





in amputation. The present study aimed to enhance wound healing and evaluate collagen synthesis through the development of an ointment incorporating herbal formulations and silver nanoparticles synthesized using rosemary extract via a green synthesis approach with an eucerin base. The morphology of the synthesized nanoparticles was characterized using scanning electron microscopy (SEM), confirming optimal shape and distribution under the selected conditions.

In the in vivo study, male Syrian mice were rendered diabetic by streptozotocin administration and compared with a control group. Following anesthesia and the creation of dorsal wounds, the treatment groups received daily applications of the formulations for 21 days. On day 7, biopsies were collected, and collagen content was quantified using a hydroxyproline assay kit. Statistical analysis revealed that the group treated with the rosemary extract silver nanoparticle formulation exhibited a significantly higher wound closure rate compared to the other treatment groups and the control. .