AVICENNE as a clinical decision support in thrombo-prophylaxis: Just because the patient's situation is improving doesn't mean there's no Drug related problem!

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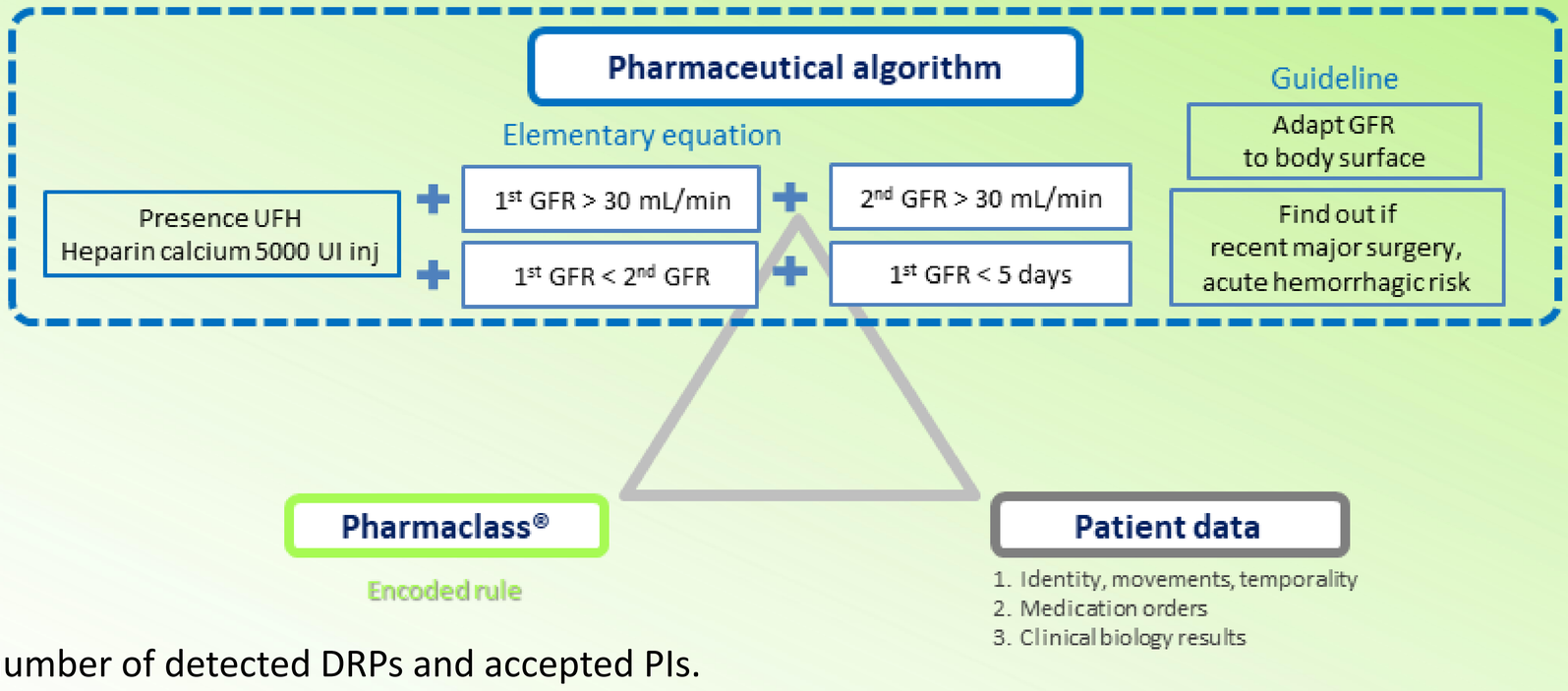
Materials and methods

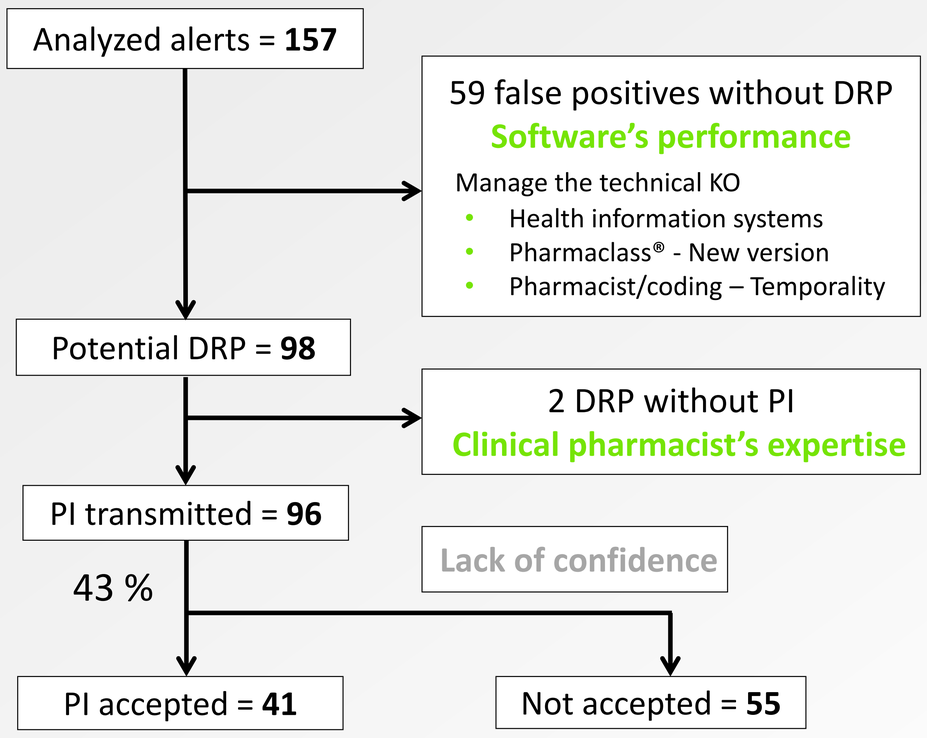
A prospective study has been carried out from March 2019 to September 2020 in 2 health facilities (1,600 beds).
One algorithm is encoded in Pharmaclass® to detect patients with an Underfractionned Heparin (UFH) prescription and 2 Glomerular filtration rate measurements > 30 mL/min, the value of the later being higher than that of the former.
A guideline structures the pharmaceutical analysis from detected Drug related Problems (DRPs) anamnesis to Pharmaceutical Interventions' transmission (PI).



The first outcome is the number of detected DRPs and accepted PIs.
The second outcome is the number of injections and hospital cost avoided.

What is achieved?

The data are collected during 250 non-consecutive days. First the pharmacist confirmed 98 DRPs after anamnesis and 96 PIs are transmitted proposing the switch between UFH and Enoxaparin. A total of 41 PIs (43%) are accepted by physicians



The secondary outcome includes saving of 353 injections and provides a minimal cost saving of 1700€.

Aim

This presentation shows the value of one AVICENNE algorithm in detecting UFH which are not indicated and the acceptance by the physician of the switch with Enoxaparin proposed by Pharmacist.

Background

Pharmacological thrombo-prophylaxis reduces the risk of pulmonary embolism and deep vein thrombosis.

Enoxaparin once a day is more relevant than UFH twice a day when Glomerular filtration rate is greater than 30 mL/min.

The Threefold Alliance AVICENNE as a real time clinical decision support system works on the patient's data, Pharmaceutical Algorithms (PA) and Pharmaclass® (Keenturtle - F).

Conclusion

AVICENNE optimizes patients' thrombo-prophylaxis management by triggering a pharmaceutical analysis on DRPs which are complex to detect despite the lack of knowledge and unfamiliarity with this clinical DRP.

What is original is that this study shows that pharmaceutical analysis stays relevant although the clinical and biological situation of the patient is improving.