

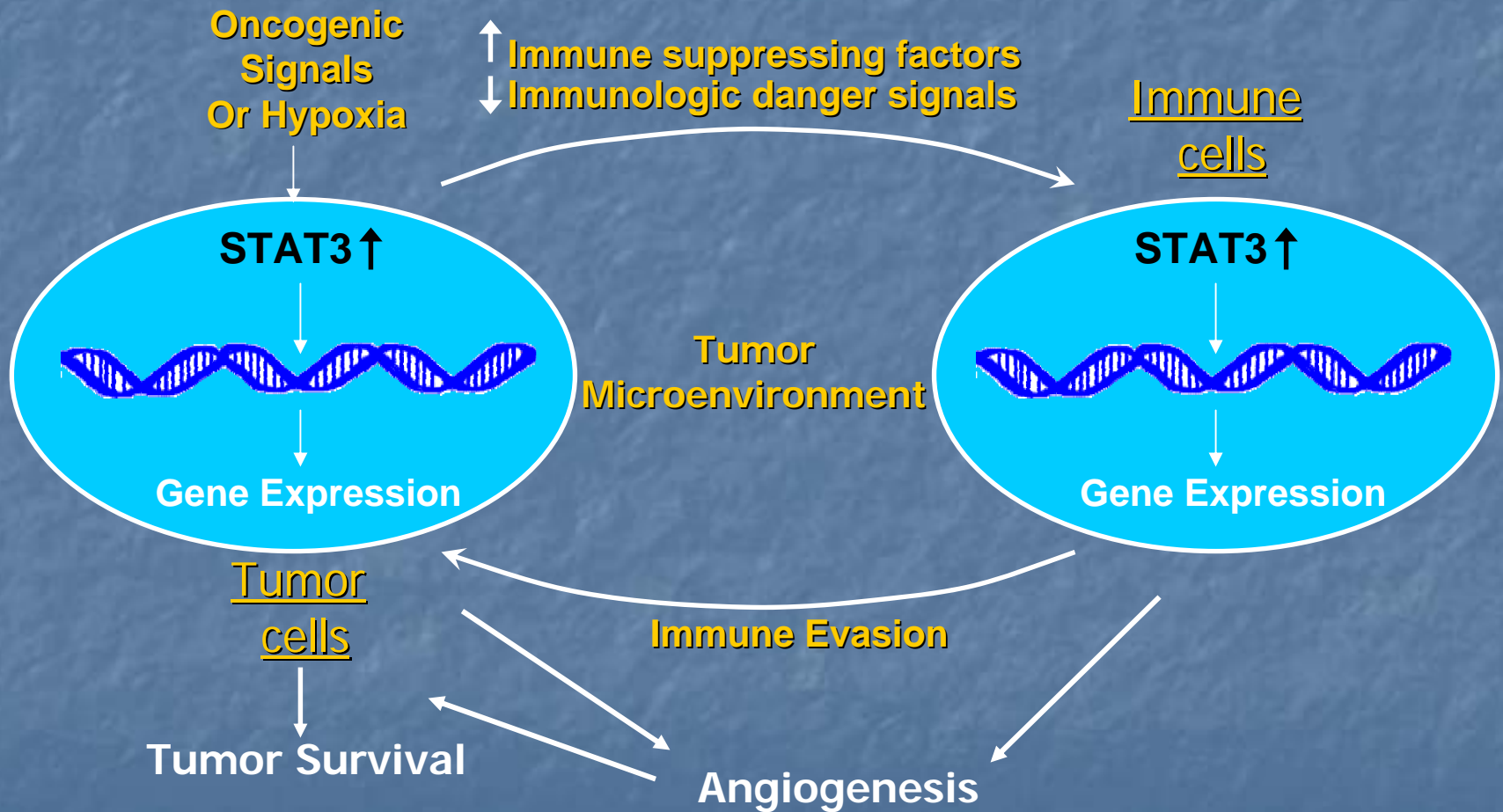
STAT3 Signaling Regulates Crosstalk between the Tumor and Its Immune Microenvironment

Cartoons courtesy of
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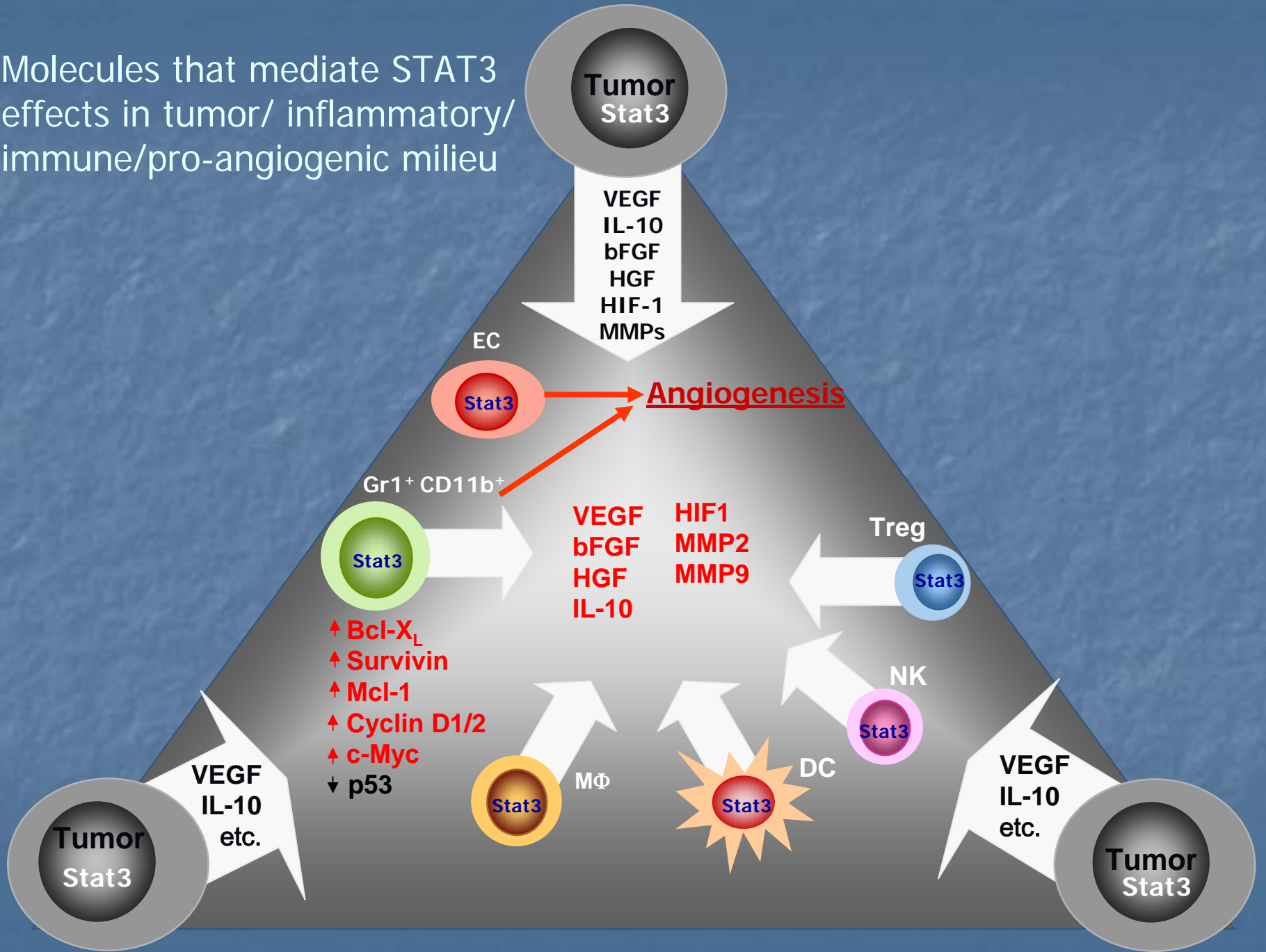
STAT3 and the Tumor-Inflammatory milieu

- Constitutively activated in many tumors (especially melanoma)
- Activation mediated in part by Src activation
- Promotes growth, survival, angiogenesis, anti-inflammatory, immunosuppressive effects
- Blockade leads to apoptosis of tumor cells, immunostimulation, anti-angiogenesis
 - Dominant negative mutation in hematopoietic cells
 - Small-molecule inhibitor of STAT phosphorylation

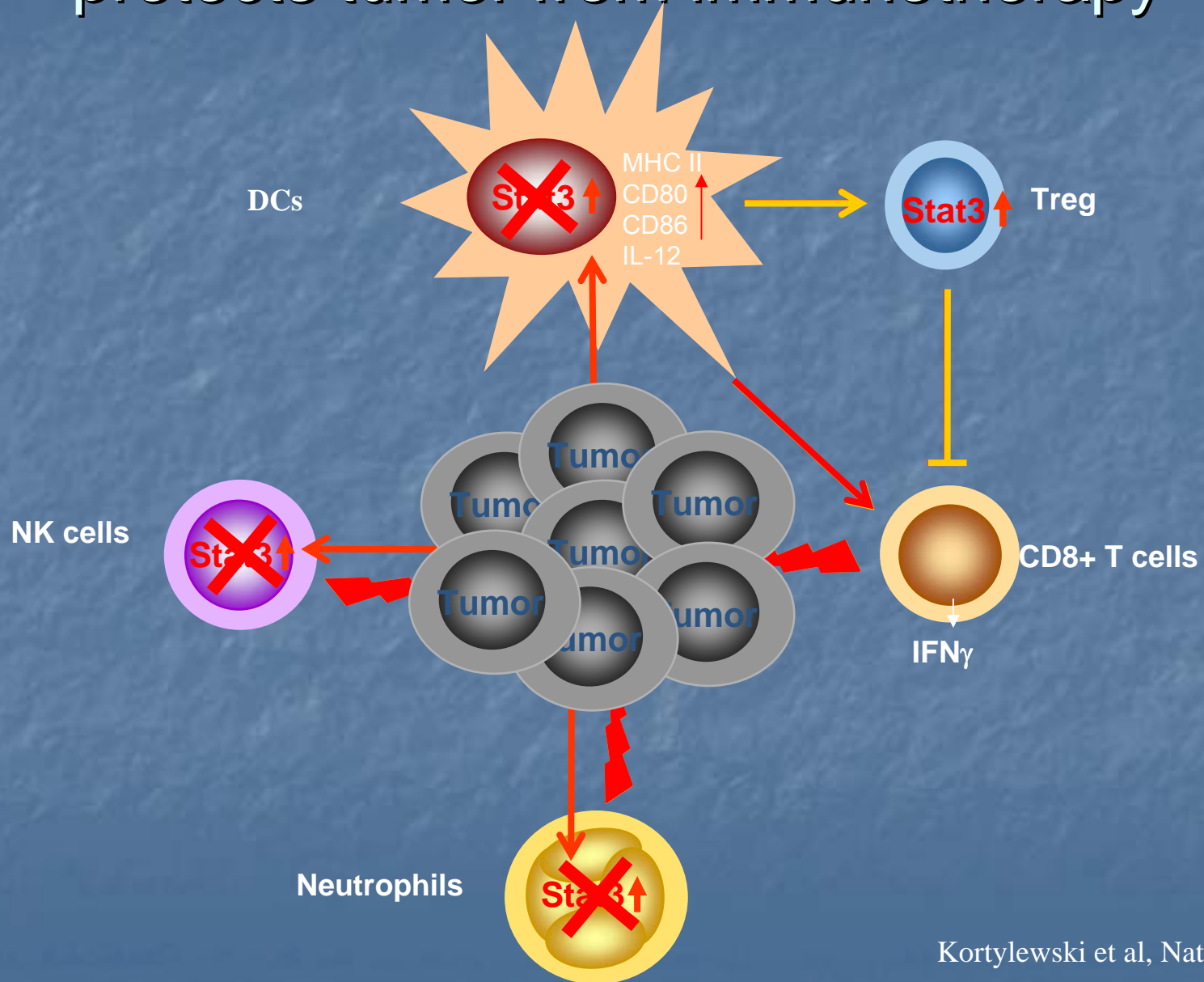
STAT3 Signaling in Tumor and Inflammatory cells



Molecules that mediate STAT3 effects in tumor/ inflammatory/ immune/pro-angiogenic milieu



Stat3 activation in immune cells protects tumor from immunotherapy



Can STAT3 inactivation in tumor cells facilitate immunotherapy?

