

Cellular Programs

Prof. Dr. Volkhard Helms

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Saarland University

Chair of Computational Biology

Assignment 6 (about paper #11)

Handed out: 26.1.20

Due: 2.2.2021 10:15

Submit your solutions by e-mail with a single PDF attachment to

kerstin.gronow-p@bioinformatik.uni-saarland.de

Every student should submit his/her own solution. Plagiarism of solutions will be penalized. Don't forget to label your assignment sheet with your name and Matrikelnummer.

Don't exceed specified page lengths by more than 0.25 pages.

Problem 1:

This study investigates whether a combination treatment of melanoma patients with the two drugs Nivolumab and Ipilimumab has a positive effect on their 5-year survival chances. What is the biological "mechanism of action" of these two molecules? Do they act independently and/or synergistically? (0.5 page)

Problem 2:

Did the authors of the CheckMate 067 clinical trial analyze aspects of the patient cohort that may affect the assumed mechanism of action of Ipilimumab and Nivolumab (i.e. their target molecules) mentioned in problem 1?

You can also check the clinical trial underlying this study,

<https://www.clinicaltrials.gov/ct2/show/nct01844505>.

(0.25 page)

Problem 3:

Why did the authors monitor the BRAF mutation status? (0.25 page)

Paper #11 Larkin et al. (2019) N Engl J Med 381:1535-46, Five-Year Survival with Combined Nivolumab and Ipilimumab in Advanced Melanoma.