

Appendix 2. Examples of PISRE and drug by drug-related problems (N = 27,822)

Drug-related problem	Number of drugs involved – n (%)	Most frequent drug (international nonproprietary names) (n)	Examples
Supratherapeutic dosage	7,571 (27.2)	Paracetamol (1,043), tramadol (223), pantoprazole (212), enoxaparin (204)	“Duplicate prescription: 1 in predefined protocol and 1 outside predefined protocol = 8 g of paracetamol per day”
Non-conformity to guidelines/contraindication	6,212 (22.3)	Alfuzosin (515), dutasteride (493), silodosin (469), paracetamol (460), tamsulosin (373)	“prescription of dutasteride, which is not in the hospital drug formulary, with a risk of treatment omission”
Improper administration	4,972 (17.9)	Paracetamol (277), levothyroxine (130), pregabalin (130), methylprednisolone (124)	“selection of IV terbutaline for administration by aerosol”
Subtherapeutic dosage	4,738 (17.0)	Enoxaparin (965), heparin (450), tinzaparin (186), paracetamol (140), macrogol (105),	“Enoxaparin 4000 UI/0.4 ml prescription: 1 IU instead of 1 syringe”
Untreated indication	2,441 (8.8)	acetylsalicylic acid (82), pregabalin (80), paracetamol (74), tinzaparin (69), bisoprolol (69), enoxaparin (68),	“prescription of pregabalin not renewed (hospital stay longer than the duration of the prescription)”

Drug without indication	1,340 (4.8)	Pantoprazole (66), amoxicillin and beta-lactamase inhibitor (44), cholecalciferol (40), ceftriaxone (34), enoxaparin (30)	“duplicate prescription of pantoprazole per os and IV by two prescribers”
Drug interaction	262 (0.9)	Amiodarone (27), fluindione (9), levothyroxine (9)	“cordarone and escitalopram combination contra-indicated: risk of “torsade de pointes” not modified during drug interaction alert with Clinical Decision Support System (CDSS)”
Drug monitoring	124 (0.4)	Fluindione (25), polystyrene sulfonate (8), paracetamol (4)	
Adverse drug reaction	70 (0.3)	Polystyrene sulfonate (11), furosemide (6), atorvastatin (4), tramadol (3), macrogol (3)	“increased risk of adverse reactions by the combination of atorvastatin and fenofibrate”
Failure to receive drug	92 (0.3)	Esomeprazole (3), cholecalciferol (3), acetylsalicylic acid (3), furosemide (3)	“Prescription of furosemide not appearing on the nursing plan”