An electric field is a field of force. Electric fields surround all charged objects. An electric field exerts forces on other charged objects within it.

Cellular proteins such as tubulin are strongly affected by Tumor Treating Fields because they are highly polar, containing both positive and negative charges. During cell division, tubulin must position itself in a particular way in order for the cell to divide. Tumor Treating Fields exerts forces on tubulin, preventing it from moving to its correct locations and disrupting cancer cell division.

Tumor Treating Fields uses alternating electric fields specifically tuned to target cancer cells. Once the electric fields enter the cancer cell, they attract and repel charged proteins during cancer cell division.

Tumor Treating Fields does not stimulate or heat tissue and targets dividing cancer cells of a specific size. Tumor Treating Fields causes minimal damage to healthy cells. Mild to moderate skin irritation is the most common side effect reported.

Sources