

PHARMACOECONOMIC ANALYSIS OF AN ALTERNATIVE DOSAGE REGIMEN FOR PALIVIZUMAB

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BACKGROUND AND IMPORTANCE

- For the 2022-2023 campaign, we established a novel regimen based on Stephanie E pharmacokinetic model whereby the dosage per kg decreases as the season progresses, and the initial dosage is defined based on postmenstrual age (PAGE) which is described as gestational age plus chronological age, both measured in weeks

PAGE (gestational+postnatal age, weeks)	1st dose (mg/kg)	2nd dose (mg/kg)	3rd dose (mg/kg)	4th dose (mg/kg)	5th dose (mg/kg)
<40	20	17,5	15	12,5	10
40-65	17,5	15	12,5	10	7,5
>65	15	12,5	10	7,5	5

OBJECTIVES

- To assess the effectiveness of a novel palivizumab regimen as well as to determine the cost savings derived from the implementation of this regime.

MATERIAL AND METHODS

- Patients were classified according to their PAGE. The total dosage received per child with the novel protocol was compared with the dosage that they would have received had they been given the dosage as specified in the SPC.
- The total expenditure on palivizumab during the 2022-2023 season was analysed comparing the expenditure on the PAGE-defined regimen to the theoretical expenditure of SPC-defined regimen.

RESULTS

PAGE (gestational+ postnatal age, weeks)	Patients (n)	Average Weight (kg)	Total dose administered (mg)	Total theoretical dose as defined by SPC (mg)	Cost savings (mg)	Cost savings (€)	Average patient saving(€)
<40	18	4,3	4.270	4.480	210	1.514	84
40-65	13	6,4	4.479	5.060	581	4.197	322
>65	16	9,5	5.897	8.119	2.222	16.044	1.002
Total	47	6,5	14.647	17.660	3.013	21.755	463

CONCLUSION AND RELEVANCE

- The PAGE-defined regimen results in significant cost savings compared with the conventional SPC-defined regimen.
- The pharmacist's intervention contributes to the optimisation of health resources, further increasing the sustainability of the Health System.

