Value for money in treating psoriasis – a systematic review of full economic evaluations of psoriasis therapies

M.P. Hamilton1, D. Ntais1, C.E.M. Griffiths2,3, L.M. Davies1

Affiliations:
1Manchester Centre for Health Economics, University of Manchester, 2Salford Royal NHS Foundation Trust, 3Manchester Centre for Dermatology Research, University of Manchester, Manchester Academic Health Science Centre, Manchester, UK

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BACKGROUND: Current therapies for psoriasis can provide effective control of symptoms but can vary significantly in price. The cost of treatment can be high so quality economic evaluations are necessary to determine if higher cost treatments are value for money.

OBJECTIVES: The aims of this review were to identify the cost-effectiveness of psoriasis care, assess the level of uncertainty and transferability of this evidence to policy and practice and identify future research needs.

METHODS: Searches of electronic databases for full economic evaluations were conducted in January 2012 and updated in April 2014. Included articles were screened, selected and critically appraised using pre-defined inclusion criteria and data extraction forms. 1,355 articles were identified and 37 papers reporting 71 comparisons met the inclusion criteria. Treatments evaluated were systemic therapies (n=45), topical therapies (n=22), phototherapies (n=14) and combination therapies (n=4).

RESULTS: Results varied widely, with the same treatments reported both as dominant (cost-saving and more effective) or highly cost-effective and as not cost effective (well above £20,000 per QALY) or dominated. The incremental cost effectiveness ratios (ICER) for topical therapies ranged between £29/clearance day to £179,439/QALY gained. For systemic, non-biologic treatment the ICERs were £483/PASI-75 to £41257/PASI-75 gained. Systemic biologic therapies ranged between £6025/PASI-75 to £42435/PASI-75 gained and £3431/QALY to £48599/QALY gained. Only phototherapy appeared to be consistently cost effective with ICERs between £3217/PASI-75 gained and £26297/QALY gained. However, this was for a limited number of evaluations. There were key methodological reasons for this uncertainty, including: (i) diversity in settings, perspectives and designs makes comparing study findings difficult; (ii) lack of high quality short and long term head-to-head effectiveness and safety comparisons; (iii) lack of evaluations of service model innovations to deliver complex packages of care for psoriasis. The evidence is dominated by indirect evaluations using comparisons of individual interventions to placebo.

CONCLUSION: Definitive, pragmatic, integrated clinical and economic evaluations of interventions are required to identify cost effective psoriasis therapies in routine practice. New research should develop co-ordinated approaches to managing psoriasis and co-morbidities and economically evaluate psoriasis therapies alone and in combination with management of co-morbidity over the lifetime course of illness. Generic measures of health (e.g. QALYs) should be used to account for treatment side effects, relapse and/or progression of psoriasis and the influence of co-morbidity. Research should also identify patient preferences and barriers/facilitators to patient adherence and response to treatment.