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BACKGROUND AND IMPORTANCE

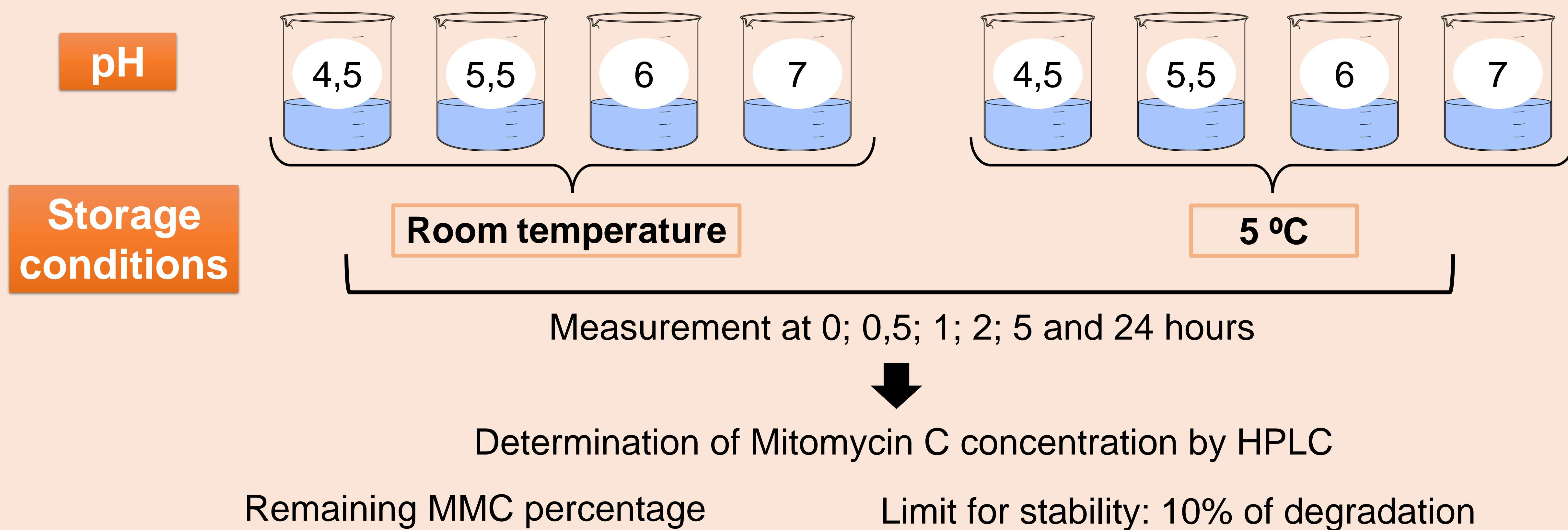
- Sodium chloride solutions are commonly used for mitomycin C administration.
- Stability of Mitomycin C (MMC) molecule is strictly affected by pH preparation, since the degradation increases with pH values lower than 7.
- Sodium chloride solutions have an approximate pH of 5,4. There are no published data to support how pH affects mitomycin C stability in sodium chloride solutions.

OBJECTIVES

To study the stability of mitomycin C in sodium chloride solutions at different conditions of pH and storage temperature.

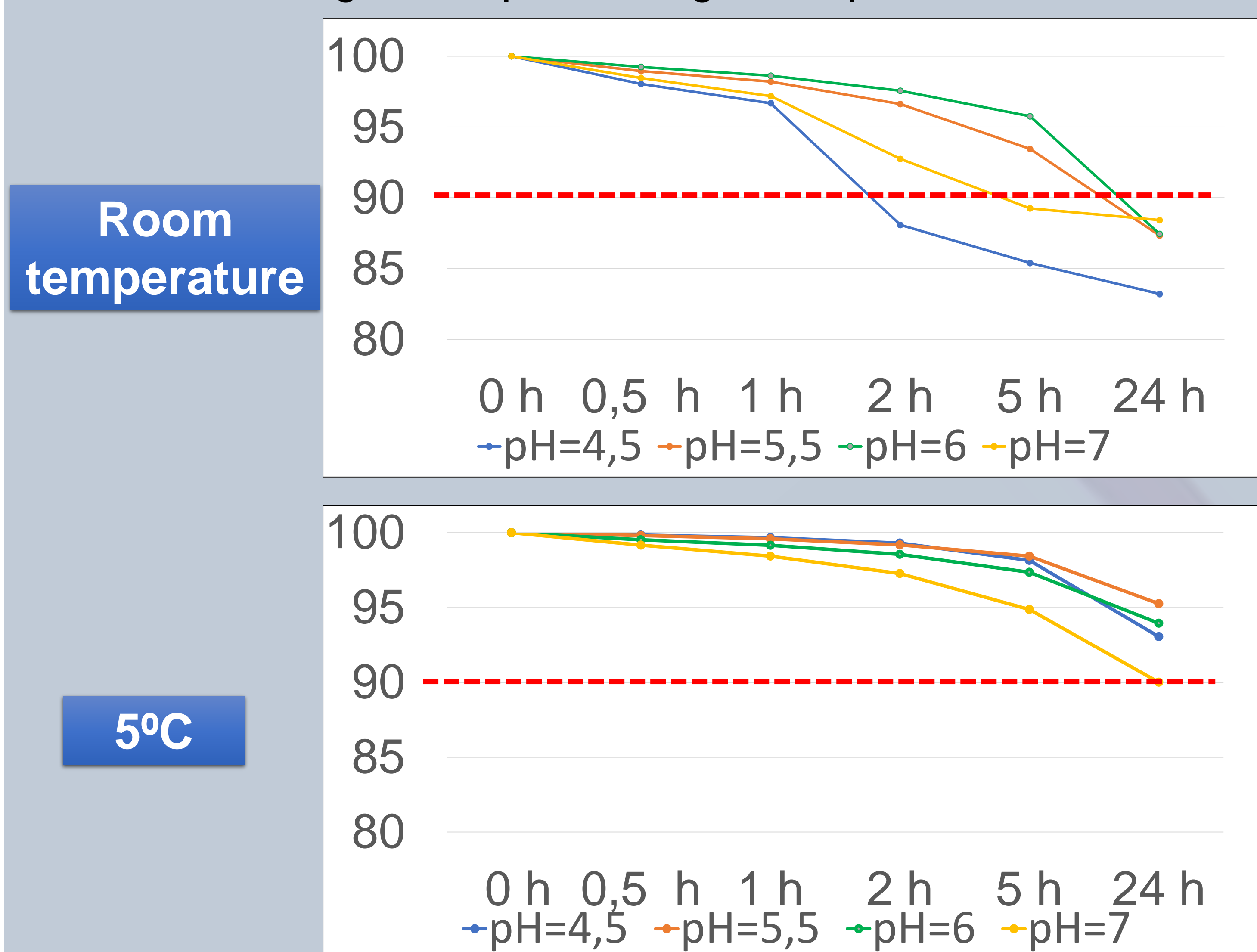
MATERIALS AND METHODS

Stability study

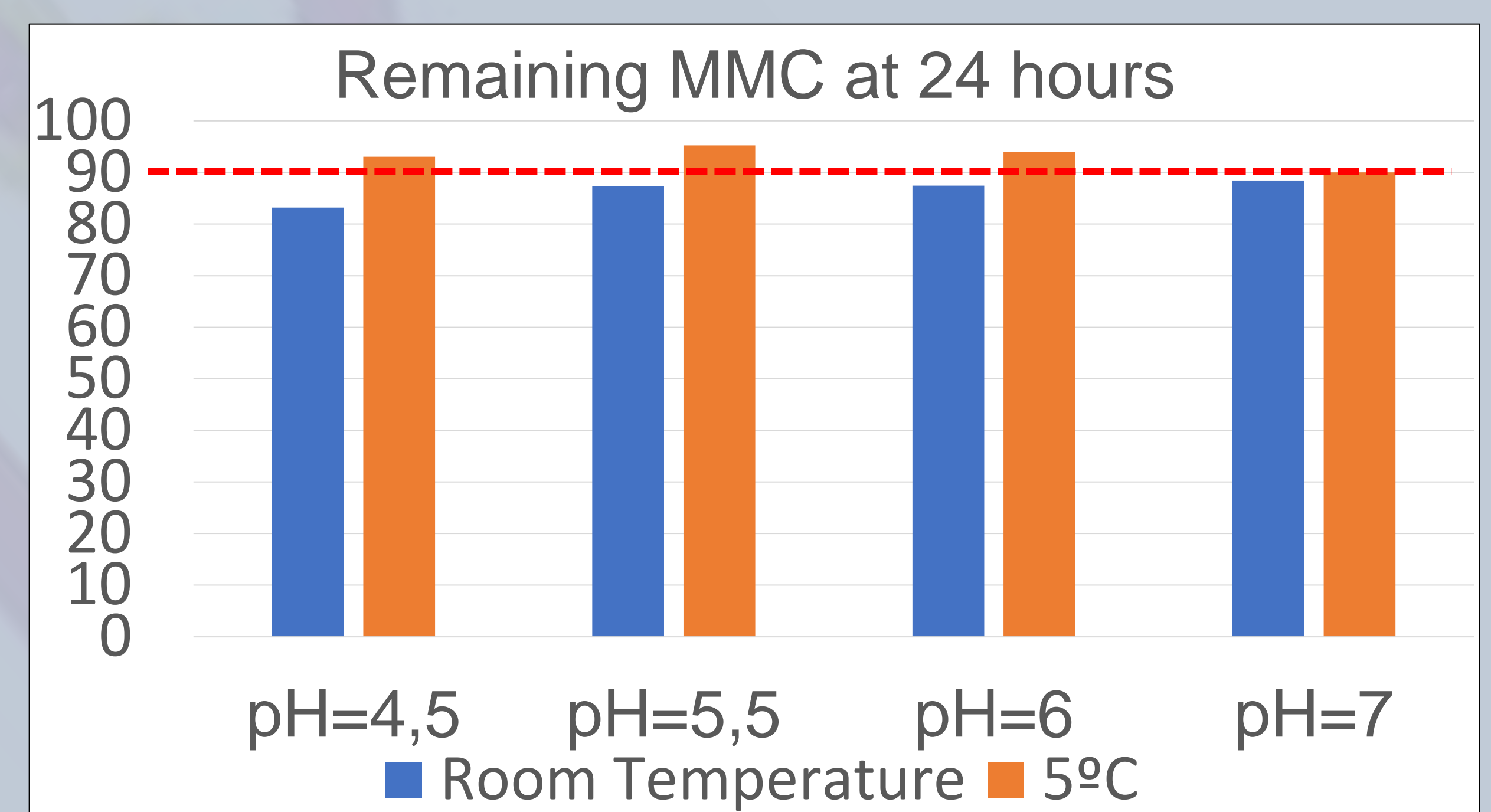


RESULTS

Remaining MMC percentage compared to the initial value at day 0



- Any solution remained above the 90% of the initial concentration after 24h at room temperature.
- All solutions stored on the fridge were stable during the 24h of the study.



CONCLUSION AND RELEVANCE

- Stability of MMC solutions decreases over time and with little variations of pH.
- Storage conditions significantly affects MMC stability.
- Degradation is reduced at 5°C regardless of pH.
- **Mitomycin C solutions in sodium chloride can be stored in fridge during 24h.**

