

Accepted Manuscript

Capitalizing on Competition: An Evolutionary Model of Competitive Release in Metastatic Castration Resistant Prostate Cancer Treatment

Jeffrey West, Yongqian Ma, Paul K. Newton

PII: S0022-5193(18)30352-7
DOI: [10.1016/j.jtbi.2018.07.028](https://doi.org/10.1016/j.jtbi.2018.07.028)
Reference: YJTBI 9553



To appear in: *Journal of Theoretical Biology*

Received date: 6 March 2018
Revised date: 10 July 2018
Accepted date: 22 July 2018

Please cite this article as: Jeffrey West, Yongqian Ma, Paul K. Newton, Capitalizing on Competition: An Evolutionary Model of Competitive Release in Metastatic Castration Resistant Prostate Cancer Treatment, *Journal of Theoretical Biology* (2018), doi: [10.1016/j.jtbi.2018.07.028](https://doi.org/10.1016/j.jtbi.2018.07.028)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- Pre-existing resistant cells are released from competition after continuous therapy.
- Evolutionary game theory model of competitive release is fit to prostate cancer data.
- A majority of patient data show a positive cost to development of resistance.
- An adaptive control paradigm allows for indirect control of resistant population.
- The quality of the cell population monitoring system is crucial to the entire strategy.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/8876511>

Download Persian Version:

<https://daneshyari.com/article/8876511>

[Daneshyari.com](https://daneshyari.com)