

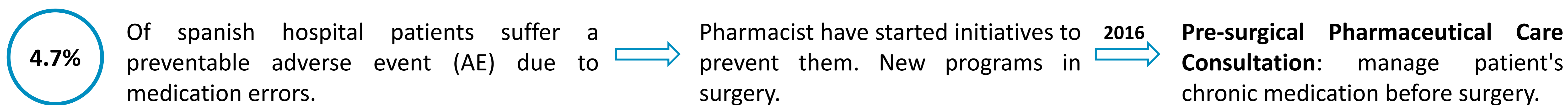
COST-EFFECTIVENESS OF A PRESURGICAL PHARMACEUTICAL CARE CONSULTATION

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BACKGROUND AND IMPORTANCE

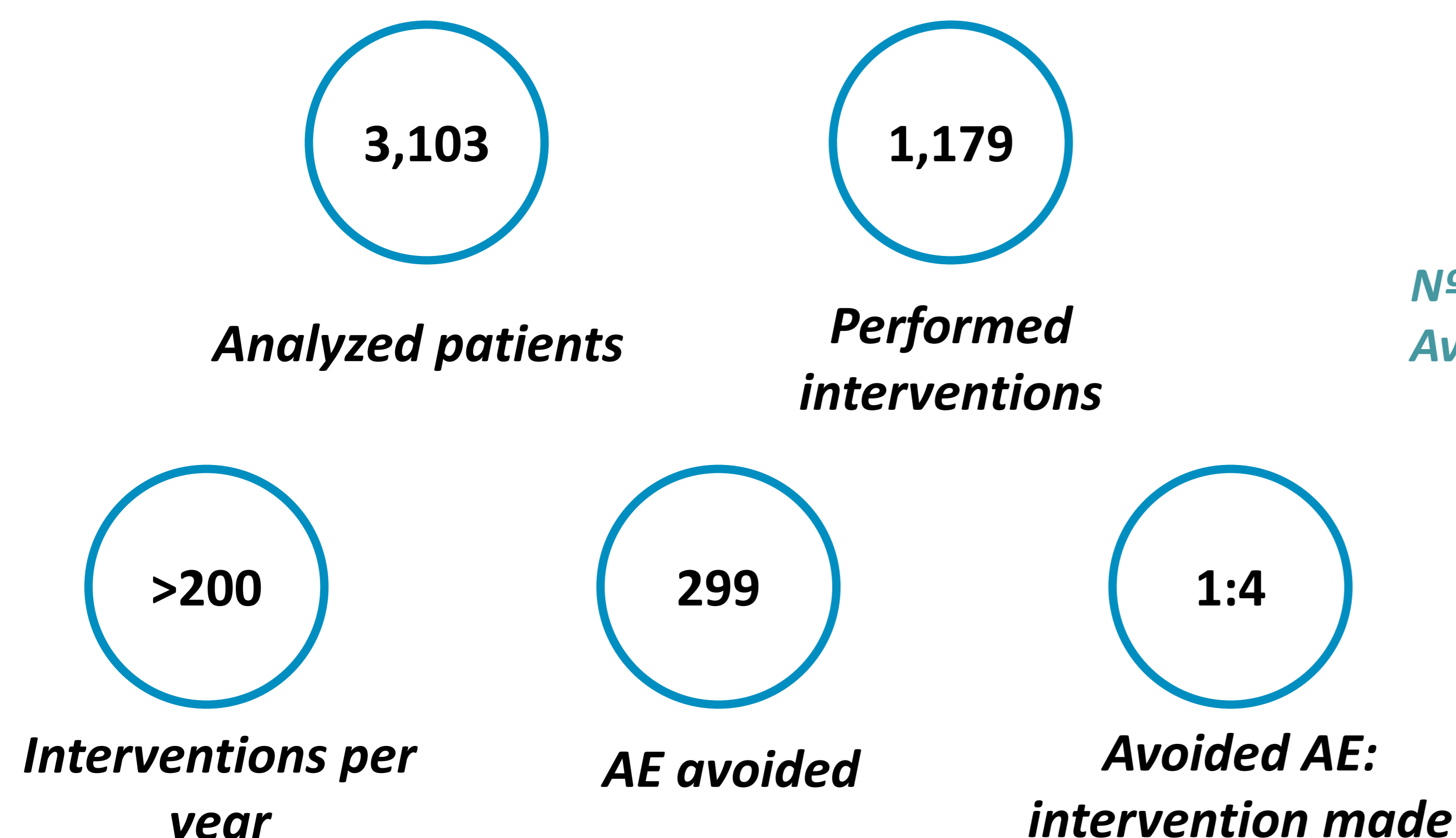


AIM AND OBJECTIVES: To analyse the **economic impact** of implementing this consultation based on the presurgical medication errors avoided with pharmaceutical interventions.

MATERIALS AND METHODS

- 1. Creation of Multidisciplinary team** Two clinical pharmacists + two anesthesiologists.
- 2. Retrospective analysis of interventions** All the interventions performed by Presurgical Pharmaceutical Care Consultation (2016 and 2020) in Traumatology, General Surgery, Cardiac Surgery and Thoracic Surgery Services.
- 3. Classification of errors** According to its **probability of causing an AE** (literature + clinical judgment). Conservative approach, without "1" probability. 5 groups: **0 – 0.01 – 0.1 – 0.4 – 0.6**
- 4. Calculation of avoided costs** **Cost of one AE: "AE probability * €6,924"** **€6,924 adjusted cost of an AE (Spanish literature)** **Sensitive analysis: AE cost 20% higher or lower**

RESULTS



Graph 1. Interventions distribution and theoretical avoided AE.

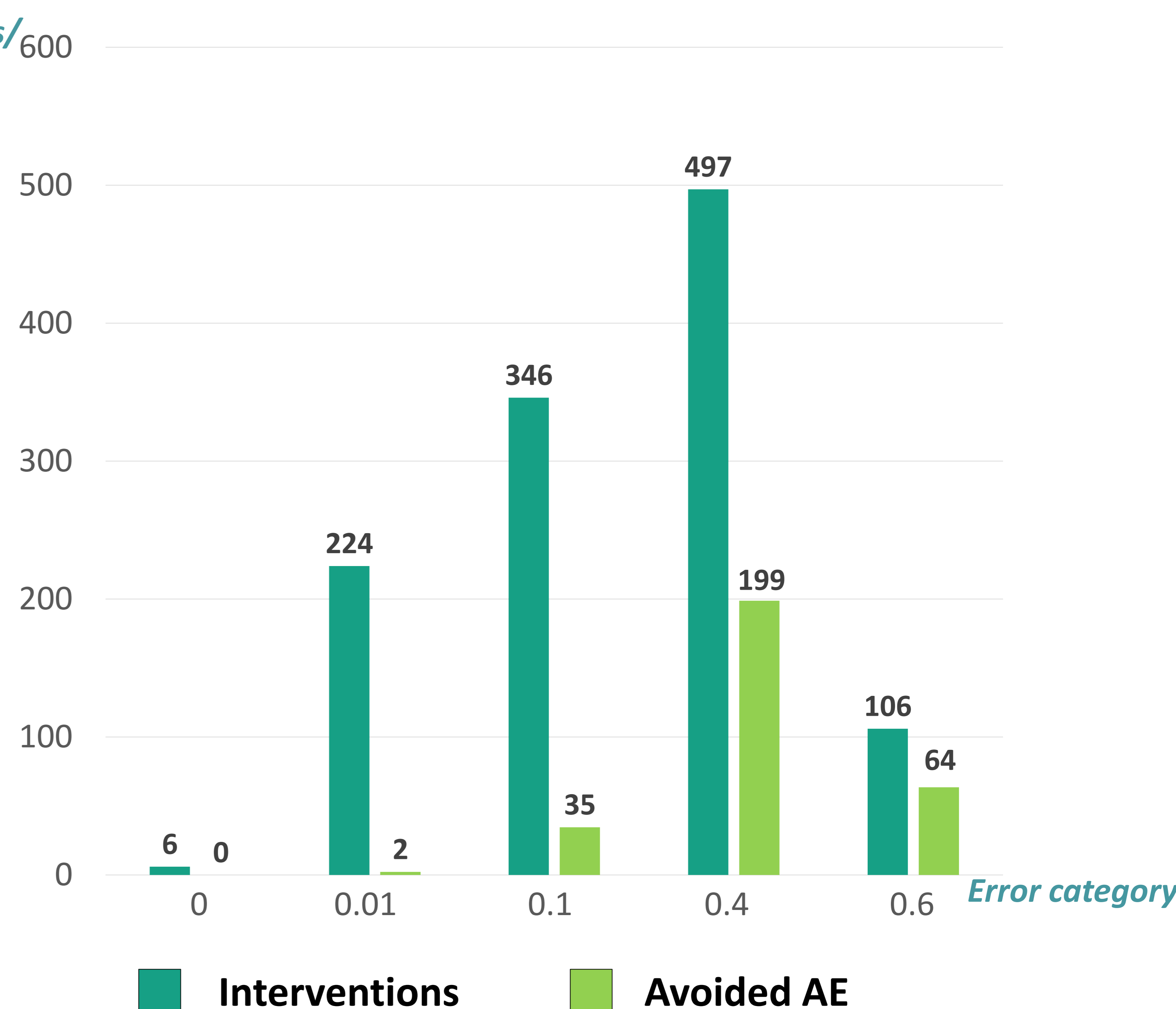


Table 1. Avoided costs.

| | AE cost | Total | Ratio Savings/Costs |
|----------------|---------|-------------|---------------------|
| Estimated cost | 6,924 € | 2.076.785 € | 9.1:1 |
| 20 % higher | 8,309 € | 2,486,385 € | 10.9:1 |
| 20 % lower | 5,539 € | 1,657,490 € | 7.3:1 |

CONCLUSION AND RELEVANCE

- Implementation of our Pre-surgical Pharmaceutical Care Consultation was cost-effective, preventing medication errors and reducing health spending.
- It could be extrapolated to other hospitals in order to improve surgical patient safety in a cost-effective way.

