# The Immunological Basis for Immunization Series

# Module 5: Tuberculosis Update 2021



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#### The immunological basis for immunization series. Module 5: tuberculosis. Update 2021 (Immunological basis for immunization series; module 5)

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# Abbreviations and acronyms

ADCC	Antibody-dependent cytotoxic
BCG	Bacille Calmette Guerin
COR	Correlate of risk
DR	Drug-resistant
DS	Drug-sensitive
DURT	Donor unrestricted T (cells)
GTBVP	Global TB Vaccine Partnership
HIV	Human immunodeficiency virus
HLA	Human leukocyte antigen
IAVI	International AIDS Vaccine Initiative
IGRA	Interferon-gamma release assay
ILC	Innate lymphoid cells
ISG	Interferon-stimulated gene
ISG	Interferon-stimulated genes
MAIT	Mucosal-associated invariant T (cells)
mRNA	Messenger ribonucleic acid
NK	Natural killer (cells)
NKT	Natural killer T (cells)
PET CT	Positron emission tomography – computed tomography
QFT	QuantiFERON
RNA	Ribonucleic acid
SAGE	Strategic Advisory Group of Experts on Immunization
TB	Tuberculosis
TBVI	Tuberculosis Vaccine Initiative
TNF	Tumor necrosis factor
TST	Tuberculin skin test

## Preface

This module is part of the World Health Organization (WHO) series The immunological basis for immunization, which was initially developed in 1993 as a set of eight modules comprising one module on general immunology and seven modules each devoted to one of the vaccines recommended for the Expanded Programme on Immunization – i.e. vaccines against diphtheria, measles, pertussis, polio, tetanus, tuberculosis and yellow fever. Since then, this series has been updated and extended to include other vaccines of international importance. The main purpose of the modules is to provide national immunization managers and vaccination professionals with an overview of the scientific basis for vaccination against a range of important infectious diseases. The modules developed since 1993 continue to be vaccine-specific, reflecting the biological differences in immune responses to the individual pathogens and the differing strategies employed to create the best possible level of protection that can be provided by vaccination. The modules also serve as a record of the immunological basis for the WHO recommendations on vaccine use, published in the WHO vaccine position papers<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> See: <u>http://www.who.int/immunization/documents/positionpapers\_intro/en/index.html</u>, accessed 31 July 2018.

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