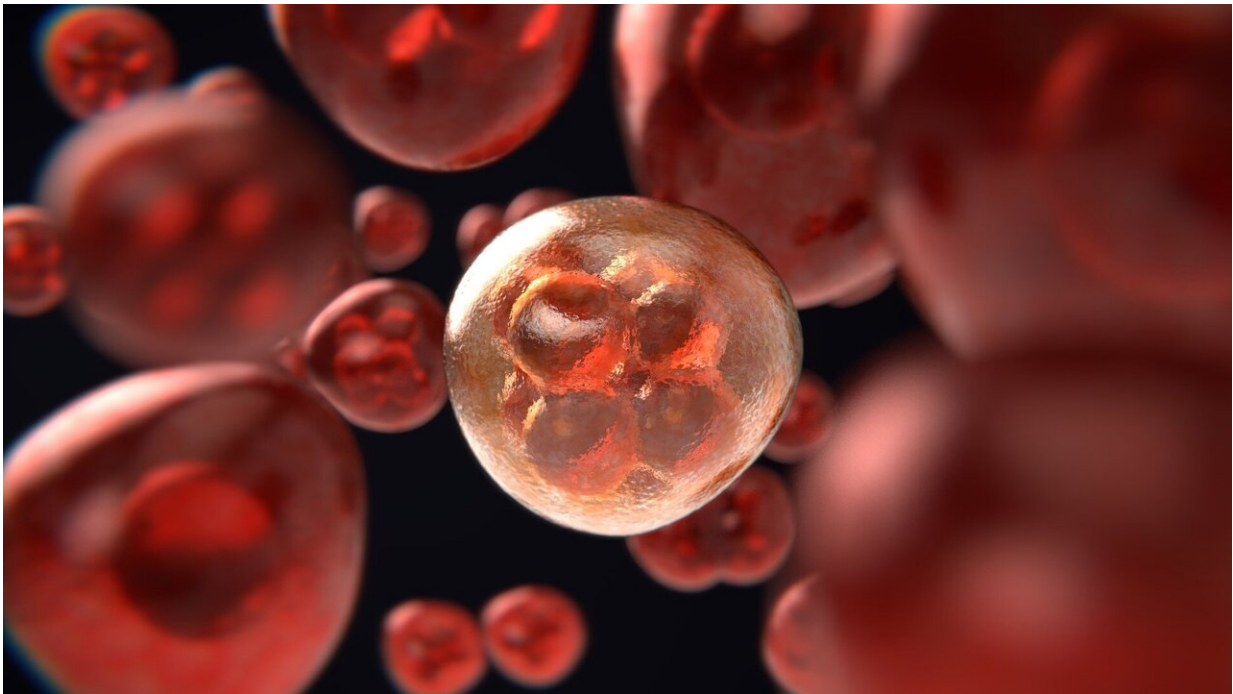


Cancer-associated fibroblasts: Challenges and opportunities

April 5 2023



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A new editorial perspective titled "Cancer-associated fibroblasts: challenges and opportunities" has been published in *Oncotarget*.

Cancer-associated fibroblasts (CAFs) are a type of cell that plays a key role in the [tumor microenvironment](#). While these cells have been extensively studied, their precise role in [cancer development](#) and

progression is still not fully understood.

In this new editorial perspective, researchers Hossein Tavana and Gary D. Luker from The University of Akron and the University of Michigan provide a comprehensive overview of CAFs, including the origins, characteristics, heterogeneity, and functions of CAFs, as well as CAFs in the detection and treatment of cancer.

The authors suggest that a deeper understanding of cancer-associated fibroblasts is crucial for the development of effective cancer therapies. They note that these cells are involved in a variety of important processes, including [tumor growth](#), angiogenesis and immune evasion. However, targeting cancer-associated fibroblasts has proven to be a challenging task, in part because of their complex and multifaceted nature.

Despite these challenges, the researchers are optimistic about the future of research into CAFs. They note a number of studies targeting cancer-associated fibroblasts in emerging therapies. The authors conclude by emphasizing that a deeper understanding of cancer-associated fibroblasts and the tumor microenvironment could ultimately lead to the development of personalized therapies that are tailored to the unique characteristics of each patient's cancer.

"Delineating cross-talk of CAFs with [cancer cells](#) and other [stromal cells](#), uncovering the role of CAFs in resistance to chemotherapies and immunotherapies, addressing challenges associated with CAFs heterogeneity to develop CAFs subtype-targeted therapies in the context of specific tumor types, and addressing the potential toxicity of such therapies especially when combined with other treatments will expedite the ongoing efforts for the translation of therapies against CAFs," note the researchers.

More information: Hossein Tavana et al, Cancer-associated fibroblasts: challenges and opportunities, *Oncotarget* (2023). [DOI: 10.18632/oncotarget.28385](https://doi.org/10.18632/oncotarget.28385)

Provided by Impact Journals LLC

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