

OBJECTIVE: There are no pharmacoeconomic studies performed to date comparing voriconazole and liposomal Amphotericin B (LAB) for the treatment of systemic fungal infections. The aim of this study was to perform an economic evaluation of voriconazole versus LAB for the treatment of invasive aspergillosis and candidiasis. **METHODS:** A cost-minimization analysis was performed from the hospital perspective in 2005, as the same efficacy was assumed. A systematic review of available literature was performed between 1996 and 2005, in order to obtain the efficacy and incidence of drug-related adverse events (AE) for each treatment group. Duration of treatment (intravenous: 15.42 days; oral: 4.49 days; the same for both treatments) and mean weight of patients (68.6 Kg) were obtained from a local study: The Fungcost study (Peiro S. Value Health 2002;5:564). Only direct costs per episode were considered; medications (iv and oral) at their hospital selling prices; the cost of monitoring AE; and administration costs (obtained from a national cost database). Voriconazole was the oral treatment in both groups. The most important AE for each treatment (and the way to monitor them) were: hepatotoxicity with voriconazole –13.97%—(two chemistries and hematologic tests during the treatment period); and nephrotoxicity with LAB –12.84%—(a daily creatinine clearance measurement). Mean cost per episode and incremental cost were calculated. **RESULTS:** Mean cost per episode was €6073.43 (iv treatment 94.22%) for voriconazole, and €8794.33 (iv: 95.78%) for LAB in the treatment of invasive aspergillosis, with an incremental cost of €2486.90 (28.28%). The treatment of candidiasis showed a mean cost of €6307.43 (iv: 94.22%) and €8779.92 (95.93%), respectively, with an incremental cost of €2472.48 (28.16%). Results were robust to the sensitivity analysis. **CONCLUSION:** Using costs and treatment patterns of fungal infections in Spain, voriconazole is more cost-effective than LAB for the treatment of invasive candidiasis and aspergillosis.

PIN28

RESOURCE USE AND COSTS ASSOCIATED WITH THE MANAGEMENT OF PAP III, PAP IIID AND PAP IV IN THE PRE-HPV VACCINE ERA IN GERMANY

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OBJECTIVE: Human Papillomavirus infection is the principal cause of cervical cancer and most cervical neoplasia. Despite available screening and treatment, cervical cancer remains an important public health problem. HPV vaccination studies have shown high efficacy against HPV-induced cervical lesions. Prior to implementing a vaccination programme, data about cervical dysplasia and annual treatment costs are critical. This study assessed resource use and costs for Pap III, IIID and IV patients in Germany. **METHODS:** A one-year retrospective chart review of 138 patients, diagnosed with Pap III, IIID or IV between February–March 2004, was conducted to assess clinical and resource use. Resources included consultations, medications, procedures, diagnostics, adverse events and hospital stays. Unit costs from official sources were applied to calculate the average cost per patient. **RESULTS:** Most patients had Pap IIID (n = 79) vs. Pap III (n = 27) or Pap IV (n = 32). Mean duration of treatment was 4.4, 5.5, and 4.9 months for Pap III, IIID and IV respectively. Pap IIID patients had on average 4.6 gynaecologist consultations vs. 4.2 and 5.6 for Pap III and IV respectively. Most common diagnostic tests were Pap-smears (99%) and col-

poscopy (in 89%, 73% and 75% of Pap III, IIID and IV). Typically, patients were treated by conisation (in 22%, 27% and 84% of Pap III, IIID and IV). More Pap IV patients had hysterectomies (22% vs. 4% for Pap III) and laser coagulation (12.5% vs. 4% for Pap IIID). 33% of the patients were hospitalised (mean 7.4 ± 8.3 days). The estimated average annual cost per patient was €1070, €955 and €3240 for Pap III, IIID and Pap IV, including 40% indirect costs. **CONCLUSION:** The cost of managing pre-cancerous cervical lesions in Germany is high. An HPV vaccine preventing many of these lesions could avert much of these costs.

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ESTIMATED ANNUAL NHS COSTS OF HUMAN PAPILLOMAVIRUS (HPV) RELATED DISEASES IN THE UK

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OBJECTIVE: Human Papillomavirus (HPV) is the main cause of genital warts (GWs) and a necessary cause of cervical cancer (CC). There is a lifetime HPV infection risk in women of 55–75%. Genitourinary Medicine (GUM) clinics and CC screening programmes help in the detection and treatment of GWs and deceleration of progression to cancerous lesions. This study estimated the annual National Health Service (NHS) costs of diagnosing and managing HPV related diseases in a pre-HPV vaccine era. **METHODS:** Data for first and recurrent GWs episodes were obtained from the Health Protection Agency and management pathways from GUM clinicians. The number of women screened for CC, results, and procedures undertaken for abnormal findings were obtained from a variety of sources (e.g., Government Statistical Service, Regional Screening Programmes; adjusted to 2003). Annual new cases of CC were obtained from GLOBOCAN, 2002. Resource costs (2003) included screening tests, clinician visits, diagnostic and treatment procedures, hospital admissions and drugs. Sensitivity analyses examined the range of treatment patterns and costs. **RESULTS:** In 2003, GUM clinics treated almost 114,000 patients with GWs. Topical creams were the first line treatment for the majority (77%) followed by cryotherapy or combination of the two. An average 26% of patients returned to complete their treatment. Total annual costs for GWs were £22.4 million. In 2003, 4.8 million CC screening tests were conducted at a cost of £104.5 million. Over 227,209 women were referred for colposcopy, costing £34 million for the diagnosis and treatment of precancerous lesions. Newly identified CC cases (N = 3308) and hospital admissions for prevalent CC cases in 2003 cost £43.7 million. Estimated total 2003 NHS costs related to HPV were £204.6 million (range: £181.3–£209.7 million). **CONCLUSION:** Preventing HPV related diseases through vaccination with a quadrivalent vaccine could result in cost offsets and more efficient resource allocation.

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INCIDENCE, PREVALENCE AND COSTS OF TREATING GENITAL WARTS IN THE PRE-HPV VACCINE ERA IN GERMANY, 2005

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OBJECTIVES: Human Papillomavirus (HPV) infections, including genital warts (GW), are common. Current treatments are not