

Clinical effectiveness and cost-effectiveness of beta-interferon and glatiramer acetate for treating multiple sclerosis: systematic review and economic evaluation

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Plain English summary

Effectiveness of β -IFN and GA for treating MS

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Plain English summary

Multiple sclerosis (MS) causes inflammation of the nerves. It is a leading cause of disability in the UK. This study is about two types of MS. In relapsing–remitting MS (RRMS) people have relapses, or attacks of more severe illness and recovery. In clinically isolated syndrome (CIS) people have just one episode but are thought to be at high risk of developing MS.

Various treatments are available for RRMS and CIS, including different types of beta-interferons and glatiramer. We focused on these two types of drugs. In this study we looked at the clinical effectiveness and cost-effectiveness of these drugs for RRMS and CIS.

We carried out systematic reviews of randomised controlled trials. We pooled the results on relapse rates with time to worsening of the disease. We drew on a risk-sharing scheme set up by the Department of Health to collect long-term information on the disease-modifying therapies. We developed our own model for CIS.

We found that all of these drugs were clinically effective in both RRMS and CIS. The studies were at high risk of bias and had short follow-up times. As a whole, these drugs were not cost-effective for RRMS. We found that glatiramer was the most cost-effective option for CIS.

We think that longer-term research is needed that compares these drugs with each other. A review of qualitative studies is also needed so that we can understand more about the preferences and experiences of people living with MS.

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