

CENTRAL QUESTIONS for 2001: On Lab Board from Jan 2001 to March 27, 2002: Then removed in preparation for new questions: (These are the old ones, some of which are still in progress).

1. Can the angiogenic switch be turned off in human tumor cells (in vitro, in vivo)?

Folkman and T. Udagawa

2. Can "no take" (non-angiogenic) tumor cells be a source of novel angiogenesis inhibitors?

New

M. Fannon, D. Panigraphy & C. Lerner

3. Do human tumors contain a sub-population of non-angiogenic tumor cells?

Maria Rupnick, Sue Delabrida, D. Panigraphy

4. Do endothelial cells control or regulate growth of non-neoplastic tissues and organs? Fat? Liver? Spleen?

Aaron Greene, Debra Freedman, Stephen. Weiner

5. Are molecular mediators of lymphangiogenesis different from angiogenesis?

Lynn Chang & Arja Kainpainen

6. Is leukemia angiogenesis-dependent?

Tim Browder

7. Can a receptor be identified for endostatin?

Kashi Javaherian

8. Is atherosclerotic plaque growth angiogenesis-dependent?

a) Does endostatin in the arterial wall normally block

plaque angiogenesis?

b) Is VEGF a major regulator of plaque angiogenesis?

c) Will plaque hemorrhage induce plaque angiogenesis, or rupture?

Karen Moulton

9. Can an angiogenic focus be detected by a sample of blood, CSF, urine, -Ephrins? E-Selectin?

Wei Wen, Karen Moulton, Sue Delabrida

10. Is there a family of endogenous endothelial inhibitor molecules in the body? How many? Proteins only?

Yuen Shing, J. Folkman, D. Panigrahy

11. Other novel angiogenesis inhibitors?

-PPAR gamma ligands

-Thyroid?

Yuen Shing, J. Folkman, D. Panigrahy

12. Is a second protease necessary to cleave the NC1 domain from collagen XVIII?

Wei Wen

13. Is bFGF a mediator of pulmonary hypertension?

Jacques Benisty

14. Is placenta a source of hemangioma endothelium? (Baby's side of the placenta)?

Carmen Barnes

15. Are there molecular differences between new vessels in the tumor bed vs new vessels in wound, ovarian angiogenesis (GFP mice)?

~~16. Is outcome of breast cancer influenced by timing of surgery (surgical angiogenesis)?~~

Michael Retsky

~~17. Does radiotherapy of a primary tumor affect secondary metastases via an angiogenic mechanism?~~

Kevin Camphausen

18. Can "antiangiogenic chemotherapy" improve response of cancer patients who have failed conventional therapy?

Mark Kieran and Tim Browder

19. Do tumors have some undiscovered mechanisms which over-ride or limit the replicative limit of endothelial cells in the tumor bed?

J. Folkman and Debra Freedman

20. Is there some undiscovered common pathway which connects the anti-angiogenic activity of Celebrex, Rosiglitazone, and Indomethacin?

21. Do any serpins other than aaTIII have antiangiogenic activity?

~~22. Are two approved drugs which inhibit angiogenesis, CELEBREX and ROSIGLITAZONE, synergistic in the Lewis lung cancer model?~~

Dipak Panigrahy

~~23. Does Del-2 (Thomas Quaternous), confer longevity on proliferating endothelial cells, beyond the time of physiologic senescence? (See # 19).~~

24. Is "antiangiogenic" cytoxin, E-selectin dependent?