security funding law, France is becoming the first country to allow biosimilars substitution when initiating treatment course. To encourage biosimilars substitution, the Norwegian Medicines Agency announced in 2013 the funding of clinical studies with infliximab originator and biosimilars in which patients would be switched from originator to biosimilars forth and back. Moreover, increased price discounts of about 40% were applied for infliximab in Norway. By 2020, expected savings for biosimilars are estimated around €12-33 billion in big EU5, Poland, Romania, Sweden. **CONCLUSIONS:** While patent cliff of major biologic drugs is expected on the next 5 years, initiatives to reassure physicians to prescribe biosimilars and implementation of substitution rules, even if still raising some reluctance, might contribute to boost biosimilar uptake in Europe. Price competition will impose manufacturers of branded biologics to adopt new pricing strategies.

PHP24

EFFECTS OF REFERENCE PRICE SYSTEM ON MEDICINES WHICH HAVE ANNUAL AVERAGE HIGHEST AMOUNT OF SALES OF BETWEEN YEARS 2008-2013

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OBJECTIVES: In Turkey, a medicine reference pricing system has been in use since 2004. The price of pharmaceuticals is determined by the acceptance of the lowest ex-factory price in the reference countries (Greece, France, Italy, Portugal, Spain). We aimed to examine the first 100 medicine's, having the annual maximum amount on the average Turkish Lira (TL) based medicine sales between the years 2008-2013 which have 25.1% value in the total pharmaceutical market, reference price changes in these period. **METHODS:** While pharmaceutical sales data were obtained from the IMS Health-Turkey data base, medicine prices were obtained from the Medicine Price List published by Turkish Medicines and Medical Devices Agency. **RESULTS:** In 2008, the top 100 medicines in determining the price of most of Italy were taken as the reference country, followed by Spain and Greece. In 2013 while Greece is taken as the reference country more common; France and Italy are to follow. In 2008, only one medicine's price increased, and only one medicine's price decreased because of the reference price. In 2009 and 2010 price increases did not seen. In 2009, 8 and in 2010, 30 medicines prices had decreased. In 2011, 2012 and 2013 totally 27 medicines reference prices had increased. 21 medicine's price in 2011, 20 medicine's price in 2012 and 24 medicine's price in 2013 had decreased. While mostly France (13 medicines) connected to the reference price increases, mostly Greece (58 medicines) has been based reference price drop in the analyzed period. **CONCLUSIONS:** The application of reference prices, medicine prices to be reduced to a large extent. Greece based reference price decreases are observed to be mainly from the year 2010. The reason for this is considered as the economic crisis in Greece and the agreement with the IMF, EU and ECB, the Greek government at cost-containment.

PHP25

IMPLICATIONS OF EXTERNAL PRICE REFERENCING OF PHARMACEUTICALS IN MIDDLE EAST COUNTRIES

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OBJECTIVES: External price referencing (EPR) is a method to control pharmaceutical prices, wherein decision-makers specify a basket of countries, whose prices they use to inform their national target price. EPR is practiced frequently worldwide, though countries vary substantially in how they execute EPR. The objective of our pioneer collaborative health policy research initiative was to analyse how EPR is used in Middle East countries, and assess whether EPR results in narrower price corridor for innovative pharmaceuticals compared to non-pharmaceutical services not subjected to EPR. **METHODS:** In Q1 2014, we conducted a survey on EPR regulations, and collected prices of 16 innovative pharmaceuticals and 10 non-pharmaceutical services in six Middle East countries (Egypt, Jordan, Kuwait, Lebanon, Saudi Arabia, UAE). Prices in local currency were converted to USD by using market exchange rates. Maximum and minimum prices of each pharmaceutical and non-pharmaceutical technology were compared to mean prices in the study countries. **RESULTS:** EPR regulations are most stringent in Egypt and Saudi Arabia (largest study countries), mandating the lowest pharmaceutical price out of a basket comprising more than 25 countries each. By contrast, Kuwait references the country of origin only. The average price corridor is +/-38% for pharmaceuticals and +/-78% for outpatient and hospital services compared to mean prices. **CONCLUSIONS:** EPR results in narrower price corridor for innovative pharmaceuticals compared to other health care services. Prices of innovative pharmaceuticals are the lowest in Egypt and Saudi Arabia, and the highest in Kuwait, indicating the importance of population size and EPR implementation on drug price levels. However, EPR results in higher pharmaceutical prices in lower income countries compared to non-pharmaceutical services, which may limit timely access of patients to new medicines in these countries compared to global markets. Stakeholders should understand the implications of EPR and develop solutions to prevent its negative consequences.

PHP26

QUANTIFICATION OF SWITCHING TRENDS IN THE GREEK PHARMACEUTICAL MARKET DURING THE PERIOD OF CRISIS

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OBJECTIVES: In 2009, Greece entered into one of the most serious economic downturns in its modern history. In May 2010, the country was put under the supervision of Troika (EU, ECB and IMF). Retail pharmaceutical market with size c. a. €6.5 bn in retail prices for 2009 (public pharmaceutical expenditure €5.2 bn), was one of the main targets for change through the implementation of new policies and drastic spending cuts. The purpose of this study was to measure the impact that these new policies for pharmaceutical spending had and how this was attributed to the levers of price, market volume and product mix. **METHODS:** An economic model was used, based on IMS Hellas' and Hellenic Statistical Authority data, to measure the contribution that (a) price; (b) market volume; and (c) product mix had on the reduction in the size of the retail market for pharmaceuticals in the period 2009-2014. The detailed approach decomposes the market change, as measured in values, into those attributed to (a) price (assuming market volume and product mix are constant); (b) market volume (assuming prices and product mix are unchanged); (c) product mix. **RESULTS:** The analysis indicated that, the major contributor in the reduction of the pharmaceutical market size was the price of medicines. It has been estimated that 87% of the reduction (>€1.2 bn) is coming from price. Volume contributed an additional c. a. 38% (>€0.5 bn) in the reduction of the size but, at the same time, it was partially offset from substitution with pricier medicines. **CONCLUSIONS:** Price was the major driver for the reduction in the size of the retail pharmaceutical market during the period of crisis. Volume had an impact as well but it was partially offset by switch towards more expensive medicines.

PHP27

IS THE FRENCH LISTE–EN–SUS STILL SUPPORTING ACCESS TO INNOVATIVE MEDICINES?

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OBJECTIVES: The "liste-en-sus" was implemented within the framework of the HPST [1] law. One of its objectives was to ensure access to highly-priced innovative medicines in hospital settings without distorting the Diagnostic-Related Groups (DRG). The objective of this research is to analyse the degree of innovation of the medicines included in the "liste-en-sus". **METHODS:** Starting from the ATIH [2] database, an initial analysis consisted of identifying all the Health Technology Assessments (HTAs) for each product included in the "liste-en-sus" available on the HAS website [3] . Then, for each HTA, the following information was collected: assessment date, SMR [4] and ASMR [5] scores. **RESULTS:** The liste-en sus includes 123 medicines. 21% have no HTA available. Another 19% were last evaluated before 2004. Among the medicines which had undergone an HTA since 2004, 7% were granted an ASMR I, 27% an ASMR II, 22% an ASMR III, 8% an ASMR IV, 36% an ASMR V. In other terms, amongst the medicines which have undergone an HTA in the last 10 years, about 45% of them were deemed non-innovative (ASMR IV/V). Those medicines mainly consist in antihemorrhagics (27%), antianaemics (18%), antineoplastics (15%) and immune sera and immunoglobulins (15%)[6] . Although they are not innovative, those medicines are only used in a proportion of patients and are thus likely to distort DRG. To put these results into perspective, since 2005, 92% of evaluated medicines were granted an ASMR IV/V [7]. **CONCLUSIONS:** Looking at the list-en-sus' objectives, the most decisive criterion seems to be more stability of the DRG rather than access to innovative medicines; however a higher proportion of the medicines in the liste-en-sus are innovative.

PHP28

A MULTI-STAKEHOLDER (PHYSICIAN, PAYER, PATIENT, AND INDUSTRY) QUALITATIVE ANALYSIS OF THE POLICIES THAT WOULD SUPPORT A SUSTAINABLE EUROPEAN BIOSIMILARS MEDICINES MARKET COMBINED WITH A QUANTITATIVE ANALYSIS OF THE MULTI-STAKEHOLDER BENEFITS A SUSTAINABLE MEDICINES MARKET WOULD DELIVER

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OBJECTIVES: To establish the key policy areas that will drive the establishment of a sustainable biosimilar medicines market. To outline the benefits that these will bring to Physicians, Payers, Patients, and Industry, with particular focus on the benefits for European National Health systems. **METHODS:** 71 qualitative in-depth interviews were conducted across 7 European markets: France, Germany, Hungary, Italy, Poland, Spain and the UK, collecting insight from experts and policy influencers at pan-European, National and Regional levels, Physicians, Payers, Pharmacists, Patients, and Industry. Quantitative modelling used a systems dynamics approach with in-depth analysis of 3 representative biologic products: trastuzumab, bevacizumab, and adalimumab. Dynamics were based on a delphi panel of expert opinions. The five forces of supplier power, buyer power, impact of new entrants, impact of substitutes, and competitive rivalry were addressed. A ranking of the attractiveness of policy combinations from a sustainability and benefit perspective was made based on a biosimilar medicines market "Sustainability Index" and the calculation of the magnitude of the benefits (cost savings, additional patients treated) that the policy combination was likely to produce. **RESULTS:** The qualitative analysis has shown that a European biosimilars medicines market based on stakeholder and policy alignment in four key areas (1. education and understanding, 2. experience and use, 3. sustainable pricing, 4. rational decision making) will be sustainable and deliver benefits to all stakeholders. The quantitative analysis demonstrated that the most efficient policy combination, measured in terms of the sustainability index, was the same for all 3 molecules and would deliver cumulative 10 year cost savings of between 24% and 26%. **CONCLUSIONS:** Greater stakeholder alignment and the combination of specific policies will increase the sustainability of the European biosimilar medicines market. A sustainable biosimilar medicines market will deliver significant benefits to all stakeholders.