

Melanoma Cells: Ruta Limits Growth and Spread

Highlights

- Ruta graveolens in a 9C potency appears to hinder the growth and restrict the spread of melanoma.
- Ruta, also known by its common names of rue or herb-of-grace, is grown in many gardens as an ornamental plant.
- As a homeopathic remedy, Ruta is used for joint and connective tissue problems but recent research indicates that in a 9C potency it may also improve patient survival by hindering the growth and spread of melanoma cells.
- This remarkable effect was demonstrated in living cells (in vivo) and in triplicate within the laboratory plates and tubes (in vitro).
- Melanoma is an aggressive form of cancer that grows rapidly and spreads quickly. While it only makes up 4% of skin cancers it causes 80% of deaths.
- Melanoma continues to evade conventional anti-melanoma treatments while the severe adverse events from those treatments often cause patients to stop them.
- An innovative approach to melanoma treatment that hinders cellular growth and spread while avoiding side-effects would likely improve patient tolerance to therapy and improve quality of life.
- Ruta graveolens in homeopathic potencies may do that.



Homeopathic Ruta graveolens (Ruta.) may be a useful complementary treatment for melanoma.

Authors

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Abstract

Cutaneous melanoma is a cancer with a very poor prognosis mainly because of metastatic dissemination and therefore a deregulation of cell migration. Current therapies can benefit from complementary medicines as supportive care in oncology. In our study, we show that a dynamized ultra-low dilution of *Ruta Graveolens* leads to an *in vitro* inhibition of migration on fibronectin of B16F10 melanoma cells, as well as a decrease in metastatic dissemination *in vivo*.

These effects appear to be due to a disruption of plasma membrane organization, with a change in cell and membrane stiffness, associated with a disorganization of the actin cytoskeleton and a modification of the lipid composition of the plasma membrane.

Together, these results demonstrate, in *in vitro* and *in vivo* models of cutaneous melanoma, an anti-cancer and anti-metastatic activity of ultra-low dynamized dilution of *Ruta graveolens* and reinforce its interest as complementary medicine in oncology.

Full Research Paper: [Dynamized ultra-low dilution of *Ruta graveolens* disrupts plasma membrane organization and decreases migration of melanoma cancer cell](#)

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