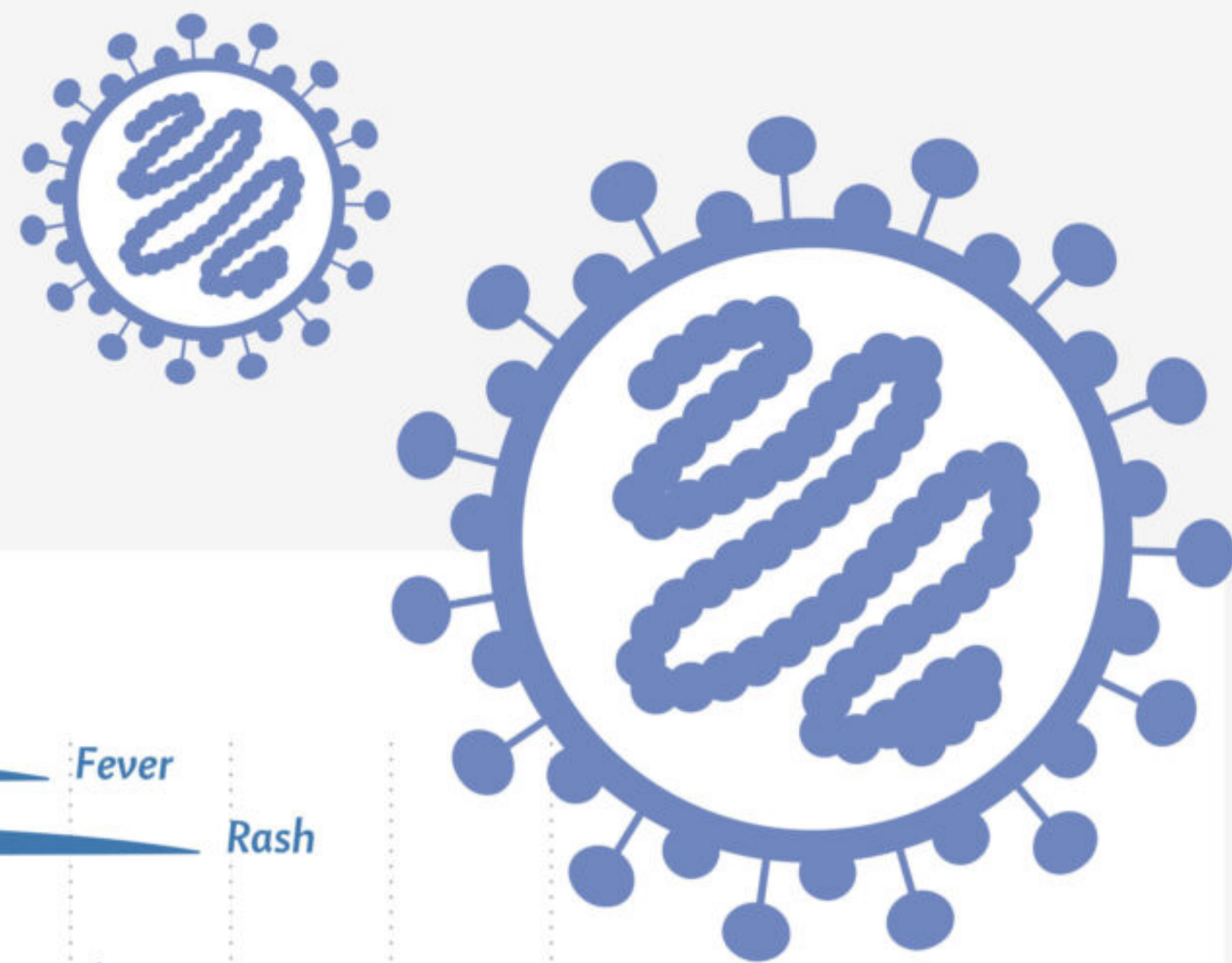


Measles

Measles is a highly contagious and potentially fatal, but vaccine-preventable disease caused by measles virus. There is no specific antiviral therapy and disease control largely depends on prevention.



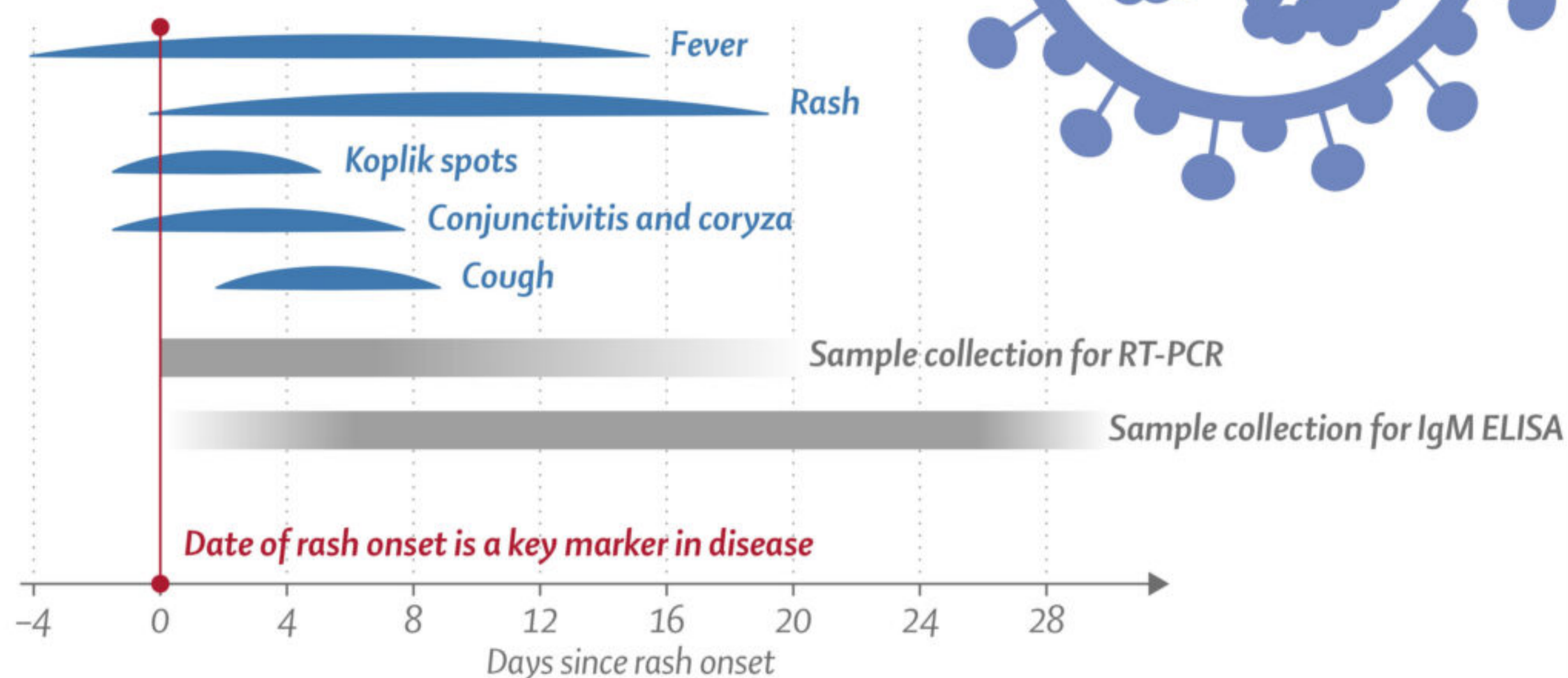
Symptoms and diagnosis

Symptoms

Clinical symptoms in vaccinated people may be milder or even absent. Immunocompromised patients may not develop the typical symptoms.

Suspected measles must be confirmed by laboratory testing

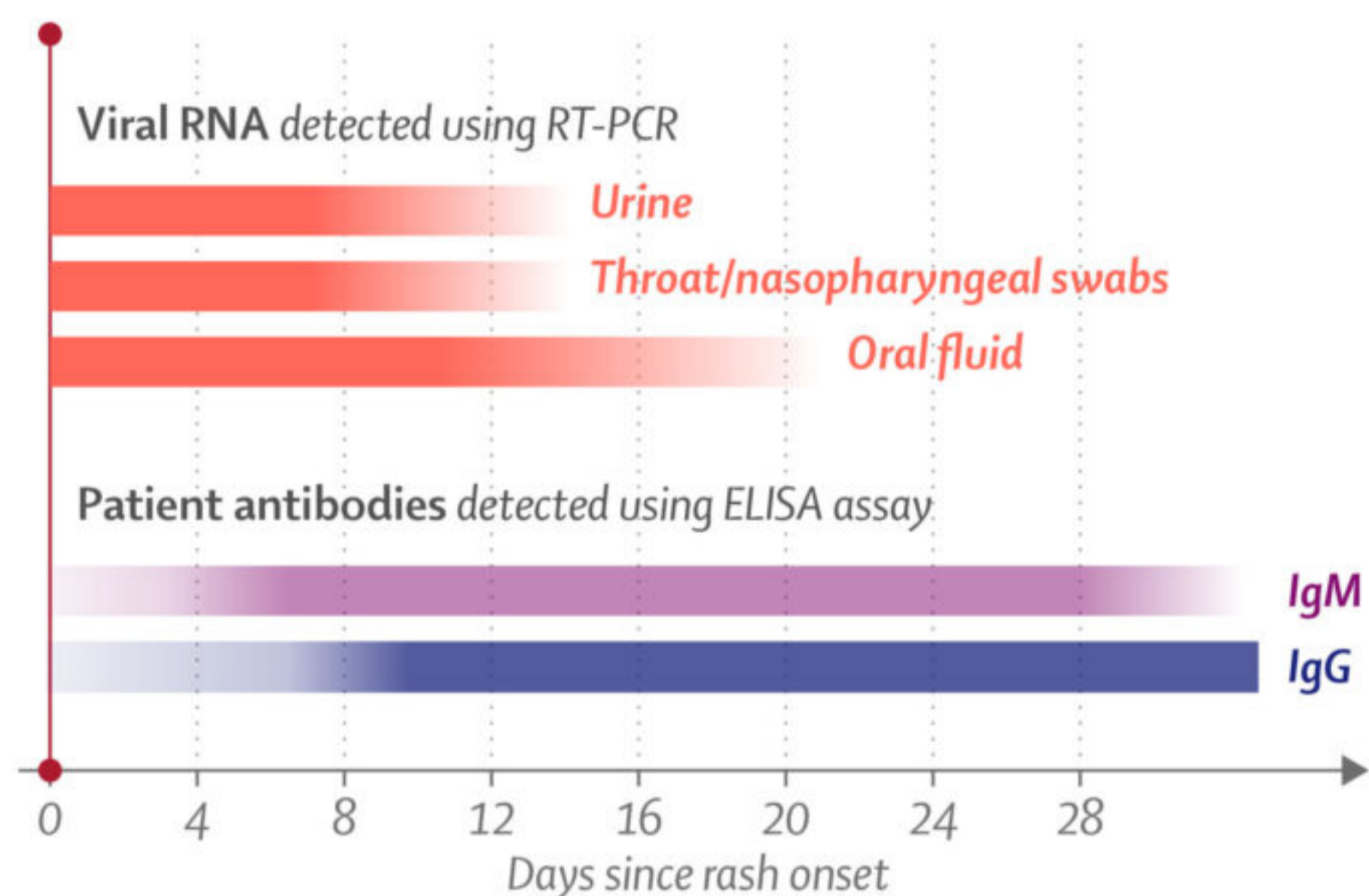
Clinical diagnosis alone is unreliable and all suspected cases require laboratory investigation. Measles can be confirmed by testing for viral RNA or anti-measles IgM antibodies.



Diagnostic tests

The window of detection varies for different tests

- Viral RNA can be detected in oral fluid samples for a maximum of three weeks.
- IgM antibodies appear shortly after rash onset.
- IgG antibodies usually develop later and persist for a long time.



Comparison of diagnostic tests

	RT-PCR	IgM ELISA	IgG ELISA
Diagnostic use			
Acute infection	●	●	
Past infection		●*	●
Advantages			
Fast	●		
Easy & cheap		●	●
False negative risks			
Previous vaccination		●	
Sample taken too early		●	●
Sample taken too late	●	●	
False positive risks			
Non-specific reactions		●	

* IgM antibodies are detectable during acute infection and shortly afterwards

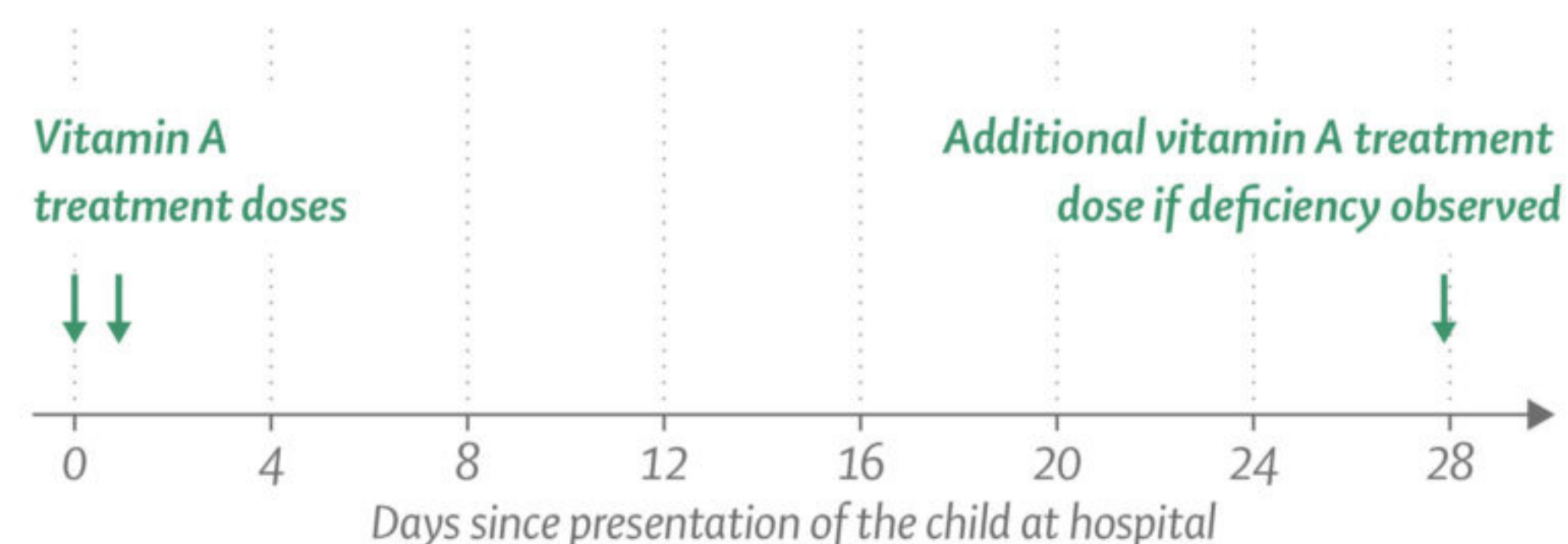
Patient management

Case management is largely supportive

So far no drugs have been approved specifically for measles treatment. Prophylactic antibiotics are not recommended.

- **Isolate patients** for four days from rash onset
- **Supportive treatment** including rehydration and treatment of secondary infections
- **Monitoring** for neurological complications

Additional treatment for children under 5 years



Post-exposure immunoglobulin treatment

In some countries, contacts of an infected individual are given post-exposure immunoglobulin treatment, especially if vaccination is contraindicated and there is a perceived high risk of complications (such as for immunocompromised individuals, pregnant women, or infants younger than 6 months).

Read the full seminar: thelancet.com/clinical/diseases/measles