SignaBlok’s first-in-class therapeutics and diagnostics open new avenues for targeted treatment and diagnosis of cancer, arthritis, sepsis, retinopathy, and atherosclerosis

SignaBlok, Inc. is a privately held biotech company based in Massachusetts and focused on the development and commercialization of first-in-class, novel targeted therapies and diagnostics for cancer, arthritis, retinopathy, sepsis, and atherosclerosis using the company’s own intellectual property.

SCHOOL Peptide Therapeutics

SignaBlok’s model of cell signaling, the Signaling Chain HOMoOLigomerization (SCHOOL) model, explains for the first time the mechanisms of transmembrane signal transduction mediated by immune receptors. This discovery has led to a novel approach to modulation of receptor signaling and enables the rational design of new, receptor-specific inhibitory peptides (SCHOOL peptides) for therapeutic purposes.

The inhibitory SCHOOL peptides mimic the structures found in nature, employ novel, ligand-independent mechanisms of action, possess unique and beneficial properties and can be used alone or in combination with other therapies. These peptides are non-immunogenic, non-toxic, simple and cheap to manufacture.

Integrated Nanosystems for Targeted Delivery

SignaBlok is developing multifunctional nanosystems for targeted delivery of SCHOOL peptides as well as other drugs and/or imaging agents to macrophages with applications in diagnosis and treatment of cancer, arthritis, retinopathy, sepsis, atherosclerosis, and other diseases with unmet clinical needs.

Company Milestones

2009 • Company founded
• Business model developed
2010 • IP developed and filed
2012 • Animal proof-of-concept:
  – sepsis prevention and treatment
  – targeted drug delivery
• Partnership with the UT Southwestern Medical Center on cancer cachexia
2013 • Animal proof-of-concept:
  – lung cancer treatment
  – early diagnosis of atherosclerosis
• US patent for novel peptide therapies
2014 • Partnership with the UMass Medical School on atherosclerosis
2015 • Animal proof-of-concept:
  – rheumatoid arthritis treatment
2016 • Animal proof-of-concept:
  – pancreas cancer treatment
  – retinopathy treatment
• Partnership with the Augusta University on retinopathy
2017 • Animal proof-of-concept:
  – liver disease treatment
• Partnership with the UMass Medical School on liver diseases
2018 • Partnership with the Feinstein Institute for Medical Research on glioblastoma multiforme

Contact Us

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Fact Sheet
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Targeted Treatment and Diagnosis of Inflammation:
Cancer, Sepsis, Arthritis, Retinopathy & Atherosclerosis