

# Review of: "Christ Bearing the Cross: the original antigenic sin of the immune system and its potential role in emerging diseases"

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I enjoyed reading this interesting point of view on the phenomenon called "original antigenic sin" (OAS).

The term was created to explain why we respond to repeated influenza infections by producing a high level of antibodies that are specific for the first strain encountered in life instead than being directed against the strain that is infecting us at the moment of measurement.

The OAS seems to describe a weak point of the immune response whereby pre-existing memory blurs the vision of similar antigens and divert the response against the real enemy.

As the Authors describe, the COVID-19 experience has demonstrated that the OAS may be also seen as a blessing and an astute strategy of the immune system to face not only a single specific virus but also its variants.

Luckily, the immune response is not monoclonal and different B and T memory cells are generated. Some memory cells are specific for the original virus, but others also recognize antigens common to viral variants. In addition, memory B cells can be rapidly reshaped and evolve to broaden their repertoire.

Thus, I agree with Ger Rijkers and Frans J. van Overveld: the OAS may not be a sin, but rather a useful device of the immune system to rapidly fight novel pathogens.