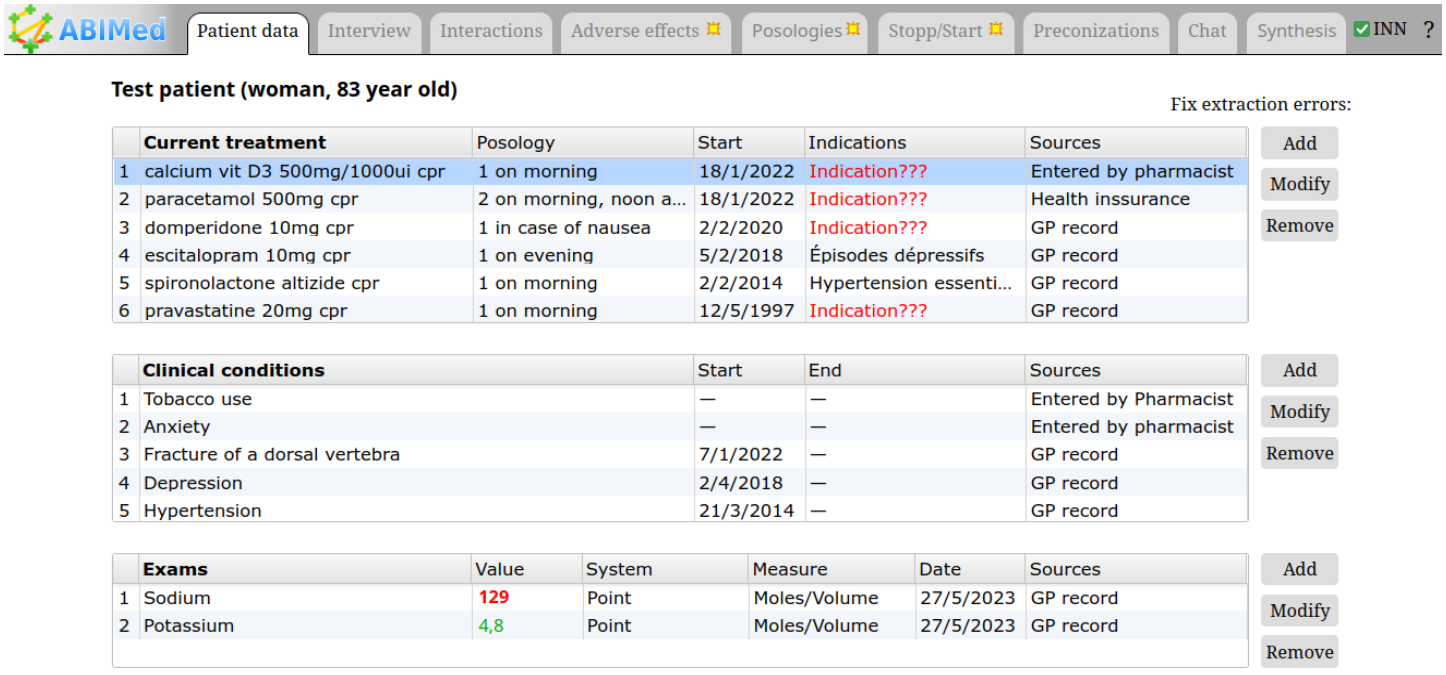
Supplementary file #1 for
"ABiMed : An intelligent and visual clinical decision support system for medication reviews and polypharmacy management"

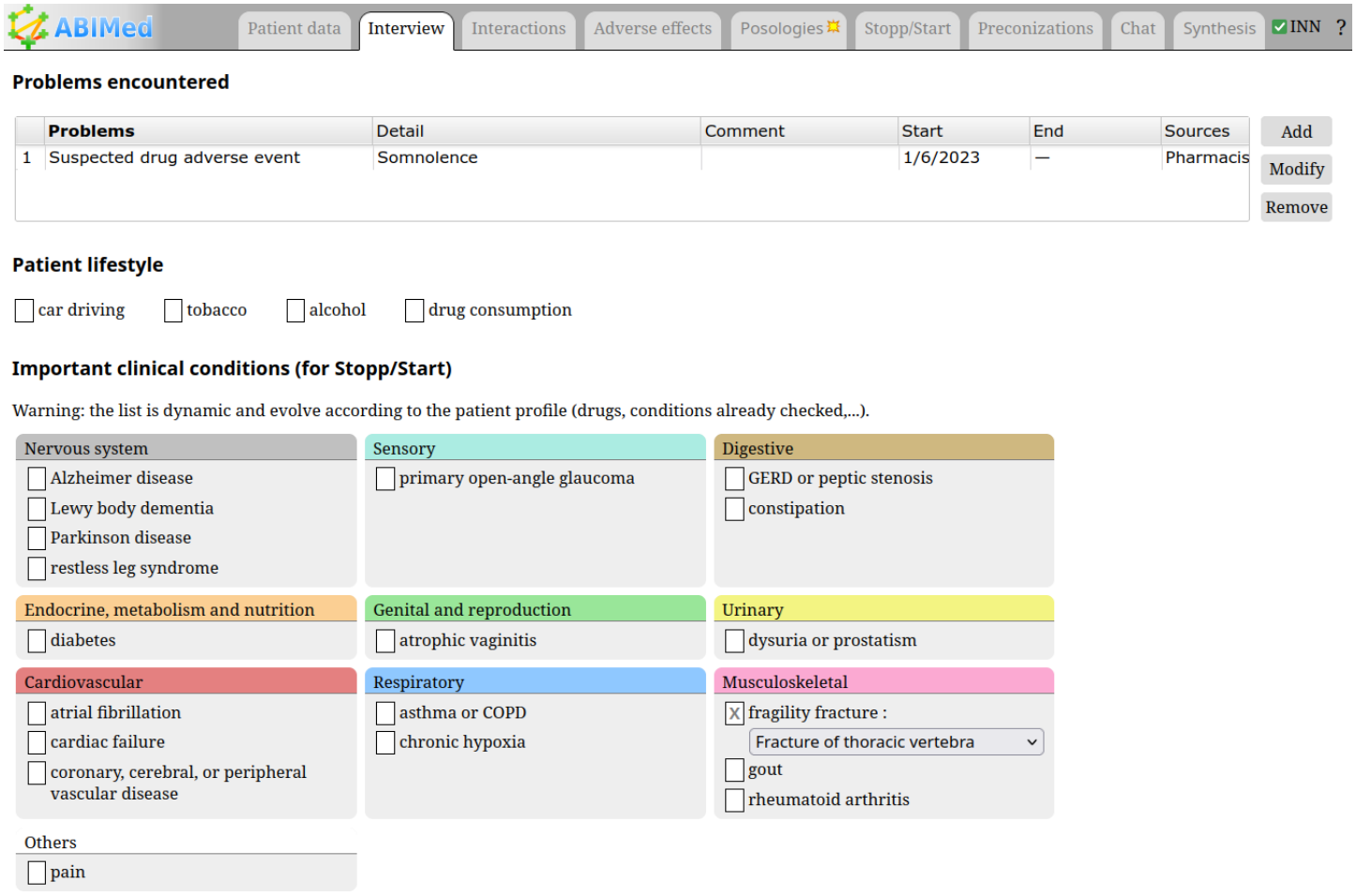
21 janvier 2025

1 Patient data tab



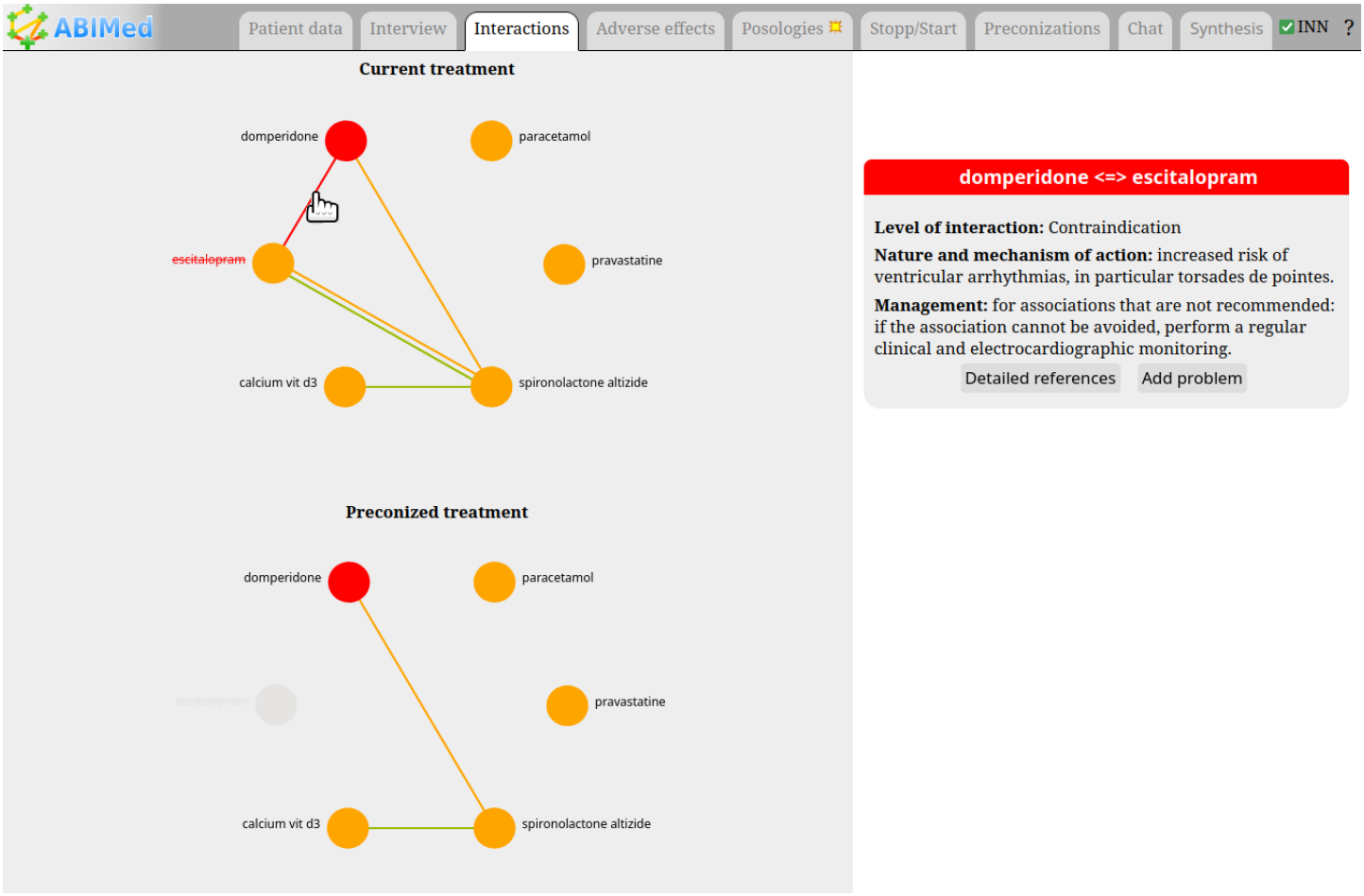
Screenshot of the patient data tab.

2 Interview tab

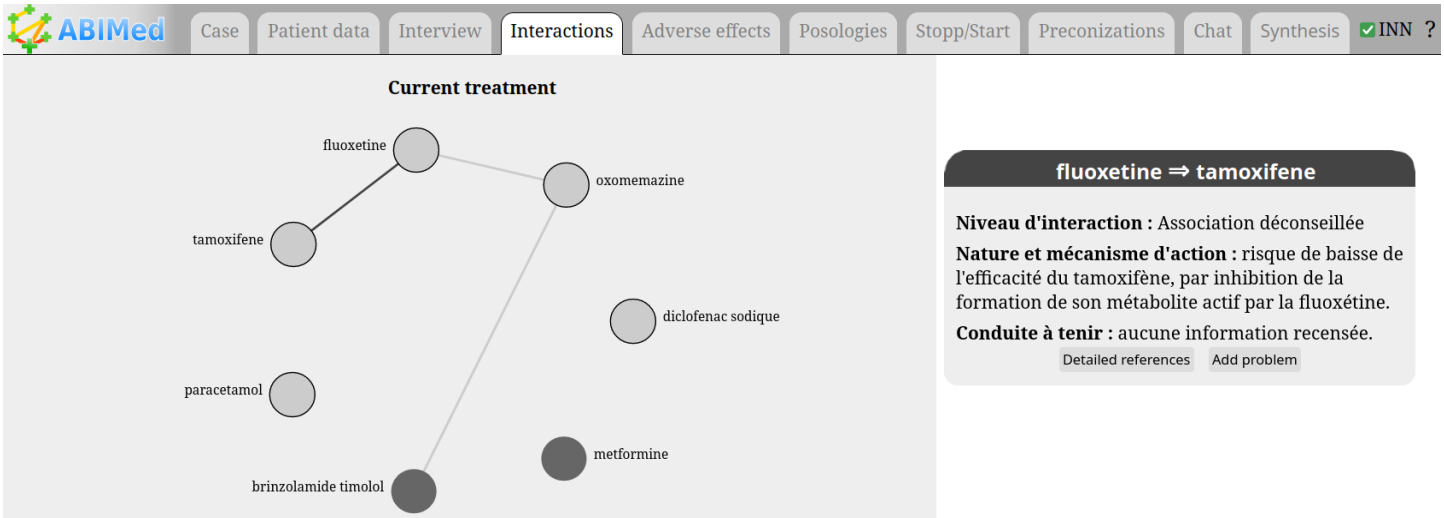


Screenshot of the interview tab.

3 Interaction tab

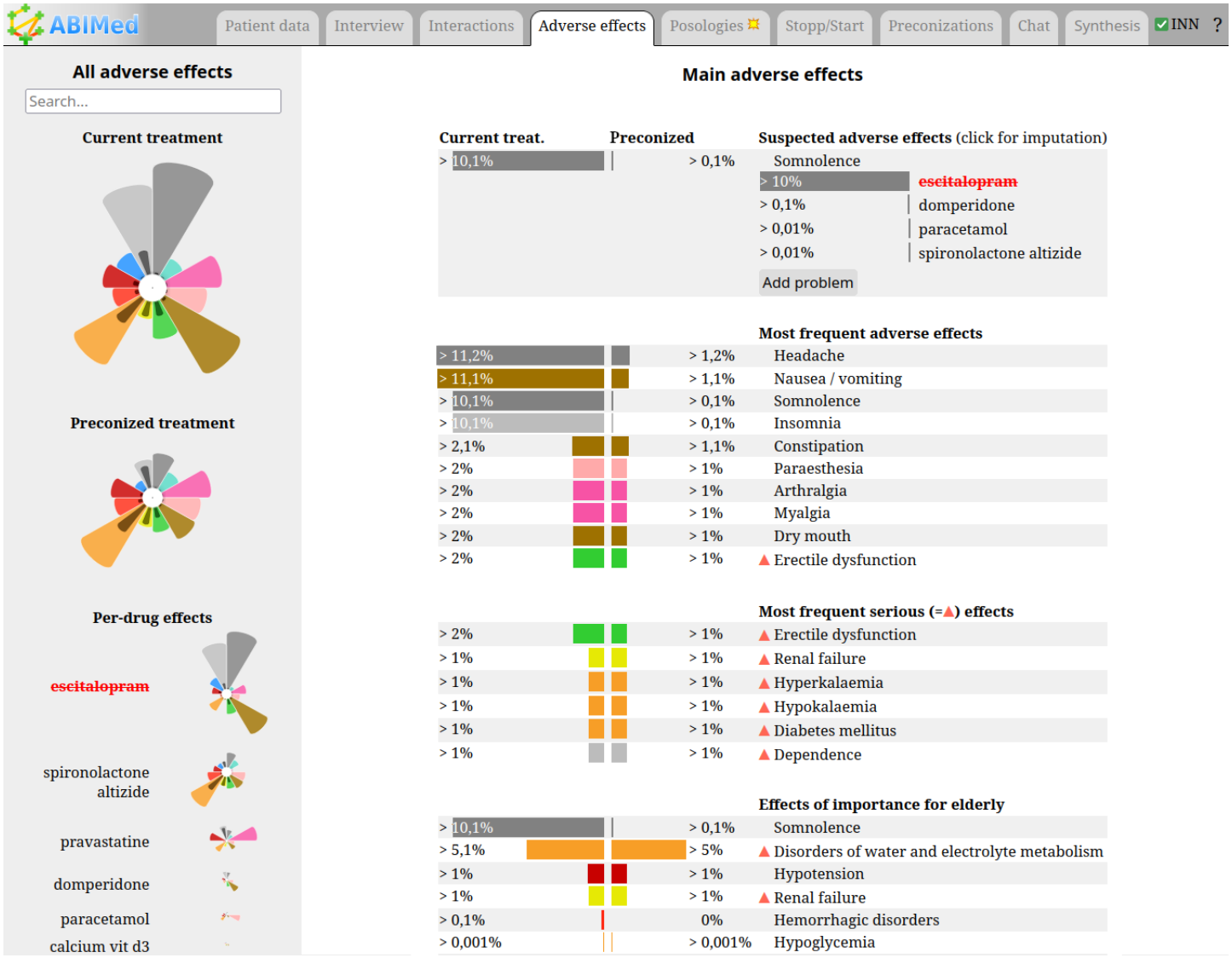


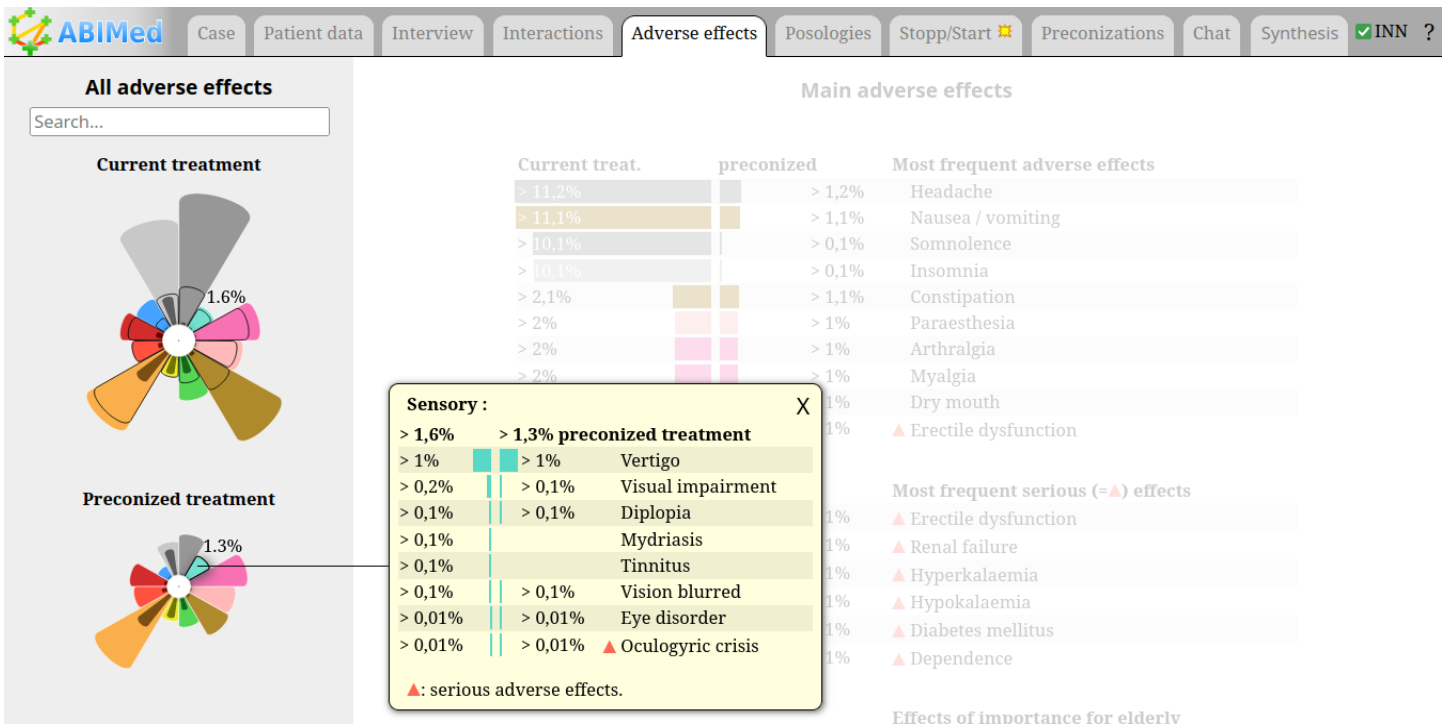
Screenshot of the interaction tab. The user preconized to deprescribe escitalopram, thus we are here in comparative mode. The user clicked on the domperidone-escitalopram interaction, which is displayed on the right.



Screenshot of the interaction tab, in color-blind mode.

4 Adverse effects tab





Two screenshots of the adverse effect tab.

5 Posology tab

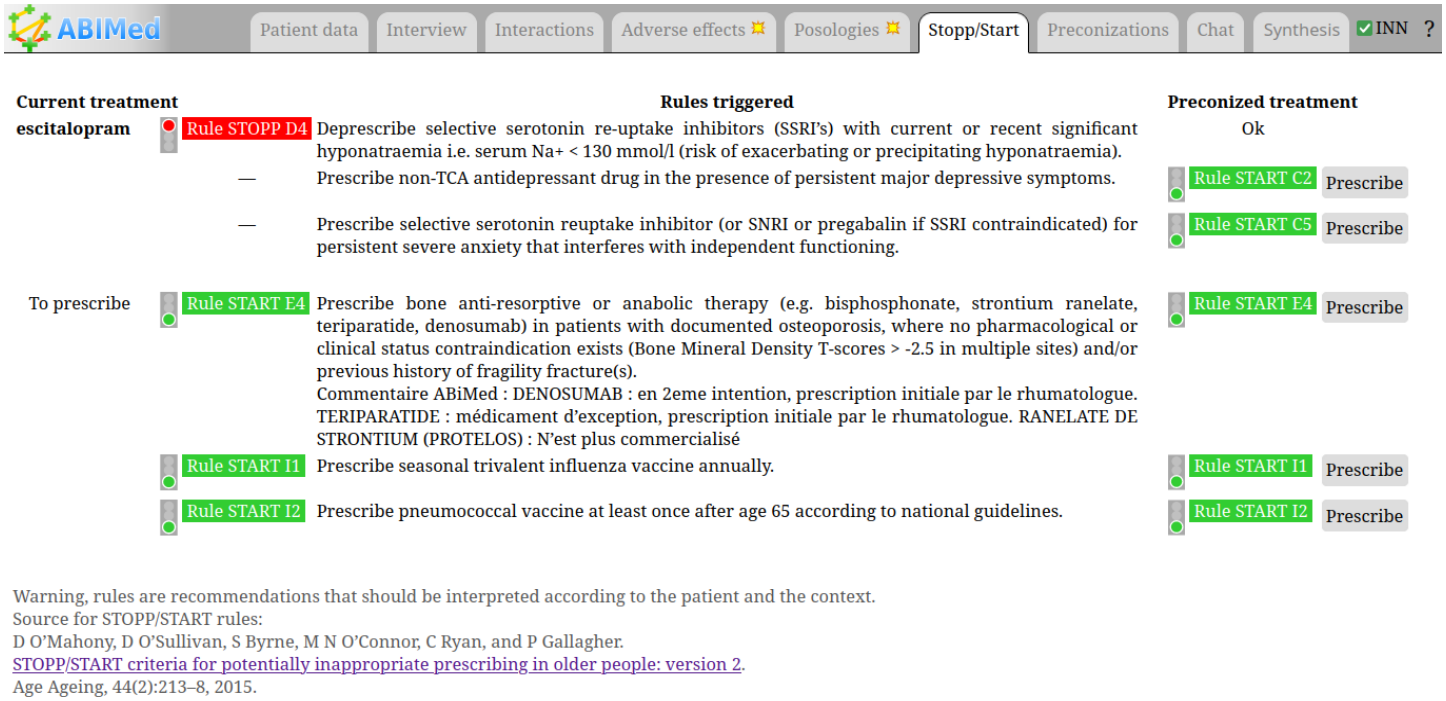
ABIMed | Patient data | Interview | Interactions | Adverse effects | Posologies | Stopp/Start | Preconizations | Chat | Synthesis | INN | ?

☐ hepatic failure ☐ renal failure Renal clearance: (non available) ml/min

Drug	Current posology	Posology from SPC (considering indication, association, clearance)	Preconized posology	Day dose
calcium vit D3 500mg/1000ui cpr	1 on morning	For vitamin-calcium deficiency, vitamin-calcium deficiency, osteoporosis, osteoporosis or osteoporosis: usual dose: 1 tablet(s)/day, 1/day	1 on morning	calcium carbonate 500 mg colecalciferol 1000 ui
paracetamol 500mg cpr	2 on morning, noon and evening	For pain or febrile state (symptomatic treatment, (from 50 kg and mild/moderate hepatic insufficiency) or (less than 50 kg and no/mild/moderate hepatic insufficiency): usual poso: adapt the poso max poso: 60 mg/kg/day max poso: 3000 mg/day For pain or febrile state (symptomatic treatment, from 50 kg and no/mild/moderate renal insufficiency): usual dosage: 500-1000 mg/dose, 1-3/day to renew if necessary space the administrations of 4 hours, re-evaluate the treatment periodically poso max: 4000 mg/day space the administrations by 4 hours, re-evaluate the treatment periodically	2 on morning, noon an	paracetamol 1 g
domperidone 10mg cpr	1 in case of nausea	For nausea and vomiting, nausea and vomiting, nausea and vomiting, nausea and vomiting or nausea and vomiting (symptomatic treatment, from 35 kg and mild/no liver failure): usual dose: 10 mg/dose, 1-3/day 1 week(s), for a short duration poso max: 10 mg / dose, 3 / day 1 week (s), for a short period	1 in case of nausea	domperidone 10 mg
~~escitalopram 10mg cpr~~	1 on evening	For major depressive episode (no/mild/moderate kidney failure): maintenance dose: 5-10 mg/dose, 1/day ≥ 6 months, for several months poso max: 10 mg / dose, 1 / day		escitalopram 10 mg => 0
spironolactone altizide cpr	1 on morning	For arterial hypertension: maintenance poso: 1/2-1 tablet(to)/take, 1/day	1 on morning	altizide et epargneurs potassiques 15 mg spironolactone 25 mg
pravastatine 20mg cpr	1 on morning	For essential hypercholesterolemia iia or mixed hyperlipidemia iib (no/mild kidney failure): usual poso: 10-40 mg/take, 1/day **on evening**, ≥ 4 week(s) max poso: 40 mg/take, 1 /day **on evening** For reduction of mortality and morbidity from cardiovascular causes (primary prevention, or, secondary prevention, renal insufficiency without/mild): usual poso: 40 mg/take, 1 /day **on evening** For post-transplant hyperlipidemia (no/mild kidney failure): maintenance poso: 20-40 mg/take, 1 /day **on evening** For essential hypercholesterolemia iia, mixed hyperlipidemia iib, post-transplant hyperlipidemia or reduction of mortality and morbidity from cardiovascular causes (liver failure or moderate/severe renal failure): maintenance poso: **on evening**	1 on morning	pravastatine 20 mg

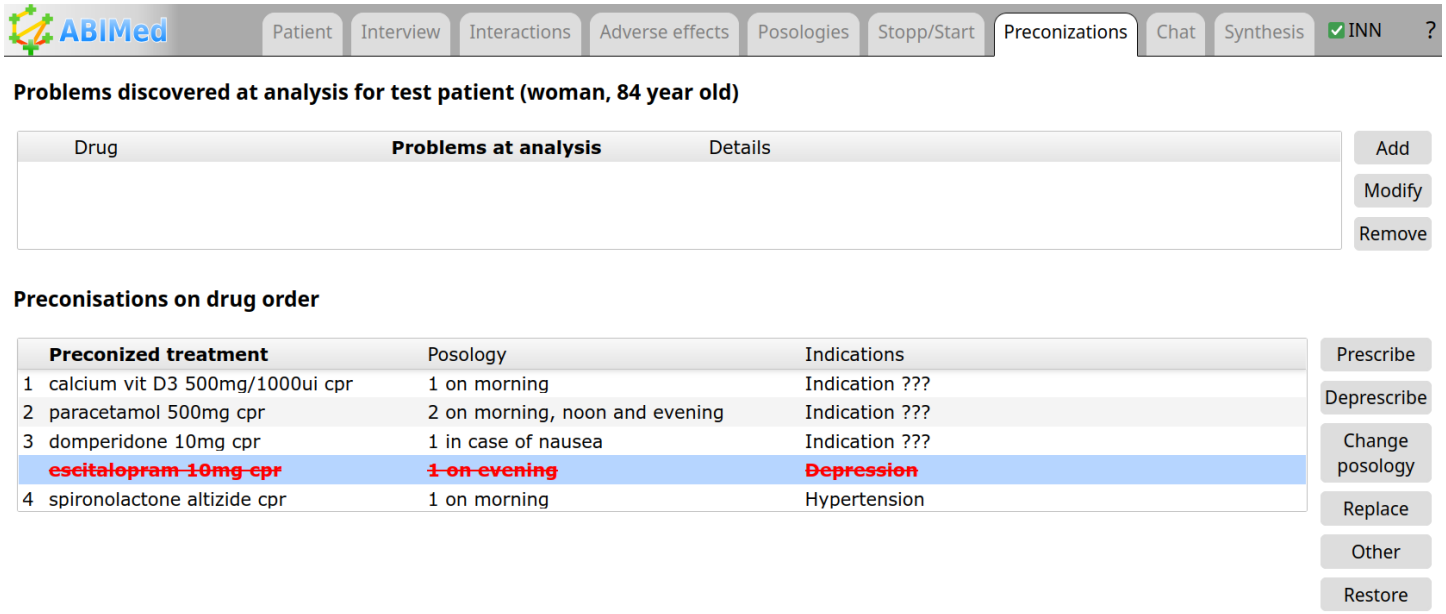
Screenshot of the posology tab.

6 STOPP/START rule tab



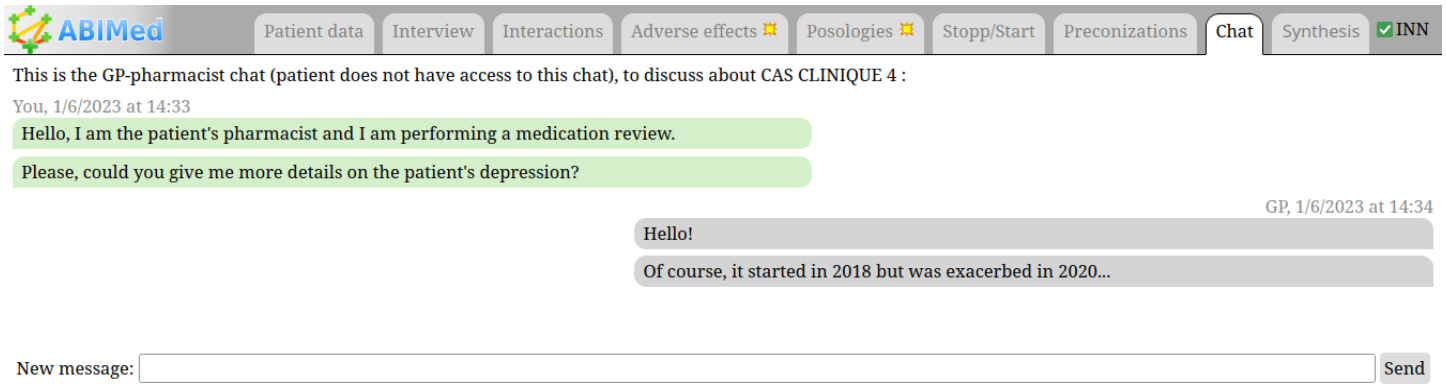
Screenshot of the STOPP/START rule tab. The user preconized to deprescribe escitalopram, thus we are here in comparative mode. The user clicked on the domperidone-escitalopram interaction, which is displayed on the right.

7 Preconization tab



Screenshot of the preconization tab.

8 Chat tab



Screenshot of the chat tab.

9 Synthesis tab

Screenshot of the synthesis tab (on next page).

Dear Doctor,

I received your patient, CAS CLINIQUE 4 84 year old women, for a medication review on September, the 3rd, 2024.

Here is the patient's current treatment:

	Current treatment	DCI	Dosage	Indication(s)
1	**orocal D3 500mg/1000ui cpr**	calcium vit d3	1 in the morning	
2	**doliprane 500mg cpr**	paracetamol	2 morning, noon and evening	
3	**domperidone 10mg cpr**	domperidone	1 if nausea	
4	**seroplex 10mg cpr**	escitalopram	1 in the evening	depressive episodes
5	**aldactazine cpr**	spironolactone altizide	1 in the morning	essential (primary) hypertension

The patient does not have hepatic insufficiency.
The patient does not have chronic renal insufficiency (clearance unknown).

(click to write here...)

Here are the issues that were identified during the assessment, as well as the STOPP/START v3 rules that were detected (STOPP/START is a good practice guide for elderly patients on multiple medications).

	Problem / rule	Details
1 : seroplex 10mg cpr (escitalopram)		
+	STOPP D6 rule	Withdraw a selective serotonin reuptake inhibitor (SSRI) in the presence of current or recent hyponatremia (Na < 130 mmol/l) (risk of exacerbation or recurrence of hyponatremia).
2: (general problems)		
+	START H4 rule	Prescribe a treatment that inhibits bone resorption or bone anabolic (e.g. bisphosphonates, teriparatide, denosumab) in cases of confirmed osteoporosis (bone densitometry: T-score < -2.5) or a history of fragility fracture - in the absence of pharmacological or clinical contraindications, such as a low life expectancy at 1 year. Comment: teriparatide: exceptional drug, initially prescribed by the rheumatologist. denosumab: second-line, initially prescribed by the rheumatologist;
+	START L1 rule	Prescribe an annual seasonal flu vaccination.
+	START L2 rule	Prescribe pneumococcal vaccination at least once, in accordance with national recommendations.
+	START L3 rule	Prescribe vaccination against varicella and shingles, in accordance with national recommendations.
+	START L4 rule	Prescribe vaccination against SARS-CoV2 (Covid-19), in accordance with national recommendations.
	Suspected adverse effect	**Contractures musculaires** Imputation: aldactazine : 0,01 - 0,1%
	Suspected adverse effect	**Hyponatrémie** Imputation: aldactazine : 1 - 10% seroplex : 0,01 - 0,1%

(click to write here...)

Following the assessment, here are some proposals for pharmaceutical interventions to optimize the current treatment:

	Proposition	Medicine	Details
+	Deprescribe	seroplex 10mg cpr	

(click to write here...)

The optimized treatment after assessment would therefore be:

	Proposed treatment	DCI	Dosage	Indication(s)
1	**orocal D3 500mg/1000ui cpr**	calcium vit d3	1 in the morning	
2	**doliprane 500mg cpr**	paracetamol	2 morning, noon and evening	
3	**domperidone 10mg cpr**	domperidone	1 if nausea	
	(retired: seroplex)			
4	**aldactazine cpr**	spironolactone altizide	1 in the morning	essential (primary) hypertension

I remain at your disposal for more information on this medication review.

Best regards,
Your pharmacist

Generate the summary in PDF | Validate the medication review