









Anticoagulants utilization in Portugal: are there inequalities?

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Background

- Anticoagulation (AC) is required in various conditions:
 DVT Prophylaxis (Orthopedic Surgery), NVAF (to reduce stroke risk), DVT or PE Treatment
- AC may be assured using: heparins, VKAs and NOACs
- Interesting for PNHS: costs increased 0.8% and AC represent the 3rd FT group with greater weight (7.7%; 84 M€; Δ 27.7%)⁽¹⁾



Objectives

- This study analyses the utilisation patterns of AC in Portugal, in the outpatient market, considering national, regional and international asymmetries.
- It also analyses the evolution of costs (for the PNHS and for patients) and the costs of treatment per day.

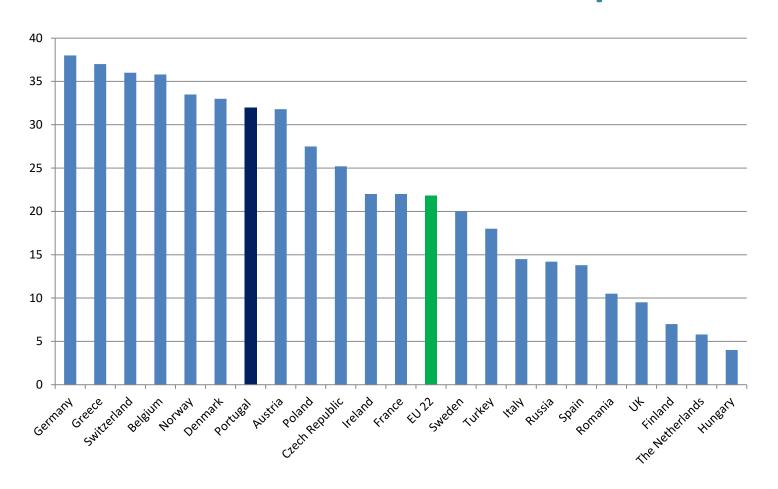


Methods

- Descriptive study considering a 10 year-period (2006 to 2015)
- Outpatient sales data obtained from INFARMED to characterise AC use.
- Data treated annually and disaggregated by the 18 districts of Portugal, considering
 ATC classification (B01A Antithrombotic Agents) and respective DDDs.⁽¹⁾
- Utilisation indicators used: DDDs, DID (DDDs/1000 inhabitants/day), considering the mean annual resident population in mainland Portugal⁽²⁾ and the ratio of NOACs on the total market of ACs.
- Cost indicators used: total costs, PNHS costs, out-of-pocket (OOP) costs and costs of treatment per day (CTD).



Results: % Ratio of NOACs on total AC market international comparison

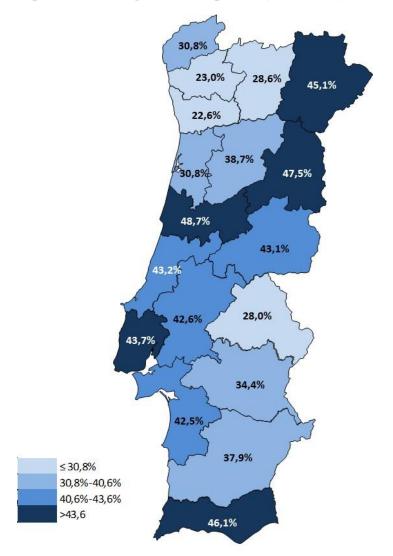


Source: adapted from IMS, 2015



% Ratio of NOACs on total AC market in mainland Portugal (PNHS) by district and region, in packages (2015)

Region	Ratio 2015	
North	24.8%	
Center	40.1%	
LVT	43.3%	
Alentejo	33.7%	
Algarve	46.1%	
Mainland Portugal	35.9%	



Source: own development, INFARMED data



Year 2006: DID Total PNHS 4,28

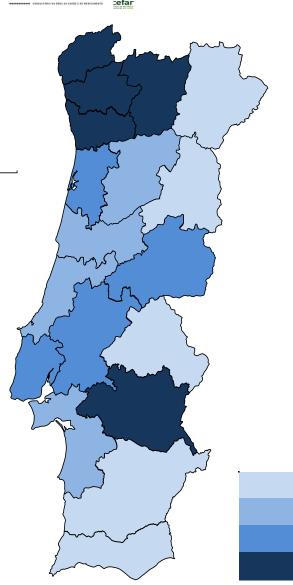
≤ 3,54

3,55-3,88

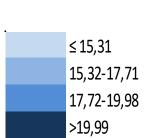
3,89-4,66

>4,66

Year 2015: DID Total PNHS **17,03**

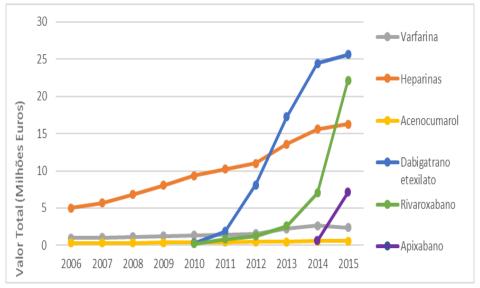


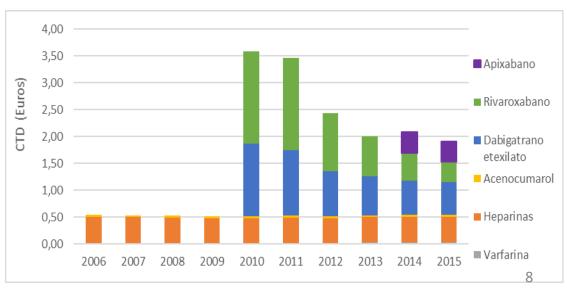
Região	Distrito	2006	2015	Var
North	Braga	5,77	16,32	183%
North	Bragança	3,52	19,81	464%
North	Porto	4,81	15,07	213%
	Viana do			
North	Castelo	7,27	21,20	192%
North	Vila Real	4,77	19,76	314%
Center	Aveiro	4,32	17,79	312%
Center	Castelo Branco	4,29	22,88	433%
Center	Coimbra	3,86	26,51	587%
Center	Guarda	3,48	19,56	462%
Center	Leiria	3,65	17,62	383%
Center	Viseu	3,62	21,69	499%
LVT	Lisboa	3,90	16,02	311%
LVT	Santarém	4,01	17,57	338%
LVT	Setúbal	3,60	14,96	315%
Alentejo	Beja	2,23	11,55	418%
Alentejo	Évora	5,30	20,03	278%
<u>Alentejo</u>	Portalegre	3,21	14,76	360%
Algarve	Faro	3,50	14,12	303%
TOTAL F	PNHS	4,28	17,03	298%





Results: Costs







Discussion & Conclusion: Potential influence of guidelines on drug use

