# Article information:

Lymphatic vessels in bone support regeneration after injury - PubMed  
<https://pubmed.ncbi.nlm.nih.gov/36669473/>

# Article summary:

1. Lymphatic vessels are present in both mouse and human bones.

2. VEGF-C/VEGFR-3 signaling and genotoxic stress-induced IL6 drive lymphangiogenesis in bones, which is critical for hematopoietic and bone regeneration.

3. Expansion of lymphatic vessels and mature cells in response to genotoxic stress is impaired in aged animals, suggesting lymphangiogenesis as a therapeutic avenue to stimulate hematopoietic and bone regeneration.

# 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:

The article “Lymphatic Vessels in Bone Support Regeneration After Injury” is a well-researched piece that provides an overview of the role of lymphatic vessels in bone regeneration after injury. The authors have used high-resolution light-sheet imaging and cell-specific mouse genetics to demonstrate the presence of lymphatic vessels in mouse and human bones, as well as their expansion during genotoxic stress. Furthermore, they have discussed the importance of VEGF-C/VEGFR-3 signaling and genotoxic stress-induced IL6 for lymphangiogenesis, as well as the role of CXCL12 from proliferating lymphatic endothelial cells for hematopoietic and bone regeneration. The article also highlights how expansion of lymphatic vessels and mature cells in response to genotoxic stress is impaired in aged animals, suggesting that stimulating lymphangiogenesis could be a potential therapeutic avenue for stimulating hematopoietic and bone regeneration.

The article appears to be reliable overall; it has been published by Elsevier Inc., which is a reputable publisher with rigorous peer review processes, ensuring that only quality research is published on its platform. Furthermore, the authors have provided detailed evidence from their experiments to support their claims throughout the article, making it clear that they have conducted thorough research before drawing any conclusions or making any recommendations. Additionally, they have also provided references to other relevant studies at the end of the article, further strengthening its credibility.

In conclusion, this article appears to be trustworthy and reliable overall; however, it should be noted that further research may be needed to confirm some of its findings before any definitive conclusions can be drawn or recommendations made based on them.

# Topics for further research:

* Lymphangiogenesis
* VEGF-C/VEGFR-3 signaling
* Genotoxic stress-induced IL6
* CXCL12 from proliferating lymphatic endothelial cells
* Hematopoietic regeneration
* Bone regeneration therapy

# Report location:

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