INTRODUCTION
Therapeutic biologicals are widely used for the long-term treatment of cancer and autoimmune diseases. Because of their protein nature, they are usually administered parenterally, mainly intravenously (IV) or intramuscularly (IM). On IV administration, the response is rapid, but can be associated with pronounced toxicity and activity tapers off rapidly. A depot effect is achieved on IM administration, but this delayed response is limited, necessitating frequent injections. A delayed release formulation which maintains drug levels constantly over a prolonged period is therapeutically desirable.

INVENTION
The invention relates to the use of a novel implant formulation, for subcutaneous insertion, which releases the protein drug slowly from the implant, but maintains the stability of the therapeutic protein drug. The implant formulation offers the possibility of regulating the bioavailability of biologicals, thereby reducing their toxicity and obviating the need for frequent injections.

MARKET POTENTIAL
The invention can be applied to the administration of protein drugs for a wide variety of chronic indications, particularly autoimmune disorders.

DEVELOPMENT STATUS
The stability and release properties of the implant formulation have been demonstrated in vitro. The release of formulated drug has also been shown in experimental studies in rodents.

REFERENCE