

## The T-cell repertoire as a biomarker for response to anti PD-1 immunotherapy in a GBM mouse model

Sol Efroni

Faculty of Life Sciences, Bar-Ilan University, Ramat-Gan, Israel.

**ABSTRACT:** The prediction of patients' response to checkpoint immunotherapy is currently imprecise. Here, we show that a measurement of the T-cell repertoire, from peripheral blood of mice, is enough to predict which mice would or would not respond to anti-PD1 treatment. To show this, we used a syngeneic orthotopically implanted CL261 glioma-bearing mouse model. We followed the mice over the timeline of tumor implantation and checkpoint immunotherapy, with blood samples on days 0, 7, 21, 35, 49, and 63. Since the (syngeneic) implanted tumor is bioluminescent, we were able to monitor tumor size using bioluminescence imaging (up to 9 measures, 1 measure per week), up to day 63 post-tumor inoculation. We then produced more

**Biography** –Dr. Efroni Sol is affiliated to the Department of Microbiology and Virology, Bar Ilan University. Dr. Efroni Sol is currently providing services as Associate Professor. Dr. Efroni Sol has published numerous publications in various national and international peer-reviewed journals and presented scientific papers across the world. Because of the active association with different societies and academies as well as the contributions, Dr. Efroni Sol is been recognized by the subject experts around the world.

**Publication** - [Global transcription in pluripotent embryonic stem cells Rep-Seq: uncovering the immunological repertoire through next-generation sequencing](#)  
[Identification of key processes underlying cancer phenotypes using biologic pathway analysis](#)  
[Reactive animation: Realistic modeling of complex dynamic systems](#)  
[Using cellular automata modeling of the emergence of innovations](#)

[32<sup>nd</sup> International Conference on Cancer Research and Therapy, Osaka, Japan, February 19-20, 2020](#)

**Abstract Citation :** [Sol Efroni, The T-cell repertoire as a biomarker for response to anti PD-1 immunotherapy in a GBM mouse model, CANCER RESEARCH 2020, Osaka, Japan, February 19-20,2020](#)