
OBJECTIVES: Two human papillomavirus (HPV) cervical cancer (CC) vaccines are currently available: a bivalent HPV-16/18 vaccine and a quadrivalent HPV-6/11/16/18 vaccine. The quadrivalent vaccine has an additional effect against genital warts, while the other offers broader protection against oncogenic non-vaccine types (cross-protection). The annual cost-consequences of both vaccines on HPV-related morbidity (i.e., abnormal pap smears, CIN1, CIN2/3 lesions, CC and genital warts) were evaluated within three European countries: Italy, UK and the Netherlands. METHODS: A static population model was developed in Excel®. The two vaccines differ in cross-protection level based on the latest results from clinical trials using, for both, the HPV naive population (without current or past HPV infection) and country specific HPV-type distribution in each related lesion. Costing was performed from a health care perspective and obtained from published sources and official tariff data. No discounting was applied as results are reported over one year after reaching steady state. RESULTS: The more cross-protection observed with the bivalent vaccine leads to an additional reduction in 9,510, 22,189, and 781 abnormal pap smears respectively in Italy, UK and the Netherlands; 275, 22,951, and 184 CIN1; 1,479, 8,693, and 833 CIN2/3; and 345, 142, and 28 CC cases while the quadrivalent vaccine results in 23,510, 50,324, and 2,983 genital warts cases prevented per year. More cost was saved with the bivalent compared with the quadrivalent vaccine and the amount per country per year was estimated at 2,719,040, 22,044,085, and 1,951,369 respectively. CONCLUSIONS: Within the Italian, the UK and the Netherlands settings the additional level of cross protection of the bivalent vaccine allows for more reduction in CC and HPV-related morbidity resulting in more cost savings that completely offset the benefit the quadrivalent vaccine has in preventing genital warts.

LOWERING ADMINISTRATION COSTS OF BEVACIZUMAB IN COMBINATION WITH PLATINUM-BASED CHEMOTHERAPY VERSUS CETUXIMAB-VINORELBINE-CISPLATIN THERAPY FOR THE TREATMENT OF METASTATIC NON-SMALL CELL LUNG CANCER (MSCLC) FOCUSING ON THREE EUROPEAN HEALTH CARE SYSTEMS

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OBJECTIVES: Bevacizumab (Bev) has been shown to increase progression free survival (PFS) when combined with cisplatin-gemcitabine (Reck 2009) and PFS and overall survival in combination with carboplatin-paclitaxel (Sandler 2006) when compared with chemotherapy (CT) alone. Cetuximab (Cet) has also improved outcomes in these patients when combined with vinorelbine and cisplatin (VinCs) (Piciri 2009). The aim of this analysis is to compare the administration costs of Bev-CT and Cet-VinCs therapy for mNSCLC patients in France, Germany, and Spain. METHODS: A systematic literature search performed in Medline, Embase, Cochrane, and Centre for Reviews and Dissemination databases identified 578 publications which included administration costs. Two independent reviewers extracted sixteen full text publications for inclusion. In addition, an evaluation of national reimbursement tariffs in both inpatient and outpatient settings was performed. Alongside this, in-depth semi-structured interviews were conducted with five expert oncologists in three countries to verify cost findings and reimbursement structures. RESULTS: For induction therapy, when comparing CetVinCs versus BevPacCarbo or BevGemCis respectively, the incremental administration cost per mNSCLC patient is an additional €450/€622/50 in France, €732/836/660 in Germany, and €960/9980 in Spain for the CetVinCs combination vs administration costs for the Bev combinations. When considering additional maintenance monotherapy the difference is €6,375/6,125 in France, €10,370/6,710 in Germany, and €5,610/6,310 in Spain with again higher costs associated with the CetVinCs combination vs the Bev combinations. Variation in cost is attributable to increased number of patient visits and disparities in reimbursement structures. CONCLUSIONS: Additional injection visits associated with CetVinCs therapy (weekly for cetuximab vs once every three weeks for Bev) are a cost driver in the treatment of mNSCLC. BevPacCarbo or BevGemCis when compared with CetVinCs offers a less often and more convenient dosing regime, while also incurring fewer administration costs.