



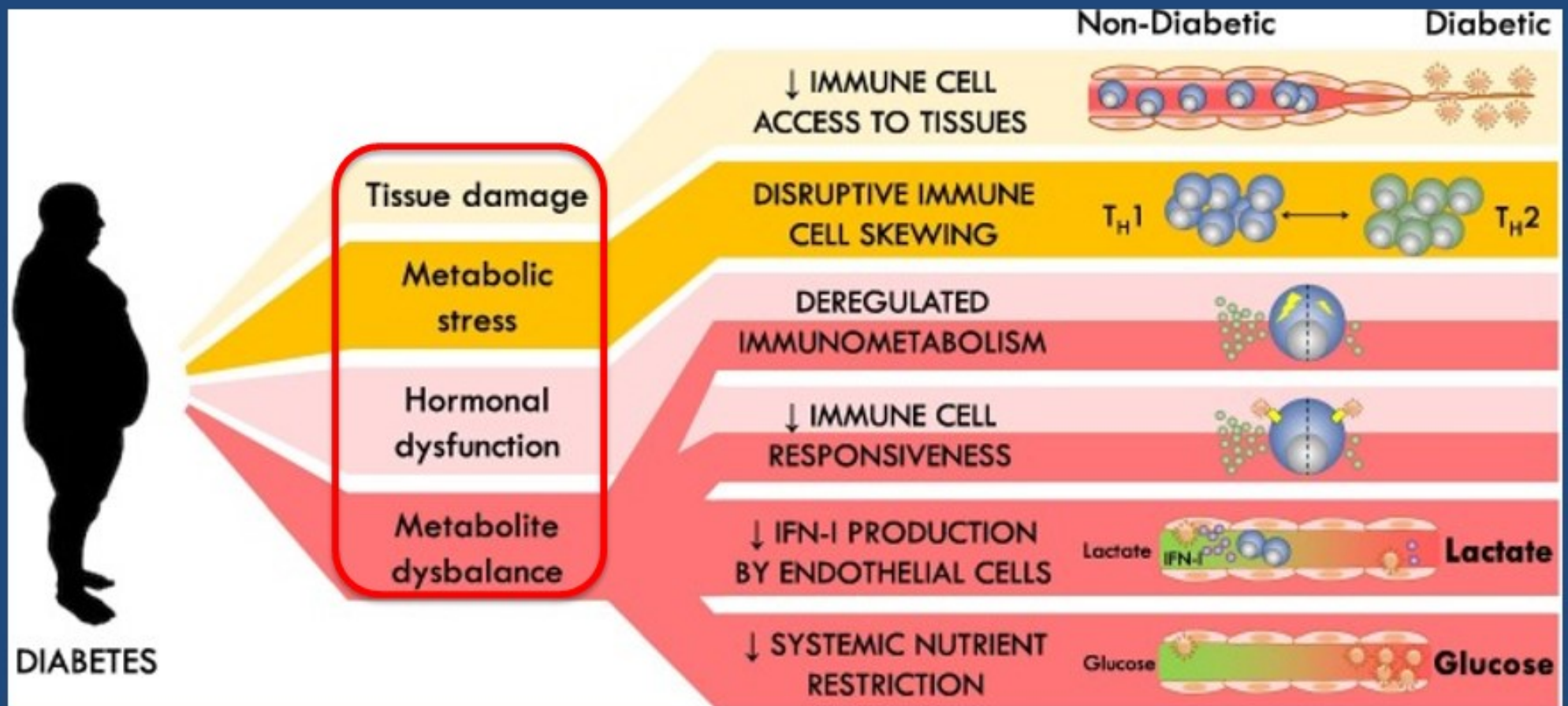
Diseases affecting Immune System

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Factors affecting Immune system function

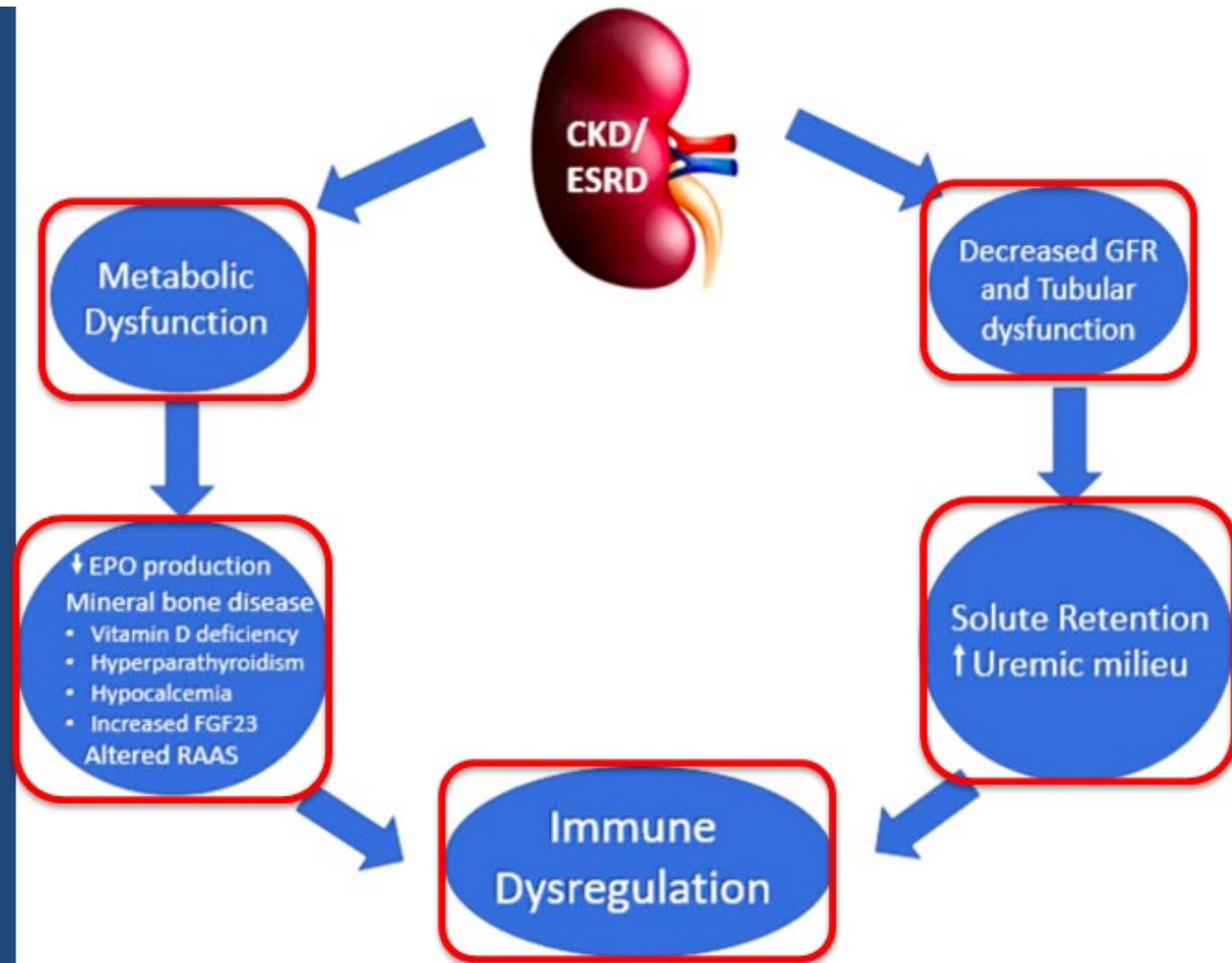
- Genetics
- Age
- Nutrition status
- presence of diseases
- therapeutic agents
- environmental condition

Negative impacts of T2D on immunological control of infection



<https://doi.org/10.1016/j.diabres.2020.108637>

Negative impacts of CKD on Immune status

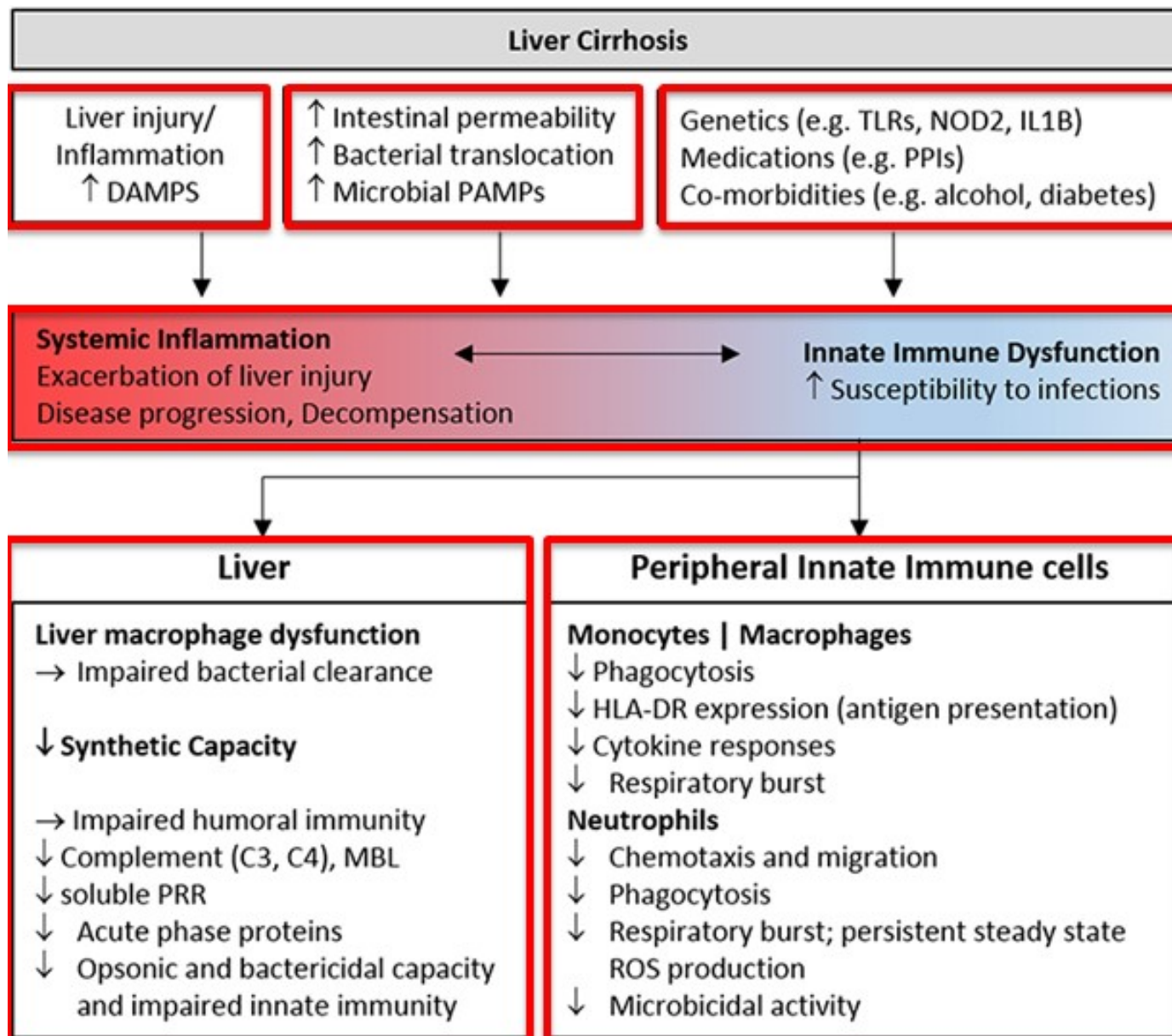


Effects of Impaired Kidney Function on Immune Dysregulation

Immune Cells in Uremia

- Decreased bactericidal ability of neutrophils
- Hyporeactive monocytes and decreased differentiation into dendritic cells
- Decreased thymic T-cell output
- Impaired activation of T-cell response
- Activation of induced T- and B-cell apoptosis
- Decreased B lymphocytes

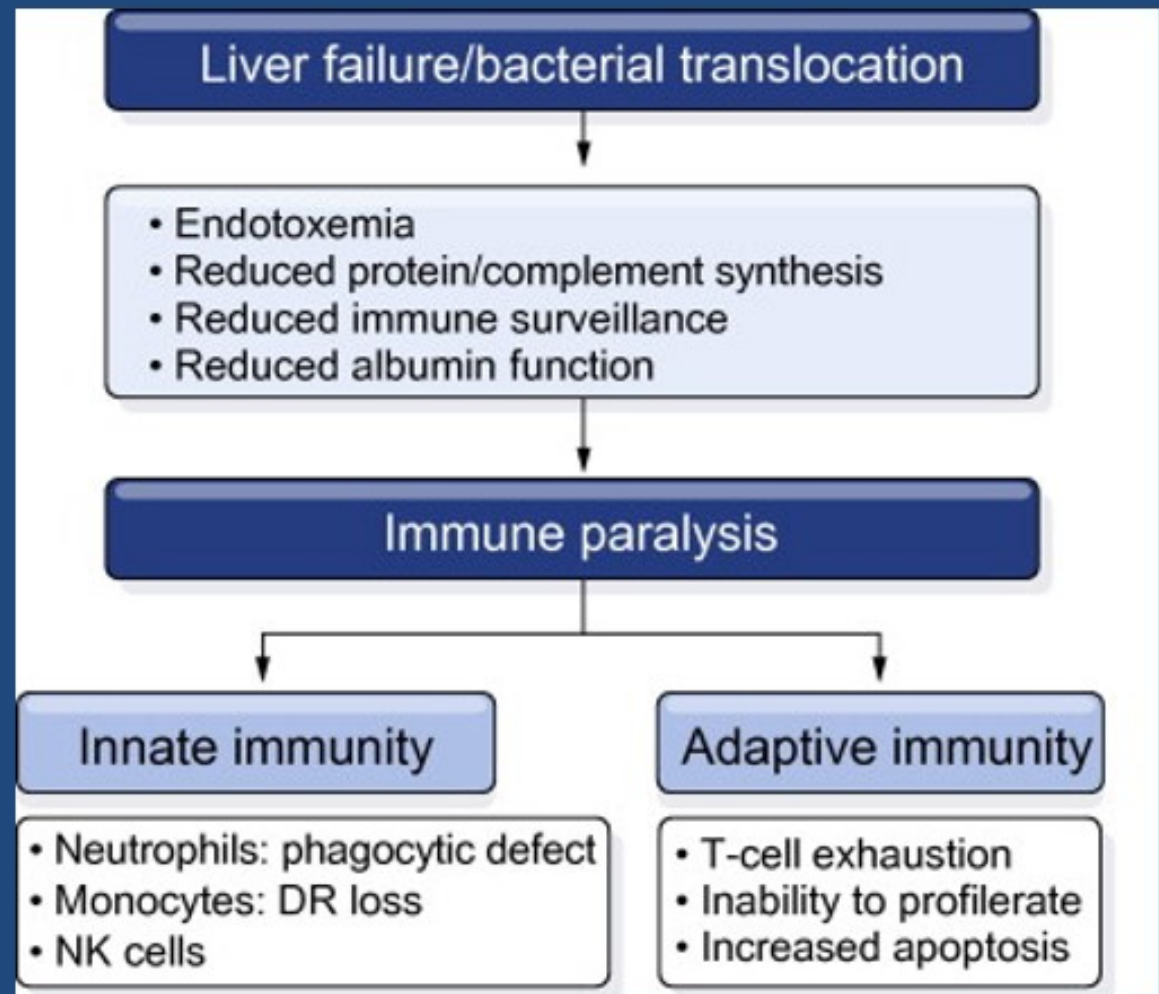
Adv Chronic Kidney Dis. 2019;26(1):8-15



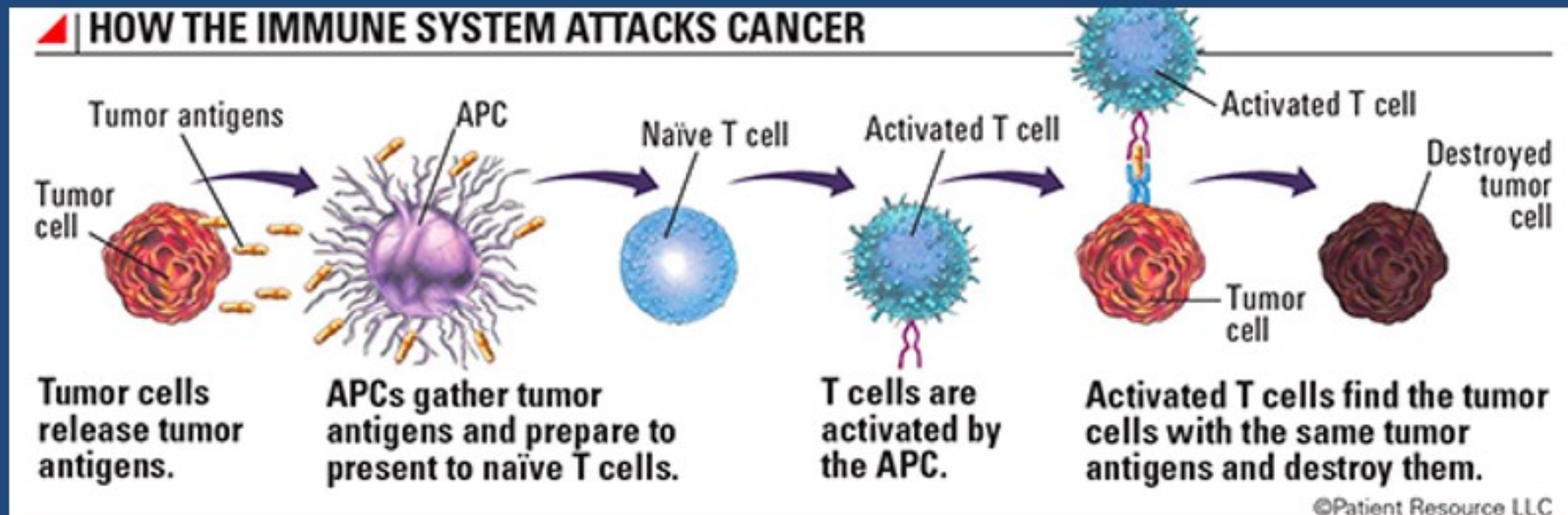
Negative impacts of COL on Immune status

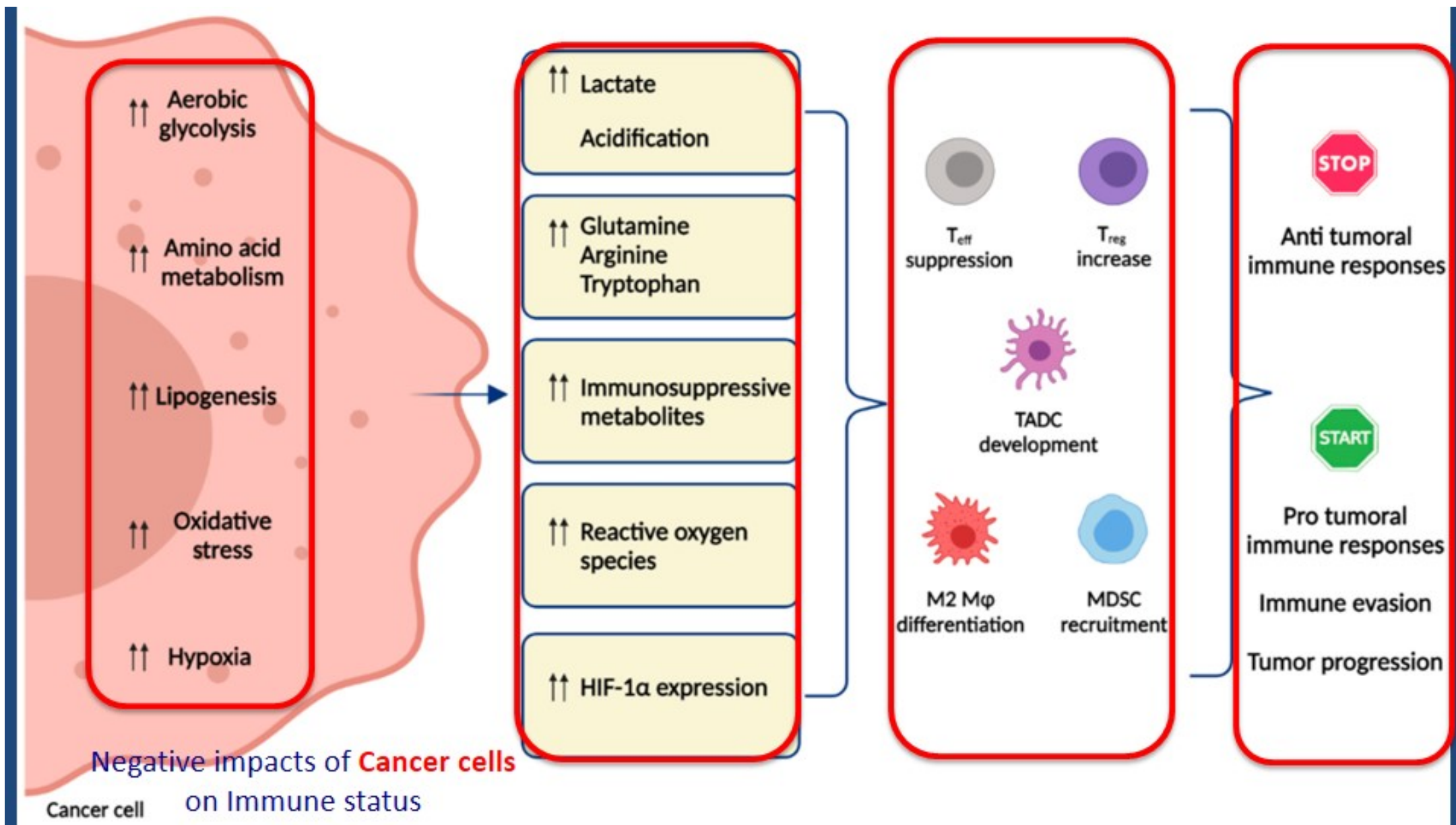
<https://www.frontiersin.org/articles/10.3389/fimmu.2019.00293/full>

Negative impacts of COL on Immune status

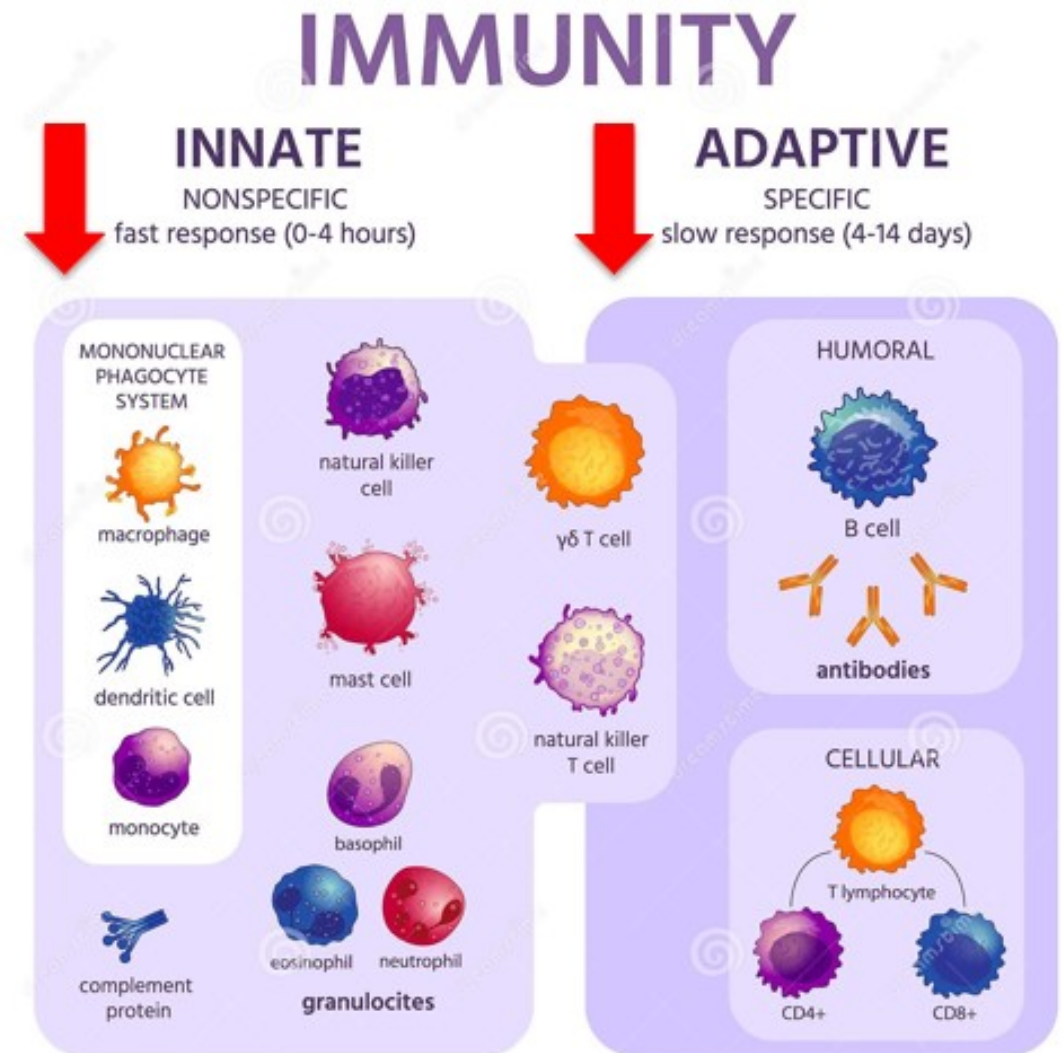


Mechanism of tumor cells killing by Immune system





A lot of common diseases have **negative impact on immune cells** involved in both Innate and Adaptive Immunity



Thank you