

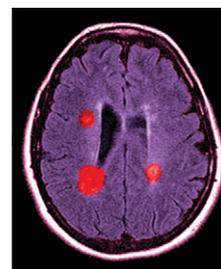
## Alemtuzumab for multiple sclerosis

*The Lancet* today publishes a pair of phase 3 trials, evaluating the efficacy and safety of the anti-CD52 monoclonal antibody alemtuzumab for a 2 year period in patients with multiple sclerosis. Alemtuzumab is licensed to treat leukaemia, and has been used off-label in patients with multiple sclerosis for many years. These trials have been keenly awaited by clinicians and patients wishing to establish evidence for this practice.

The results are encouraging: compared with an established and widely used first-line treatment—interferon beta 1a—alemtuzumab was found to significantly reduce relapse rate not only in previously untreated patients with relapsing-remitting multiple sclerosis, but also in those who had relapsed despite first-line treatment. Notably, in the latter group, the risk of sustained accumulation of disability was also decreased. The efficacy of alemtuzumab, as with all drugs, comes with a price of adverse events: in these studies, they include infusion-associated reactions, infections, and autoimmune diseases—mainly thyroid disorders but also immune thrombocytopenia, both of which require careful monitoring and management.

Alemtuzumab has been developed and commercialised in multiple sclerosis by one of the sponsors of these trials—Genzyme (a Sanofi company). Genzyme recently withdrew the drug from the USA and European Union, and submitted applications for approval in relapsing multiple sclerosis treatment from the US Food and Drug Administration and the European Medicines Agency. However, there is concern that with a licence for multiple sclerosis, the cost of alemtuzumab could rise and might become too expensive for many patients (and health systems). Additionally, discontinuation of the supply might result in patients with multiple sclerosis, who have already started treatments, not being able to get their vital second course.

Multiple sclerosis runs a chronic and progressive course, eventually disabling many patients. More effective, affordable, evidence-based treatments with long-term benefits are desperately needed. Finding promising treatments such as alemtuzumab is important. But so is keeping alemtuzumab accessible and affordable if its early success in these trials proves to be of enduring value. □ *The Lancet*



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