from SPRING-2, SINGLE and FLAMINGO trials, each one of them went through a Markov model to assess each patient lifetime. Initial treatment to all the health states included were: living with HIV with or without opportunistic infections, long-term chronic diseases and death. Transition probabilities for each 1-month cycle, were obtained from clinical trials. Utilities and direct health-care costs by NIS were obtained from literature and national databases. A 3% annual discount was applied to costs and health outcomes. Sensitivity analysis with 0% and 5% discount rates were performed. RESULTS: Treatment initiation with DTG/ ABC/3TC was dominant when compared with treatment-naive patients with the comparators: vs. FTC/TDF/EFV (€6,210.71/QALY), vs. DRV+r + FTC/TDF or ABC/3TC (€152,411.73/QALY), and vs. RAL + FTC/TDF or ABC/3TC (€182,480.19/QALY). All the sensitivity analyses performed showed the consistency of these findings. The main driver of costs was ART-treatment costs (80%) followed by the costs of care (around 14%). CONCLUSIONS: With the premises considered, treatment initiation with DTG/ABC/3TC STR appears to be the most cost-effective option for ARV-naive HIV infected patients from the Spanish Health System perspective.

PIN75 ECONOMIC EVALUATIONS IN INFECTIOUS DISEASE: WHICH INFECTIONS, WHAT SETTINGS AND WHAT TYPE OF ECONOMIC EVALUATIONS WERE REPORTED IN PAPERS PUBLISHED IN 2014?
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OBJECTIVES: To determine the focus of economic evaluation papers relevant to infectious diseases that were indexed in the PubMed database and published in 2014. METHODS: A systematic literature search was performed based on a systematic search of PubMed, using key words relevant to economic modelling in healthcare or disease and limited to studies published in English, in humans, and with abstracts. Articles were included if they analysed the cost-effectiveness of interventions; healthcare service design or methodological issues related to one or more infectious disease. We included all studies with a publication date of 2014 that were indexed in PubMed up to 8 June 2015. RESULTS: The search identified 27,772 articles published in 2014. Of these, 148 were included in patients with infectious diseases. Most (32 articles) were in HIV-infected people, 14 articles were in those with hepatitis C, 13 in tuberculosis, 9 in human papilloma virus infection, 7 in pneumonia, and 6 each in influenza and hepatitis B. Twenty-five analyses in Asia were more diverse, with only 3 each on HIV and tuberculosis. The 30 European analyses were also diverse, with 5 on hepatitis C, 4 each on HIV and pneumonia, and 3 on hospital-acquired infections. Of the 35 North American analyses, 8 related to hospital-acquired infections, 6 to hepatitis C, 4 to hepatitis B, and only 2 each on HIV or tuberculosis. Cost-utility analyses were reported in 58 articles and cost-effectiveness analyses in 45, and only 11 studies stated that indirect costs were assessed. CONCLUSIONS: Outcomes of our analysis and disease class to be evaluated for cost-effectiveness in our search for studies published in 2014, with a geographical focus that reflects the relevant epidemiology. Despite potential societal costs from pandemics or chronic infection, evaluations rarely considered indirect costs.

PIN78 PHARMACOEPIDEMIOLOGICAL MODELING OF TREATMENT-INFECTED PATIENTS WITH RILPIVIRINE/ TENOFOVIR/ EMTRICITABIN (SINGLE TABLET REGIMEN) IN RUSSIA
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OBJECTIVES: To determine the focus of economic evaluation papers relevant to infectious diseases that were indexed in the PubMed database and published in 2014. METHODS: A systematic literature search was performed based on a systematic search of PubMed, using key words relevant to economic modelling in healthcare or disease and limited to studies published in English, in humans, and with abstracts. Articles were included if they analysed the cost-effectiveness of interventions; healthcare service design or methodological issues related to one or more infectious disease. We included all studies with a publication date of 2014 that were indexed in PubMed up to 8 June 2015. RESULTS: The search identified 27,772 articles published in 2014. Of these, 148 were included in patients with infectious diseases. Most (32 articles) were in HIV-infected people, 14 articles were in those with hepatitis C, 13 in tuberculosis, 9 in human papilloma virus infection, 7 in pneumonia, and 6 each in influenza and hepatitis B. Twenty-five analyses in Asia were more diverse, with only 3 each on HIV and tuberculosis. The 30 European analyses were also diverse, with 5 on hepatitis C, 4 each on HIV and pneumonia, and 3 on hospital-acquired infections. Of the 35 North American analyses, 8 related to hospital-acquired infections, 6 to hepatitis C, 4 to hepatitis B, and only 2 each on HIV or tuberculosis. Cost-utility analyses were reported in 58 articles and cost-effectiveness analyses in 45, and only 11 studies stated that indirect costs were assessed. CONCLUSIONS: Outcomes of our analysis and disease class to be evaluated for cost-effectiveness in our search for studies published in 2014, with a geographical focus that reflects the relevant epidemiology. Despite potential societal costs from pandemics or chronic infection, evaluations rarely considered indirect costs.

PIN76 TESTING FOR NS5A RESISTANCE IN ORDER TO OPTIMIZE ANTIVIRAL TREATMENT WITH LEDIPASVIR/SOFOSBUVIR 12 WEEKS IN NON-CIRRHOTIC GENOTYPE 1 HEPATITIS C TREATMENT EXPERIENCED PATIENTS
Wester K1, Buusmeester W1, Duchesne F2, Shariga U, Pissini M1, Teurv M1
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OBJECTIVES: Sustained virologic response (SVR) of NSSA inhibitor-containing regimens is reduced in genotype-1 hepatitis C virus (HCV) patients with NSSA resistance. The long-term persistence of NS5A resistance limits re-treatment options (Wyles et al, 2015). Latest EASL treatment guidelines recommend simeprevir+sofosbuvir with/without ribavirin (SMV+SOF) for re-treating patients failing a NSSA inhibitor-containing regimen. This study investigates the cost-effectiveness of NSSA resistance-testing (before treatment) to optimize treatment choice and avoid the need for re-treatment. METHODS: An existing lifetime Markov model was used to estimate disease progression for HCV genotype 1 patients in the UK. Patient subgroups were identified by cirrhosis stage and prior treatment experience. NSSA resistance-testing pre-treatment and subsequent treatment with SMV+SOF or simeprevir+ledipasvir (SOF-LDV) in patients with or without NSSA resistance, respectively, was compared to a no testing scenario where all patients received SOF+LDVx. SVR rates of SOF+LDVx in patients with/without NSSA resistance were obtained from published phase III/IV studies. Markov model simulations were performed with 10000 cycles. RESULTS: Treatment with SMV+SOF 12 weeks instead of SOF+LDVx 12 weeks appeared to be cost-effective in treatment-experienced HCV patients without cirrhosis and with NSSA resistance. Optimizing with SOF+LDVx 24 weeks was not deemed cost-effective.

PIN77 TESTING FOR NS5A RESISTANCE IN ORDER TO OPTIMIZE ANTIVIRAL TREATMENT WITH LEDIPASVIR/SOFOSBUVIR 12 WEEKS IN NON-CIRRHOTIC GENOTYPE 1 HEPATITIS C VIRUS TREATMENT EXPERIENCED PATIENTS
Wester K1, Buusmeester W1, Duchesne F2, Shariga U, Pissini M1, Teurv M1
1Amaris, London, UK, 2Sanofi Pasteur MSD, Maidenhead, UK
OBJECTIVES: Sustained virologic response (SVR) of NSSA inhibitor-containing regimens is reduced in genotype-1 hepatitis C virus (HCV) patients with NSSA resistance. The long-term persistence of NS5A resistance limits re-treatment options (Wyles et al, 2015). Latest EASL treatment guidelines recommend simeprevir+sofosbuvir with/without ribavirin (SMV+SOF) for re-treating patients failing a NSSA inhibitor-containing regimen. This study investigates the cost-effectiveness of NSSA resistance-testing (before treatment) to optimize treatment choice and avoid the need for re-treatment. METHODS: An existing lifetime Markov model was used to estimate disease progression for HCV genotype 1 patients in the UK. Patient subgroups were identified by cirrhosis stage and prior treatment experience. NSSA resistance-testing pre-treatment and subsequent treatment with SMV+SOF or simeprevir+ledipasvir (SOF-LDV) in patients with or without NSSA resistance, respectively, was compared to a no testing scenario where all patients received SOF+LDVx. SVR rates of SOF+LDVx in patients with/without NSSA resistance were obtained from published phase III/IV studies. Markov model simulations were performed with 10000 cycles. RESULTS: Treatment with SMV+SOF 12 weeks instead of SOF+LDVx 12 weeks appeared to be cost-effective in treatment-experienced HCV patients without cirrhosis and with NSSA resistance. Optimizing with SOF+LDVx 24 weeks was not deemed cost-effective.
OBJECTIVES: Annual trivalent influenza vaccines (TIV) containing three influenza strains (A/H1N1, A/H3N2, and one B) have been recommended in Colombia since 2007. However, we lacked evidence of the effectiveness of trivalent B lineages (Victoria and Yamagata) and difficulties in predicting which lineage will predominate in the next season have led to the development of quadrivalent influenza vaccines (QIV) including both B lineages. We estimated the hypothetical impact of QIV compared with TIV over seven influenza seasons (2009 pandemic year excluded) using virologic circulation, vaccine coverage, vaccine effectiveness and attack rate. In absence of B-lineage distribution in Panama, Brazilian data was considered. The QIV included influenza-related costs (hospitalisations, deaths), two sets of inputs were used. Influenza-related costs were estimated from societal perspective in Panamanian balboas (1 per US dollar). RESULTS: Over the 2006-2013 period, QIV would have prevented 7,519 influenza B cases compared with TIV, averting between 2,756 and 5,564 outpatient visits, between 28 and 2,026 hospitalisations and between 6 and 930 deaths. This translates into influenza-related avoided costs of between 137 and 3,599 thousand balboas. In 2012, year with high B attack rate and mismatch, QIV would have avoided 5,256 cases compared with TIV, averting between 2,756 and 5,564 outpatient visits, between 1,539 hospitalisations, 650 deaths and 2.5 million balboas of influenza-related costs in the upper bound. CONCLUSIONS: The wider protection offered by QIV would reduce the number of influenza infections and its related complications, leading to influenza-related costs avoided. herd effect was not taken into account, underestimating the benefits of QIV vaccination. More robust local data are needed to better assess benefits of QIV.

PIN81
PUBLIC HEALTH AND ECONOMIC BENEFITS OF QUADRIVALENT INFLUENZA VACCINATION: A COST-OUTCOMES STUDY
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OBJECTIVES: Annual trivalent influenza vaccines (TIV) containing three influenza strains (A/H1N1, A/H3N2, and one B) have been recommended in Colombia since 2007. However, we lacked evidence of the effectiveness of trivalent B lineages (Victoria and Yamagata) and difficulties in predicting which lineage will predominate in the next season have led to the development of quadrivalent influenza vaccines (QIV) including both B lineages. We estimate the hypothetical impact of QIV compared with TIV over seven influenza seasons (2009 pandemic year excluded) using virologic circulation, vaccine coverage, vaccine effectiveness and attack rate. In absence of B-lineage distribution in Panama, Brazilian data was considered. The QIV included influenza-related costs (hospitalisations, deaths), two sets of inputs were used. Influenza-related costs were estimated from societal perspective in Panamanian balboas (1 per US dollar). RESULTS: Over the 2006-2013 period, QIV would have prevented 7,519 influenza B cases compared with TIV, averting between 2,756 and 5,564 outpatient visits, between 28 and 2,026 hospitalisations and between 6 and 930 deaths. This translates into influenza-related avoided costs of between 137 and 3,599 thousand balboas. In 2012, year with high B attack rate and mismatch, QIV would have avoided 5,256 cases compared with TIV, averting between 2,756 and 5,564 outpatient visits, between 1,539 hospitalisations, 650 deaths and 2.5 million balboas of influenza-related costs in the upper bound. CONCLUSIONS: The wider protection offered by QIV would reduce the number of influenza infections and its related complications, leading to influenza-related costs avoided. Herd effect was not taken into account, underestimating the benefits of QIV vaccination. More robust local data are needed to better assess benefits of QIV.