

Technology: [Biomarkers for predicting response to immunosuppressive therapy](#)

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Abstract

The subject invention concerns methods and materials for assessing a patient's likelihood of responsiveness to an immunosuppressive therapy. The subject invention is contemplated for use with patients having an autoimmune disorder. In an exemplified embodiment, the methods of the invention are used for assessing and/or treating a patient with MDS. In one embodiment, a method of the invention comprises analyzing T cells of a patient for dysregulation of CD4.sup.+ and/or CD8.sup.+ T cell subsets, and determining the patient's likelihood of responsiveness to IST based on the level of dysregulation of the patient's CD4.sup.+ and/or CD8.sup.+ T cell subsets. In one embodiment, an increased likelihood of patient responsiveness to IST is associated with an increased percentage of CD4.sup.+ and/or CD8.sup.+ effector memory T cells and/or terminal effector memory T cells for a patient. The subject invention also concerns methods for treating a patient with an autoimmune disorder, such as MDS. In one embodiment, a method of the invention comprises determining if a patient is likely to respond to IST, wherein said determination is made using a method of the present invention for assessing likelihood of responsiveness to IST; and if the patient is determined to be one likely to respond to IST, administering an effective regimen of IST to the patient.