# Article information:

Dual growth factor releasing multi-functional nanofibers for wound healing - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S1742706113003784?via%3Dihub>

# Article summary:

1. This research aims to develop a dual growth factor-releasing nanoparticle-in-nanofiber system for wound healing applications.

2. The nanofibers are composed of chitosan and poly(ethylene oxide) and contain VEGF and PDGF-BB encapsulated in poly(lactic-co-glycolic acid) nanoparticles.

3. In vitro and in vivo studies have shown that the nanofibers accelerate wound healing by promoting angiogenesis, increasing re-epithelialization, controlling granulation tissue formation, and increasing collagen deposition.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

This article is generally reliable and trustworthy as it provides evidence from both in vitro and in vivo studies to support its claims. The authors provide detailed descriptions of the materials used in their experiments, as well as the methods employed to test their hypothesis. Furthermore, they provide evidence from a preliminary study on normal full thickness rat skin wound models which demonstrates that their nanofiber/nanoparticle scaffolds significantly accelerated the wound healing process compared to a commercial wound dressing.

The article does not appear to be biased or one-sided, as it presents both sides of the argument fairly and objectively. It also does not appear to contain any promotional content or partiality towards any particular product or company. Additionally, the authors note possible risks associated with their proposed treatment method such as potential toxicity due to high concentrations of growth factors released from the nanofibers.

The only potential issue with this article is that it does not explore any counterarguments or alternative treatments for wound healing that may be available. However, this is understandable given the scope of this particular research paper which focuses solely on the development of a dual growth factor releasing nanoparticle-in-nanofiber system for wound healing applications.

# Topics for further research:

* Alternative treatments for wound healing
* Nanoparticle-based wound healing
* Growth factor releasing scaffolds
* In vitro wound healing studies
* In vivo wound healing studies
* Toxicity of growth factors in wound healing

# Report location:

<https://www.fullpicture.app/item/380be917e7f41498e9c89a806bf847f1>