

# Celecoxib/PLGA suppresses angiogenesis and lung metastasis of murine experimental breast cancer [Celecoxib/PLGA suprime angiogénesis y metástasis pulmonar de un cáncer mamario murino experimental]

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Angiogenesis and metastasis are critical events on the tumor invasion process. Their close association is related as a good target in antitumor therapy. The aim was to analyze lung metastasis pattern and angiogenesis following application of microencapsulated Celecoxib with poli(lactic-co-glycolic) acid in mice. An experimental tumor model was assessed, induced by TA3-MTX-R cells, in 18 mice, separated in 3 groups of 6 animals and treated with 2 intramuscular Celecoxib presentations (Group Control; Group Cx 1000 ppm and Group Cx 1000 ppm+PLGA). Mice were sacrificed and histologically processed to stain slides with H&E and Arteta Trichromic. The study revealed that the lung showed a significant heterogeneity, and a perivascular metastasis pattern; moreover, Celecoxib associated to poli(lactic-co-glycolic) acid reduces tumor invasion and pulmonary angiogenesis. The results are similar to partial previous descriptions and are comparable to other tumor lines, concluding that Celecoxib/poli(lactic-co-glycolic) acid is a potential candidate in antitumor therapy. © 2016, Universidad de la Frontera. All rights reserved.

Angiogenesis

Cancer

Celecoxib

Lung

Metastasis

PLGA

