



Teknik Diagnosis COVID – 19 : Rapid Antibodi



Rizka Oktarianti Ainun Jariah S.Si.,M.Sc
Prodi DIII Teknologi Laboratorium Medis



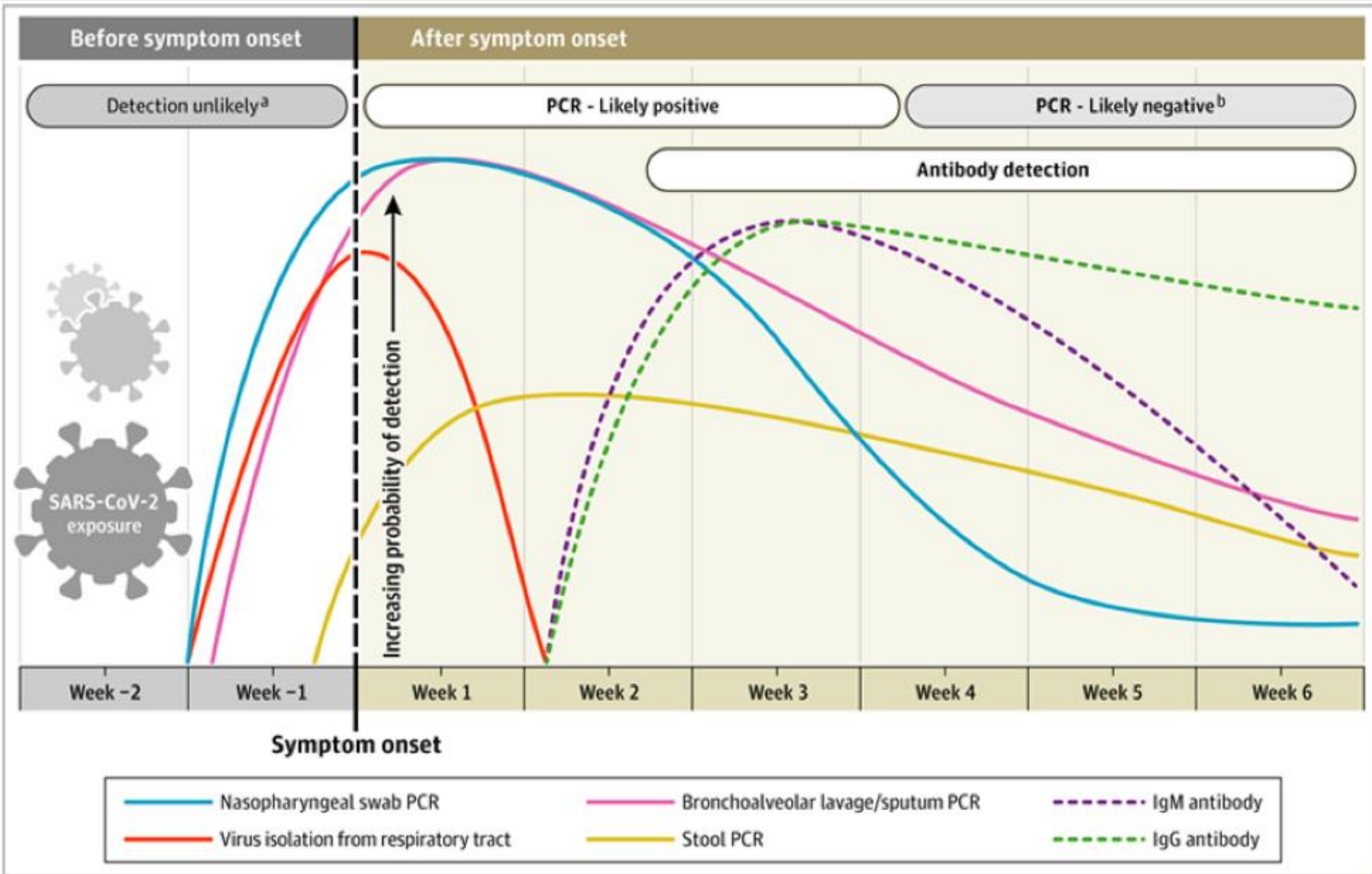
Course Objectives

- ① Mampu memahami dan menjelaskan perbedaan rapid antigen dan antibodi
- ① Mampu memahami dan menjelaskan prinsip pemeriksaan rapid antibody



	Antigen (Ag) RDT	Antibody (Ab) RDT
What does it do?	It informs us whether a person is currently infected with SARS-CoV-2 virus or not.	It informs us of the past exposure to the virus.
What kind of specimens needed to perform the test?	Nasopharyngeal swab or other respiratory samples.	Blood-derived samples (e.g. serum, plasma).
How does it work?	The test detects the presence of virus particles in the body. The particle will disappear as soon as there is a response from the body's immune system.	Ab RDT can be used once the body's immune response appears to eliminate the virus in the body.
When should it be used?	At the early stage of the disease, less than 5-7 days after symptoms (e.g. fever, cough) occurred.	It can be used more than 1 week after symptoms onset. Negative results from the Ab RDT test does not mean that the person is free from COVID-19, it is possible that the person is in the early stage of the disease. <u>It is important not to draw a conclusion based solely on an Ab RDT result.</u>

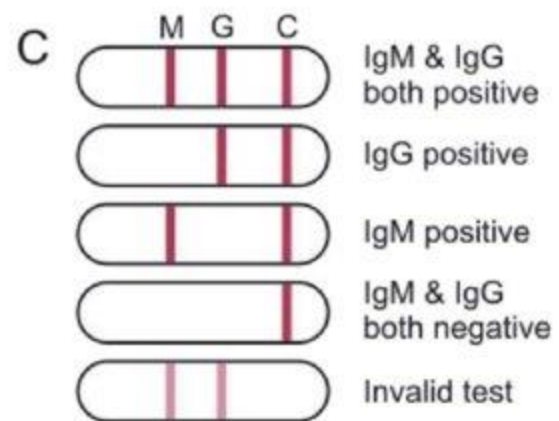
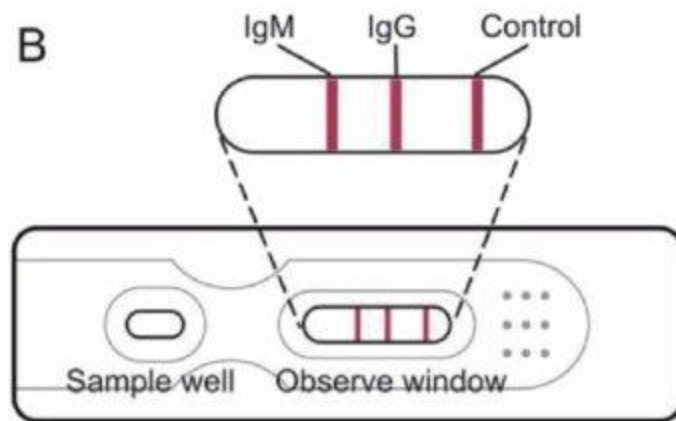
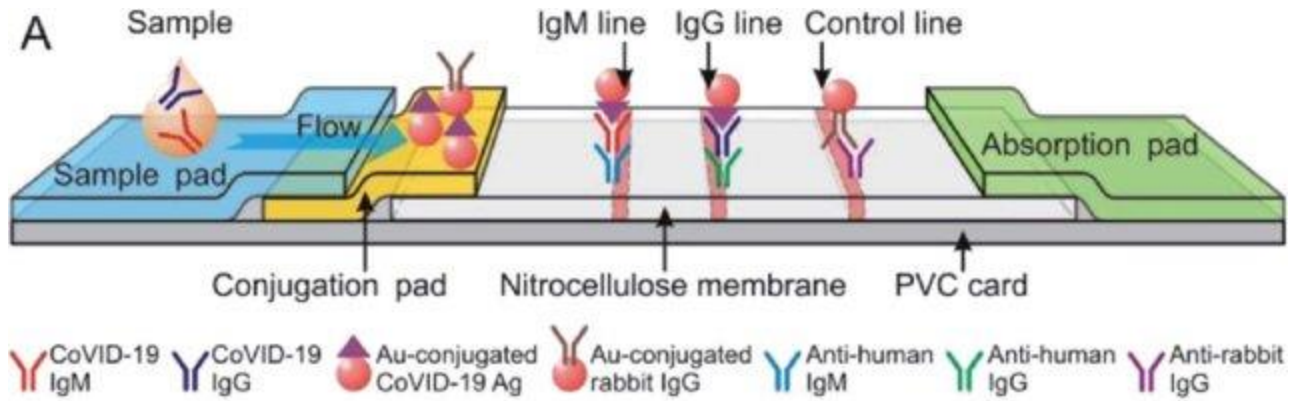
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Prinsip Kerja

- ⦿ Salah satu metode serologi
- ⦿ Mendeteksi antibody yang dihasilkan karena infeksi SARS-CoV 2
- ⦿ Antibodi (IgG dan IgM) dapat terdeteksi 1 – 3 minggu pasca infeksi





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- ⦿ Dapat digunakan untuk mengevaluasi adanya antibody terhadap SARS-CoV-2

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- ⦿ Tidak dapat digunakan untuk *screening* awal infeksi



References :

- ① <https://www.nature.com/articles/d41586-021-00332-4>
- ② [https://www.who.int/indonesia/news/detail/08-12-2020-implementation-of-antigen-rdt-\(ag-rdt\)-to-detect-covid-19-cases-in-indonesia](https://www.who.int/indonesia/news/detail/08-12-2020-implementation-of-antigen-rdt-(ag-rdt)-to-detect-covid-19-cases-in-indonesia)
- ③ **COVID-19: Rapid antigen detection for SARS-CoV-2 by lateral flow assay: A national systematic evaluation of sensitivity and specificity for mass-testing.** Peto, TimAffron, Dominic et al. EClinicalMedicine, Volume 36, 100924 DOI: <https://doi.org/10.1016/j.eclinm.2021.100924>



Thank you.

