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Growth factors, Cytokines and VEGF in human neoplastic and inflammatory pathologies

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Growth factors, Cytokines and VEGF in human neoplastic and inflammatory pathologies

Immunohistochemical basis for Nuclear Medicine studies

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The work presented in this thesis has started at the University of Rome "Sapienza", where the majority of work has been performed. Some articles have been made in cooperation with the University Medical Center Groningen, NL .

Cover picture: VEGF molecule; IHC analysis: Expression of VEGFR1 in mouse subcutaneous tissue implanted and colonized by human HT 29 colon carcinoma cells; tumour blush

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- 3 **Artico, M.**, Bianchi, E., Magliulo, G., De Vincentiis, M., De Santis, E., Orlandi, A., Santoro, A., Pastore, F.S., Giangaspero, F., Caruso, R., Re, M., Fumagalli, L. Neurotrophins, their receptors and Ki-67 in human GH-secreting pituitary adenomas: An immunohistochemical analysis (2012) International Journal of Immunopathology and Pharmacology, 25 (1), pp. 117-25.

- 4 Bianchi, E., Scarinci, F., Grande, C., Plateroti, R., Plateroti, R., Plateroti, A.M., Fumagalli, L., Capozzi, P., Feher, J., **Artico, M.** Immunohistochemical profile of vegf, tgf- β and pge2in human pterygium and normal conjunctiva: Experimental study and review of the literature (2012) International Journal of Immunopathology and Pharmacology, 25 (3), pp. 607-15.

- 5 Bianchi E*, **Artico M***, Di Cristofano C, Leopizzi M, Taurone S, Pucci M, Gobbi P, Mignini F, Petrozza V, Pindinello I, Conconi MT, Della Rocca C. Growth factors, their receptor expression and markers for proliferation of endothelial and neoplastic cells in human osteosarcoma (2013) International Journal of Immunopathology and Pharmacology, 26 (3), pp. 621-32. (*Authors equally contributed).

6 Taurone S, Bianchi E, Attanasio G, Gioia CD, Ierinó R, Carubbi C, Galli D, Pastore FS, Giangaspero F, Filipo R, Zanza C, **Artico M**. Immunohistochemical profile of cytokines and growth factors expressed in vestibular schwannoma and in normal vestibular nerve tissue (2015) *Molecular Medicine Reports*, 12 (1), pp. 737-45.

7 Bianchi E, Taurone S, Bardella L, Signore A, Pompili E, Sessa V, Chiappetta C, Fumagalli L, Di Gioia C, Pastore FS, Scarpa S, **Artico M**. Involvement of pro-inflammatory cytokines and growth factors in the pathogenesis of the Dupuytren's contracture. (2015) *Clinical Science* 129 (8). pp 711-20.

8 Filippo Galli*, **Marco Artico***, Samanta Taurone, Isabella Manni, Enrica Bianchi, Giulia Piaggio, Bruce D. Weintraub, Mariusz W. Szkudlinski, Enzo Agostinelli, Rudi A.J.O. Dierckx, Alberto Signore. Radiolabeling of VEGF₁₆₅ with ^{99m}Tc to evaluate VEGFR expression in tumor angiogenesis (2016) submitted on August 2016 to *International Journal of Oncology*. (*Authors equally contributed)

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