LIGA PROTI RAKOVINĚ

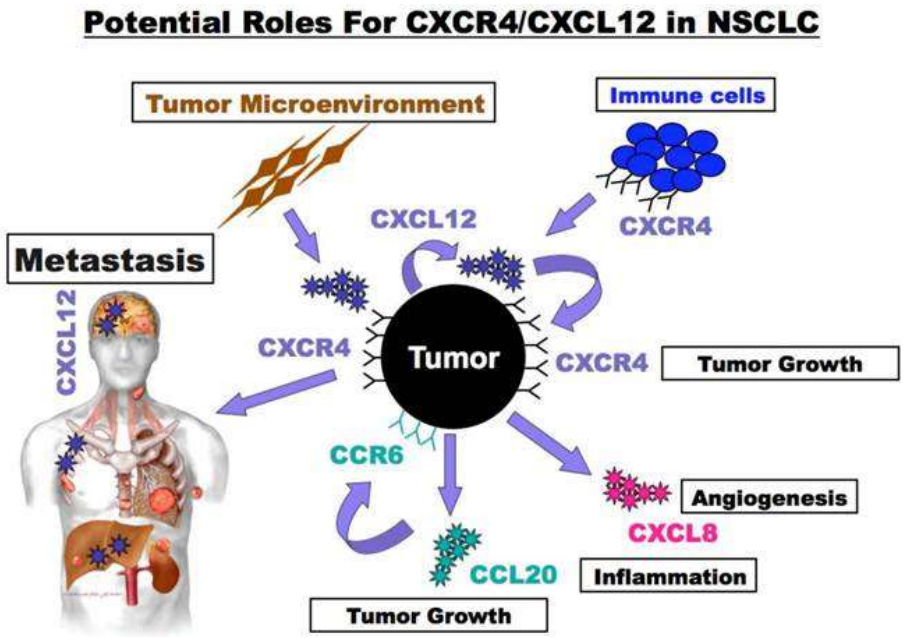
Laboratoř Metalomiky a Nanotechnologií

Vás zve na přednášku Ligy proti rakovině Praha:

Nanotechnologické nástroje v teranostice karcinomů plic

Mgr. Zbyněk Heger

The drugs/strategies to selectively inhibit tumor blood supply have generated interest in recent years for enhancement of cancer therapeutics. The objective of this study was to formulate tumor homing PEGylated CREKA peptide conjugated theranostic nanoparticles of DIM-C-pPhC6H5 (DIM-P) and investigate in vivo antitumor activity as well as evaluate the targeted efficiency to lung tumors using imaging techniques. DIM-P loaded Nanoparticles (NCs-D) were prepared using lipids, and DOGS-NTA-Ni and the surface of NCs-D were modified with PEGylated CREKA peptide (PCNCs-D). PCNCs-D showed 3 fold higher binding to clotted plasma proteins in tumor vasculature compared to NCs-D. PCNCs-D showed 26%±4% and 22%±5% increase in tumor reduction compared to NCs-D in metastatic and orthotopic models respectively. In-vivo imaging studies showed ~40 folds higher migration of PCNCs-Di in tumor vasculature than NCs-Di. Our studies demonstrate the role of PCNCs-D as theranostic tumor homing drug delivery and imaging systems for lung cancer diagnosis and treatment. Nanomedicine. 2014 Jul;10(5):1053-63. doi: 10.1016/j.nano.2013.12.002. Epub 2013 Dec 17.



06. 03. 2015, 14:00 h

Ústav chemie a biochemie, místnost D06

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COMBINANO

TIKÁ V KAŽDÉ RODINĚ · LIGA PROTI RAKOVINĚ PRAHA ·