Review of: "Classification of Cancer Response to Antiglycolytic Agents: An Approach to Understanding and Predicting Cancer"

ao zhang[1]

1 Shanghai Jiaotong University

Cancer cells present higher metabolic activity than normal cells to maintain proliferation, thus glycolytic pathway is a potential target for tumor therapy. In this article, the author analyzed the gene expression profiles of various cancer cells that treated with glycolysis inhibitory drugs, and summarized 3 response classes, which associated with cell cycle, DNA damage and antigen processing and presentation. It is an interesting study that could be used to predict the response of cancer cells to antiglycolytic drugs, while several concerns should be solved before acceptation.

1. According to additional file 1, the drugs analyzed in this article are only sorafenib and rapamycin, neither of which directly target glycolysis pathway, and two drugs could not represent antiglycolytic drugs. The author should analyze cell response to more drugs that directly target glycolysis-related proteins.

2. The biological process most relevant to the clustering is cell cycle, while the studied object of this manuscript is the antiglycolytic agent, thus the relationship between the cell cycle and glycolysis should be discussed.