ABSTRACT
To evaluate the effects of photobiomodulation (PBM) on IL-10 expression in individuals with relapsing-remitting multiple sclerosis, a clinical trial was performed. Participants were randomized and then collected 10 mL of peripheral blood. IL-10 was analyzed by BioLegend ELISA Standard MAX ™ kit. This is an enzyme linked immunosorbent assay (ELISA). A human IL-10 specific mouse monoclonal antibody is first coated in a 96-well plate. Standards and samples are added to the wells and IL-10 binds to the immobilized capture antibody. Then, a biotinylated mouse monoclonal IL-10 detection monoclonal antibody is added, producing an "antibody-antigen-antibody sandwich". Horseradish perididase avidin is then added, followed by TMB Substrate Solution, producing a blue color in proportion to the concentration of IL-10 present in the sample. Finally, the Stop Solution alters the reaction color from blue to yellow, and the microwell absorbance is read at 450 nm with a microplate reader.

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KEYWORDS
IL-10, multiple sclerosis, ELISA
The complete list of reagents and plastic can be found in the 'Materials' section.

MATERIALS TEXT

**MATERIALS**

- **PBS pH 7.4** Contributed by users
- **ELISA MAX™ Standard Sets** Contributed by users Catalog #430601
- **Microwell plates** PENSABIO Catalog #423501
- **Coating Buffer** BioLegend Catalog #421701
- **Wash Buffer** BioLegend
- **TMB Substrate Solution** BioLegend Catalog #421101
- **Stop Solution** BioLegend
- **Assay Diluent** BioLegend