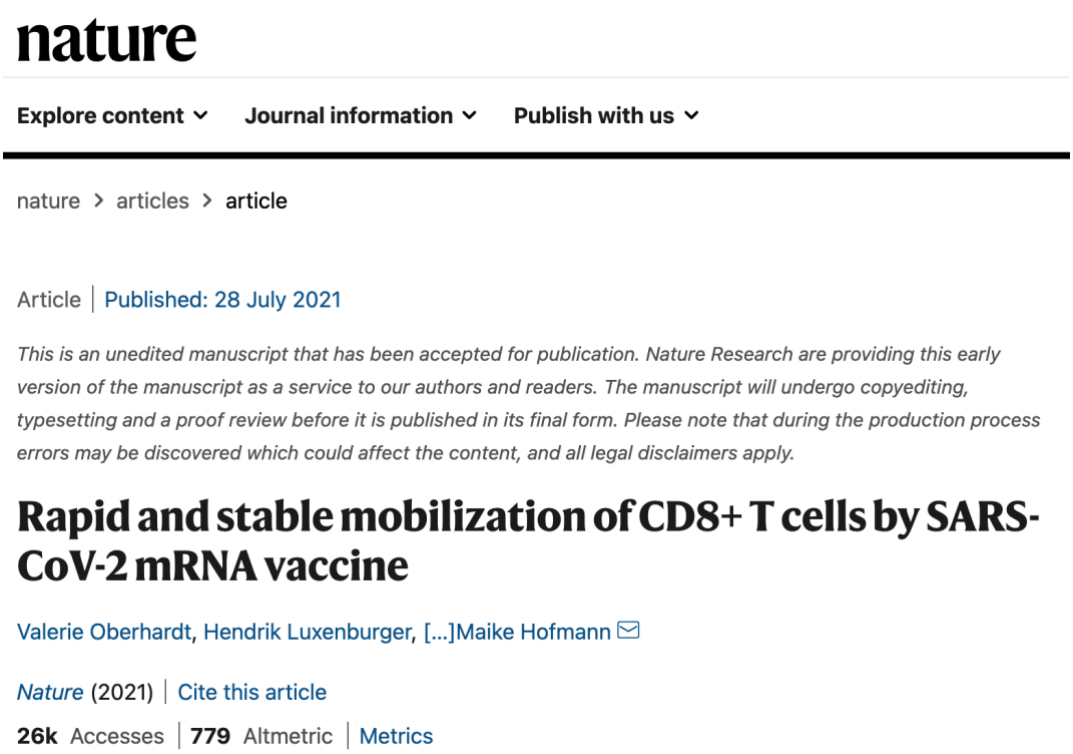
CPD Evidence 2 (Winter 2021)

1. Basic Information

1.1 Registrant Name: Chen Liu, AMRSB
1.2 Profession: BMS
1.3 Registration Number: BS075665
1.4 CPD type: Self-directed – Journal based learning
1.5 Date of completion: 18/09/2021s
1.6 Standard(s) met:
Standard 2 – A registrant must identify their CPD activities are a mixture of learning activities relevant to current or future practice.
Standard 3 – A registrant must seek to ensure that their CPD has contributed to the quality of their practice and service delivery.

2. Details



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Rapid and stable mobilization of CD8+ T cells by SARS-CoV-2 mRNA vaccine

Valerie Oberhardt, Hendrik Luxenburger, [...]Maike Hofmann

Nature (2021) | Cite this article

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Oberhardt, V., Luxenburger, H., Kemming, J. et al. Rapid and stable mobilization of CD8+ T cells by SARS-CoV-2 mRNA vaccine. Nature (2021).

CPD Evidence (version 1.0, created 08/2021)

The outbreak of the SARS-CoV-2 coronavirus and its disease COVID-19 have led to a significant global health urgency in the past year. The development of an effective vaccine was therefore regarded as the priority by the science community. Currently, three categories of vaccines have been approved in clinical use, weather through facilitated or standard approval process:

- Adenovirus (ChAdOx) vector: AstraZeneca, Covishield
- mRNA: Pfrizer, Moderna
- Whole inactivated Coronavirus: Sinopharm, Sinovac, Covaxin [1].

However, the mechanism of mRNA vaccination was not fully understood. The article in this Evidence investigated the differentiation and proliferation of the CD8+ T cells post vaccination.

The research team utilised CD38 and Ki-67 proliferation assays to reveal a strong CD8+ activation at 9-12 days post vaccination.

The use of CD38 and Ki-67 immunohistochemistry assay are highly common in my further research projects (Standard 3).

Reference:

1. Public Health England, *COVID-19 vaccination programme: Information for healthcare practitioners. Version 3.10.* 2021.