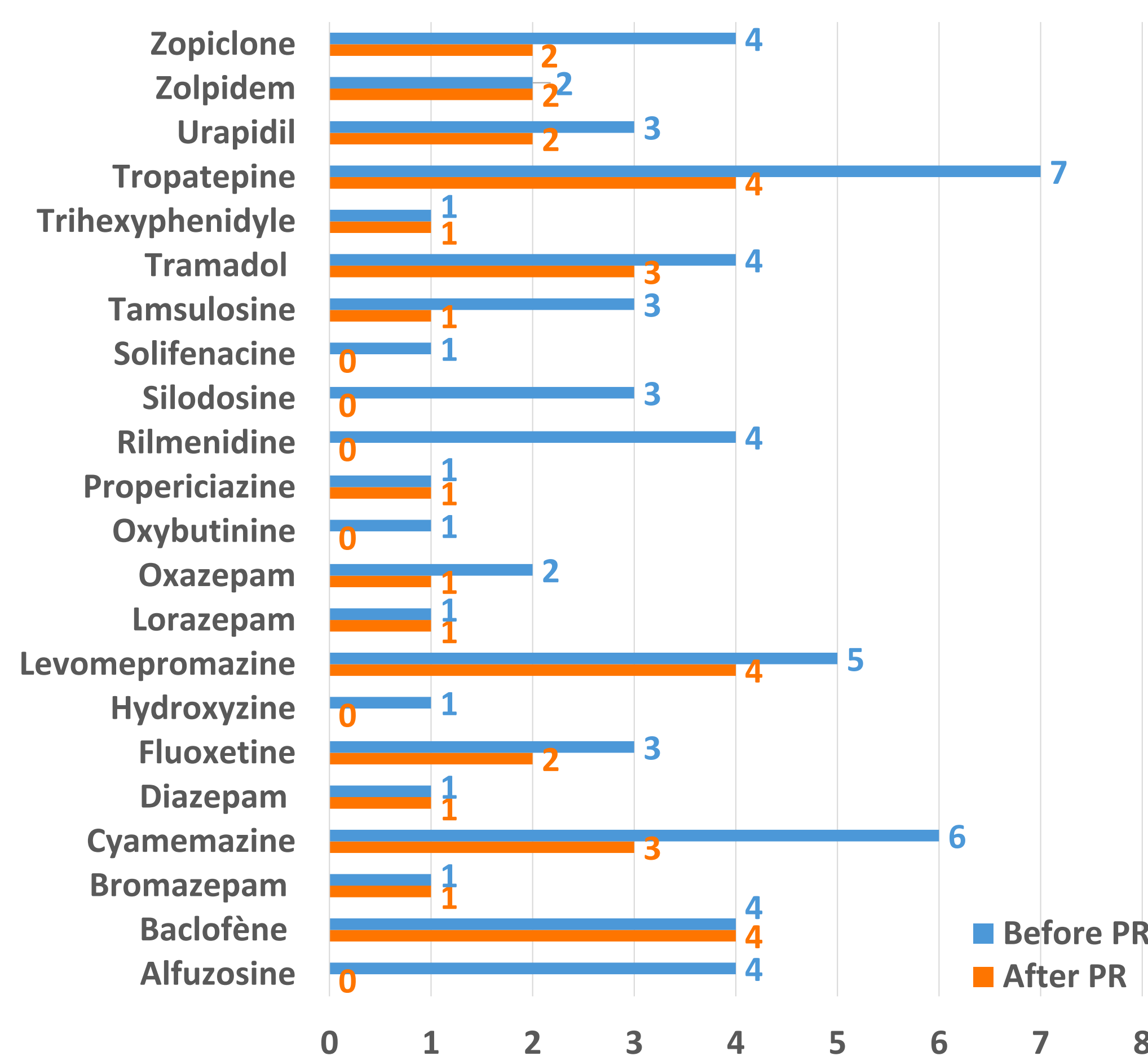
Number of patient with CIA score before and after PR



2. Potentially inappropriate medication (PIM) for elderly.

The PR permitted to leave 13 residents without PIM : initially 62 PIMs were identified for 38 residents; and after PR, only 33 PIMs remaining for 25 residents. The PR leads to a reduction of the MPI's prescription of 46,8%.

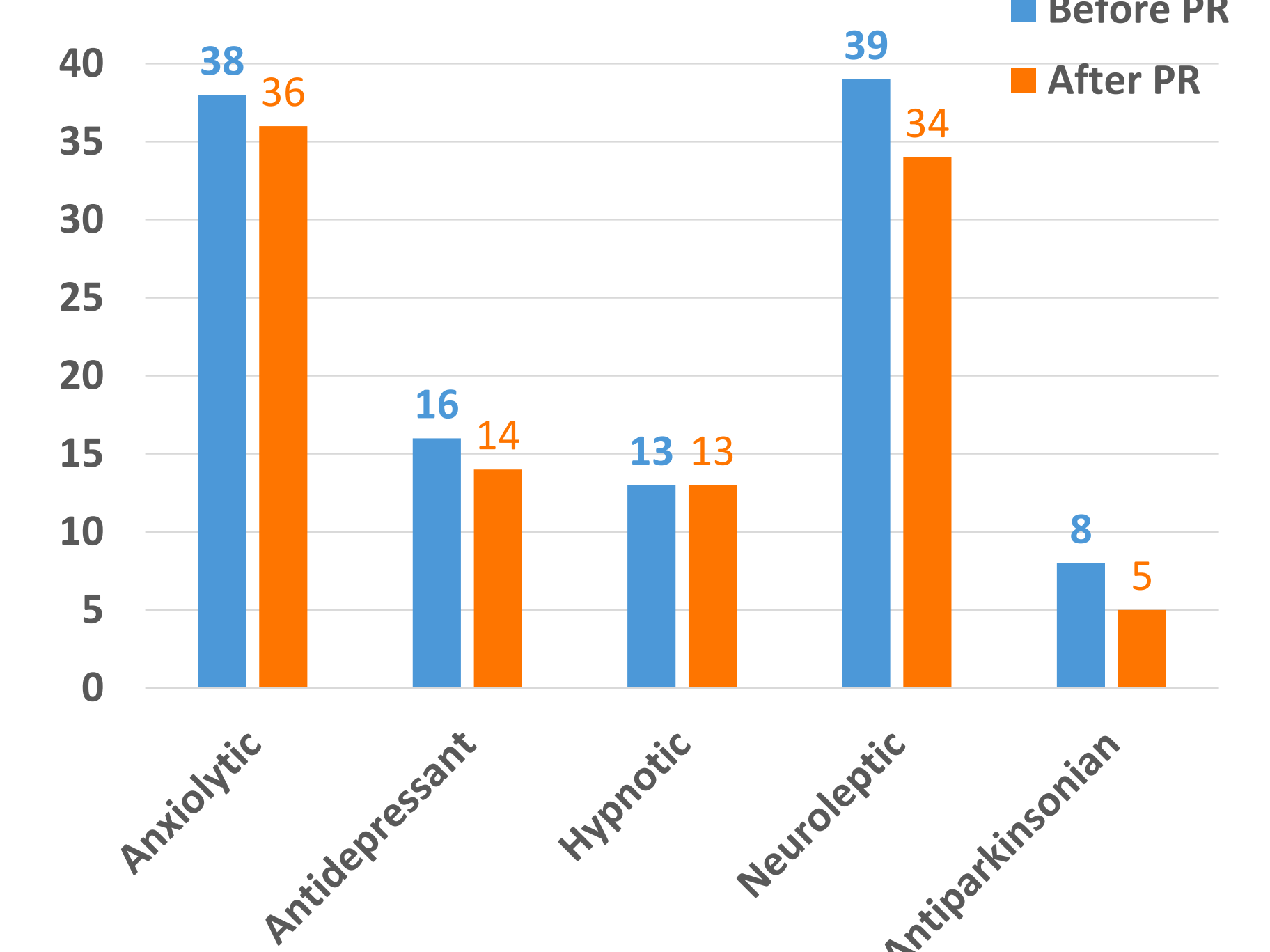
Number of PIM prescribed before and after PR



3. Psychotropic drugs

After multidisciplinary discussion, only 43,2% (n=32) of the 74 PIs were accepted, leading to a modest reduction in the psychotropic drug consumption (9,7%) as the substitution was the most recommended type of IP (51,3%) and as the NH accommodates residents with psychotic disorders, behavioural issues, and intellectual disabilities, which means highly medicamented patient with anticholinergic psychotropic drugs usually hard to change.

Number of psychotic drugs prescribed before and after PR



CONCLUSION AND RELEVANCE

Beyond the acceptance of PIs, the PR enables 12 patients to get a psychiatric reevaluation and more importantly enables the coordinating physician to reevaluate the overall therapeutic management of residents, and helps mitigate the *underuse*, *overuse* and *misuse* of medications, which are quite common in geriatrics.

