

Biological Activity: Crocetin and TSC

Transcrocetin sodium belongs to a group of compounds known as oxygen diffusion-enhancing compounds.¹ It can increase the movement of oxygen from red blood cells into hypoxic tissues.²

Many studies, carried out in animal models and in clinical trials in humans, indicated that transcrocetin sodium might prove beneficial in the treatment of a variety of conditions associated with hypoxia and ischemia (a lack of oxygen reaching the tissues, usually due to a disruption in the circulatory system), including cancer, myocardial infarction (heart attack), and stroke.¹⁻⁵

In a clinical trial transcrocetin sodium has shown promise of effectiveness in restoring tissue oxygen levels and improving the ability to walk of patients with peripheral artery disease (PAD)⁴ in which reduced delivery of oxygen-rich blood to tissues can cause severe leg pain and impair mobility. The drug has also been under investigation in a clinical trial sponsored by drug developer *Diffusion Pharmaceuticals Inc.* for potential use as a radiosensitizer, increasing the susceptibility of hypoxic cancer cells to radiation therapy, in patients with glioblastoma.⁵

References

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