



Research Article

Methotrexate versus Ciclosporin in the Treatment of Severe Atopic Eczema in Children: An economic evaluation

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Plain language summary

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Eczema affects 20% of United Kingdom children, 16% of whom will experience moderate-to-severe eczema. The impact on patients' quality of life, mainly through intense itching and sleep disturbance, and the economic burden is comparable to other chronic conditions in children. This study addresses one of the treatment uncertainties identified by a James Lind Alliance group of patients, carers and health professionals: 'What is the best and safest way of using drugs that suppress the immune system when treating eczema?'

Public money available to provide health care is limited, so choices must be taken about which treatments to provide. This study sought to help inform these choices by comparing the costs and outcomes of two drug treatments (methotrexate vs. ciclosporin) for children who have severe eczema. We did this by collecting information on medication use and appointments with National Health Service services related to eczema and individuals' health-related quality-of-life for those children participating in the TREAT trial. One hundred and three children and young people aged 2–16 years were given either methotrexate or ciclosporin randomly for a 36-week treatment period with 24 weeks of further follow-up.

It is currently uncertain which drug represents best value for money for the United Kingdom National Health Service. This study shows that methotrexate and ciclosporin are similar in terms of costs (for visits/monitoring, adverse events and medications) and outcomes but that methotrexate drug costs were significantly cheaper than ciclosporin drug costs. Methotrexate was found to offer greater value for money for the National Health Service than ciclosporin over the 60 weeks, and there was low uncertainty around this. This result may help inform management guidelines for childhood eczema. In addition, the findings are particularly valuable for healthcare settings with limited financial and drug safety monitoring resources.