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(54) Title: METHODS AND COMPOSITIONS FOR THERAPIES USING GENES ENCODING SECRETED PROTEINS SUCH AS INTERFERON–BETA

(57) Abstract

Methods and pharmaceutical compositions for modifying cells of a mammalian recipient with DNA encoding a secreted protein such as human interferon in situ are provided. The methods include forming a secreted protein expression system in vivo or ex vivo and administering the expression system to the mammalian recipient. The expression system and methods are useful for the localized and systemic delivery of interferons in situ.