Parenteral nutrition (PN) is needed for preterm and ill babies in:

- Neonatal intensive care unit (NICU),
- Neonatal medicine unit (NMU),
- Pediatric intensive care unit (PICU).

In our center, each prescription is analyzed by a pharmacist to ensure the quality and safety of the pediatric parenteral nutrition. In case of prescribing errors, the pharmacist alerts the prescribers and performs a pharmaceutical intervention (PI).

Validate the tool ‘ACTIP Nutrition’ and evaluate the rate of avoidable errors with an electronic prescribing software.

Where: sterile preparation unit
Who: 3 pharmacists
Which units: NICU, NMU, PICU
How long: 2 months
How: PN prescriptions were analyzed, each PI was scored thanks to ‘ACTIP Nutrition’ and recorded in ACTIP, the national registration database of PI

627 prescriptions were analyzed, 223 needed an intervention:

- ≥1 PI: 37% of orders
- ≥2 PI: 17% of orders

Top 3 of errors:
1. – underdosing of vitamins and trace elements (n=71)
2. – instability due to phosphate (n=45)
3. – wrong choice of ingredient in the mix (n=27)

Avoidable errors:
- 15% with transcription software
- 14% with software with thesaurus or guidelines

CONCLUSION AND RELEVANCE
Pharmaceutical analysis is a crucial process in pediatric parenteral nutrition, many errors are detected. The tool, ‘ACTIP nutrition’ allows to register PI in ACTIP, the national database of PI. In our center, 30% of errors could be avoided with electronic prescribing software.