COST AND QUALITY OF LIFE ISSUES ASSOCIATED WITH PROTEASE INHIBITOR-BASED COMBINATION THERAPY FOR THE TREATMENT OF HEPATITIS C CARTER J, GAO X, STEPHONS J, ROUX V, HAIDER S
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OBJECTIVES: To systematically analyze the literature to assess the economic and health-related quality of life (HRQoL) impact of adverse events (AEs) related to the addition of protease inhibitors (PI) to standard of care (SOC) for the treatment of hepatitis C (HCV). METHODS: A literature search (2000-Present) was conducted to identify and analyze clinical trials for PI triple therapy (PI-T = PI + SOC) and SOC (PEGIFN/RBV for 48 weeks). HRQoL and safety data were synthesized by study design, sample characteristics, and AEs. Economic and resource use data were synthesized in an economic analysis of AEs in PI-T vs. SOC. Costs (2009) were derived from published literature. RESULTS: Twenty-three SOC and 7 PI-T trials were identified. Statistically significant (p < 0.05) changes from baseline were most often seen in trials of SOC in the following domains: vitality, depression, physical limitations, and fatigue. The following 4 PI-T related AEs could be linked to HRQoL domains: anemia and depression were linked to fatigue and vitality, and headache and rash were linked to physical limitations. In terms of economic impacts, the costs to manage a PI-T related episode of anemia, depression, diarrhea, and rash were $4825, $2837, $566, and $633, respectively. The average AE cost in PI-T ranged from $1732 to $3778. Corresponding costs in SOC ranged from $1608 to $2229. The treatment costs of PI-T related AEs were 30% (range 8-40%) higher than the cost of treating SOC related AEs. CONCLUSIONS: The costs to manage PI-T related AEs appear higher than the costs of SOC related AEs. Since PI-T is associated with higher AE rates, it can also be expected to result in worse HRQoL. Gaps in symptom burden assessment with existing instruments also exist. Future studies should incorporate the economic burden of AEs and the appropriate use of HCV-validated instruments to capture potential HRQoL differences among treatment strategies.

IMPACT OF MMRV MASS VACCINATION WITH OR WITHOUT A CATCH UP PROGRAM ON THE INCIDENCE OF VARICELLA COMPLICATIONS IN FRANCE QUERENS M*, LITTLEWOOD K*, SOUZA C*, TEBIAR A*, ALAVI S*, DENIS P*, BOUILL P** (Mapi Value, Houten, The Netherlands; 2GlaxoSmithKline Biologicals, Rixensart, Belgium; 3Laboratoire GlaxoSmithKline, Marly le Roi, France; 4French National Reference Center, Limoges, France; 5CHU Dupuytren, Limoges, France; 6Université Pierre et Marie Curie, Paris, France)

OBJECTIVES: Varicella complications place a large burden on health care resources, however varicella is preventable with mass vaccination with MMRV. The impact on complications of three MMRV programs were explored. METHODS: An age-stratified dynamic model compared natural and breakthrough varicella following mass vaccination, to current cases. Age-specific complication rates (neurologic, cutaneous, pulmonary, other) were applied per case. MMRV replaced 80% of MMR over 1 year (basecase) compared to 100% of MMR with a catch-up in 11-13 year-olds (‘catch up’). In an ‘optimal’ scenario, MMR coverage increased from 95% to 96% (1st dose) and 60% to 90% (2nd dose), MMR replaced 100% MMR within 1 year with a catch-up in 10 year-olds. RESULTS: MMRV decreased varicella incidence among 10-14 year-olds, however, many post-vaccination cases were breakthrough cases, believed to be milder and require less resource use. Prior to MMRV: highest varicella incidence (per million-person-years of total population) was among 1-4 year-olds (7,482 cases), with 355 complications (age-specific complication rate: 4.75%). Bascase: highest incidence among 10-14 year-olds (907 natural, 633 breakthrough), with 54 complications (age-specific rate: 3.53%); 85% lower versus 1-4 year-olds. ‘Catch-up’: highest incidence among 15-24 year-olds (161 natural, 398 breakthrough), with 49 complications (age-specific rate: 8.82%); 86% lower versus 1-4 year-olds. ‘Optimal’: highest incidence among 15-24 year-olds (22 natural, 80 breakthrough), with 9 complications; 97.5% lower versus 1-4 year-olds. Assuming breakthrough cases have 10% of complications of natural cases, the incidence in the basecase, catch-up and optimal scenarios are 3.4, 1.8 and 0.5 cases per million-person-years respectively. Complications per age group are: 90% in older age groups, the reduction in varicella cases significantly reduced the incidence of complications. The ICER remained below €16,000 (direct costs). CONCLUSIONS: Mass varicella vaccination is predicted to significantly reduce varicella and complication cases. As many vaccine era cases will be breakthrough, burden to patients and health care systems may be further reduced.

HOW LONGITUDINAL PATIENT RECORDS CAN HELP PUBLIC HEALTH AUTHORITIES IN THE MANAGEMENT OF RAPIDLY GROWING EPIDEMICS: THE EXPERIENCE OF FLU A/H1N1 IN FRANCE TOUSI M, PERTUS D, ANTONIO M, ROBAIN M
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OBJECTIVES: In the context of an epidemic, public health authorities need to have real time information of the disease propagation to make appropriate public health decisions. We present our experience in using centralized electronic patient records in the early detection and follow-up of Flu A/H1N1 epidemic in France. METHODS: We used Longitudinal Patient Data (LPD), which is a dynamic centralized database of more than 1.3 million anonymous patient records uploaded regularly by a network of 1,300 representative general practitioners and pediatricians in France. The trends of seasonal influenza, Flu A/H1N1 and flu-like syndrome diagnoses are traced and compared with the reports published by Sentinel Network, a group of trained physicians, who report on LPD. RESULTS: The trends of seasonal influenza, Flu A/H1N1 and flu-like syndrome obtained from LPD data show a very close similarity with those published by Sentinel Network (Pearson’s correlation coefficient = 0.97). The seasonal pattern of the incidence of influenza and flu-like syndrome were less similar, as compared between 2009 and 2008 reports. CONCLUSIONS: The LPD data can be explained by an over declaration of all kinds of flu by the doctors during the second half of 2009. There was also a close similarity between seasonal Flu, approved Flu A/H1N1, and flu-like syndrome trends with a peak incidence in late November 2009. CONCLUSIONS: The LPD data matched very closely the results published by the