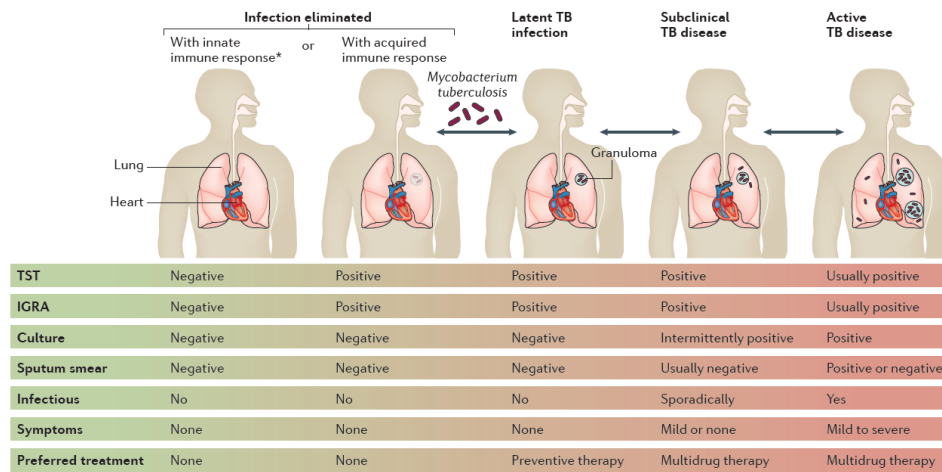


Tuberculosis Basics

- What is it: the spectrum of tuberculosis (TB) from infection to active disease (see figure from [Nature Primer on TB](#)). TB is caused by *Mycobacterium tuberculosis*, a rod-shaped bacillus.



- Symptoms: Classic 3 are: Cough, night sweats, weight loss.
- How it is diagnosed- clinical vs. microbiologically-confirmed. Combination of:
 - Symptoms
 - Chest radiograph
 - TST (tuberculin skin test) or IGRA history
 - Sputum smear (look for bugs under microscope- quick turnaround, can be +, ++, +++, ++++)
 - Culture (try to grow bugs in the lab- can take weeks)
- Factors affecting transmission
 - Patient factors
 - Cavitary TB disease (cavities in lungs filled with TB) are more infectious
 - Laryngeal > Pulmonary > Other respiratory > Other sites
 - Miliary, abdominal and other sites are much less infectious
 - Children under 10 rarely transmit to others (not good cough mechanics)
 - Risk factors such as sharing smoking devices
 - Environmental factors
 - Ventilation and air circulation
 - Overcrowding
- Contact tracing: Typically look back 3 months from symptom onset (this can be tricky when dealing with a population that always has a cough)