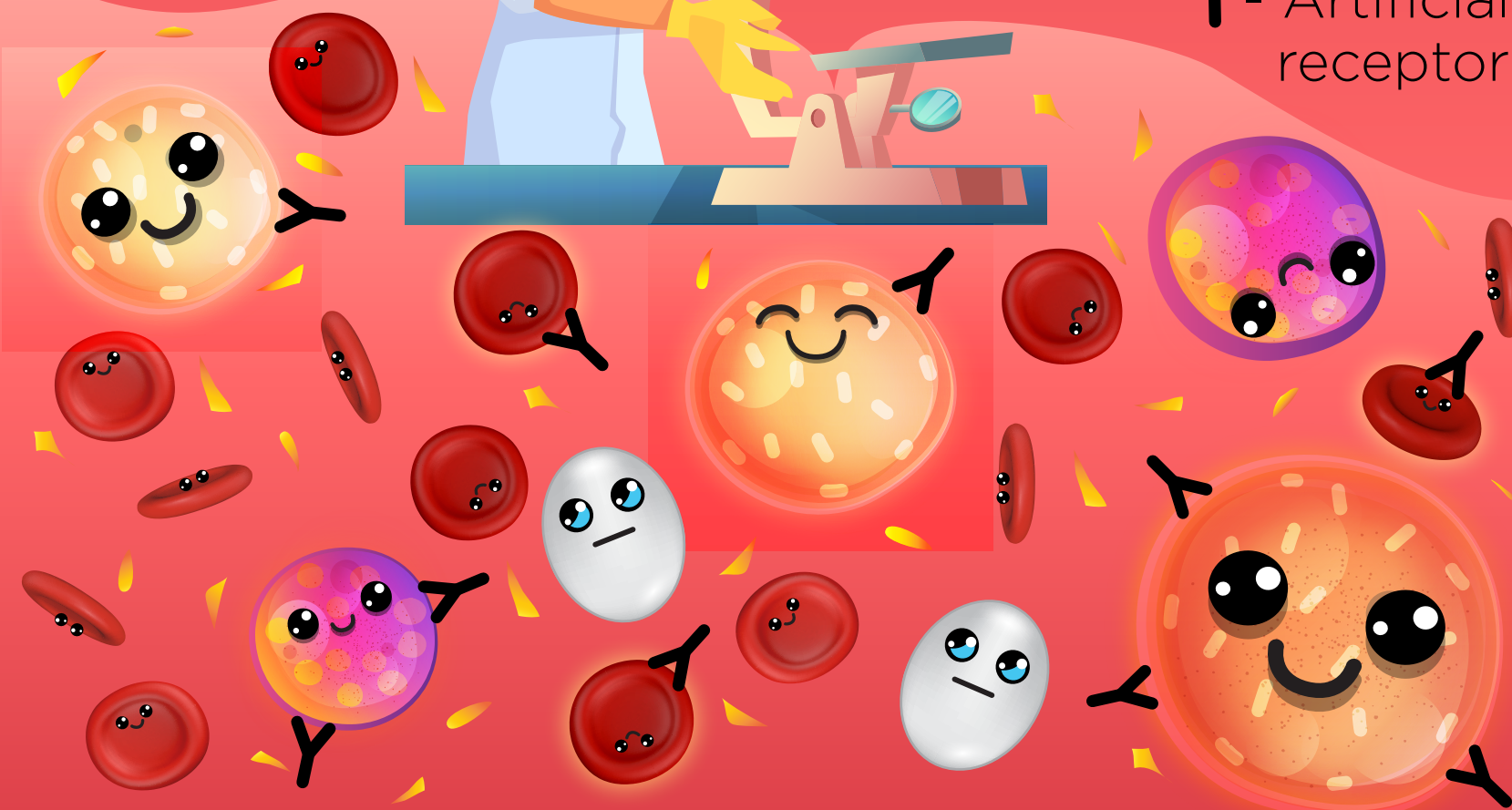


A bloody affair: Novel indicator dye and Cucurbit[8]uril (CB8) conjugate for detection of supramolecules in blood

Low-cost, robust artificial receptors like CB8 can be used as “reporters” for detecting and monitoring drug levels.

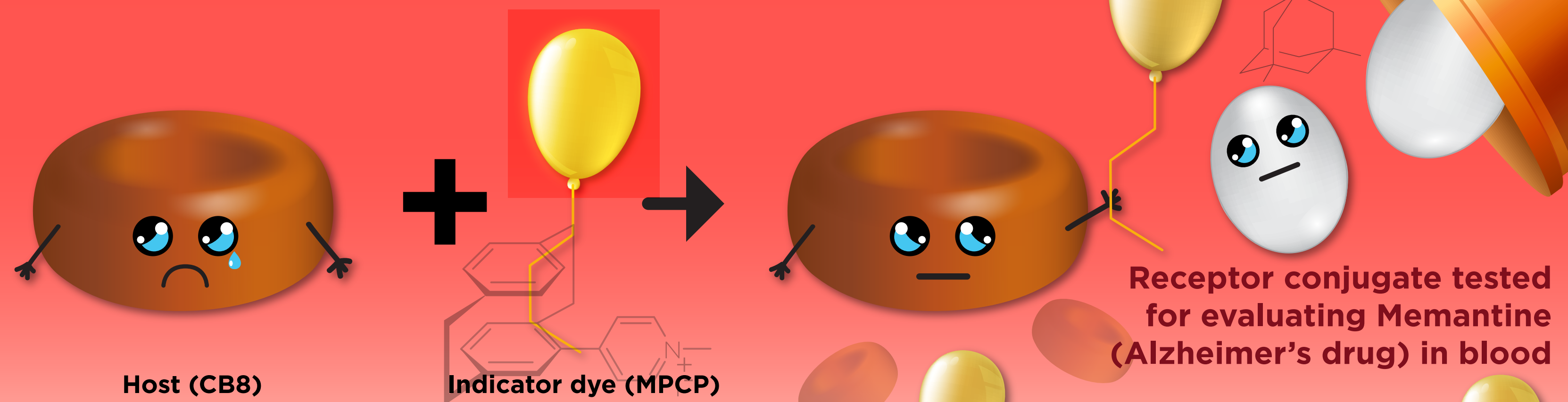


Y - Artificial receptors



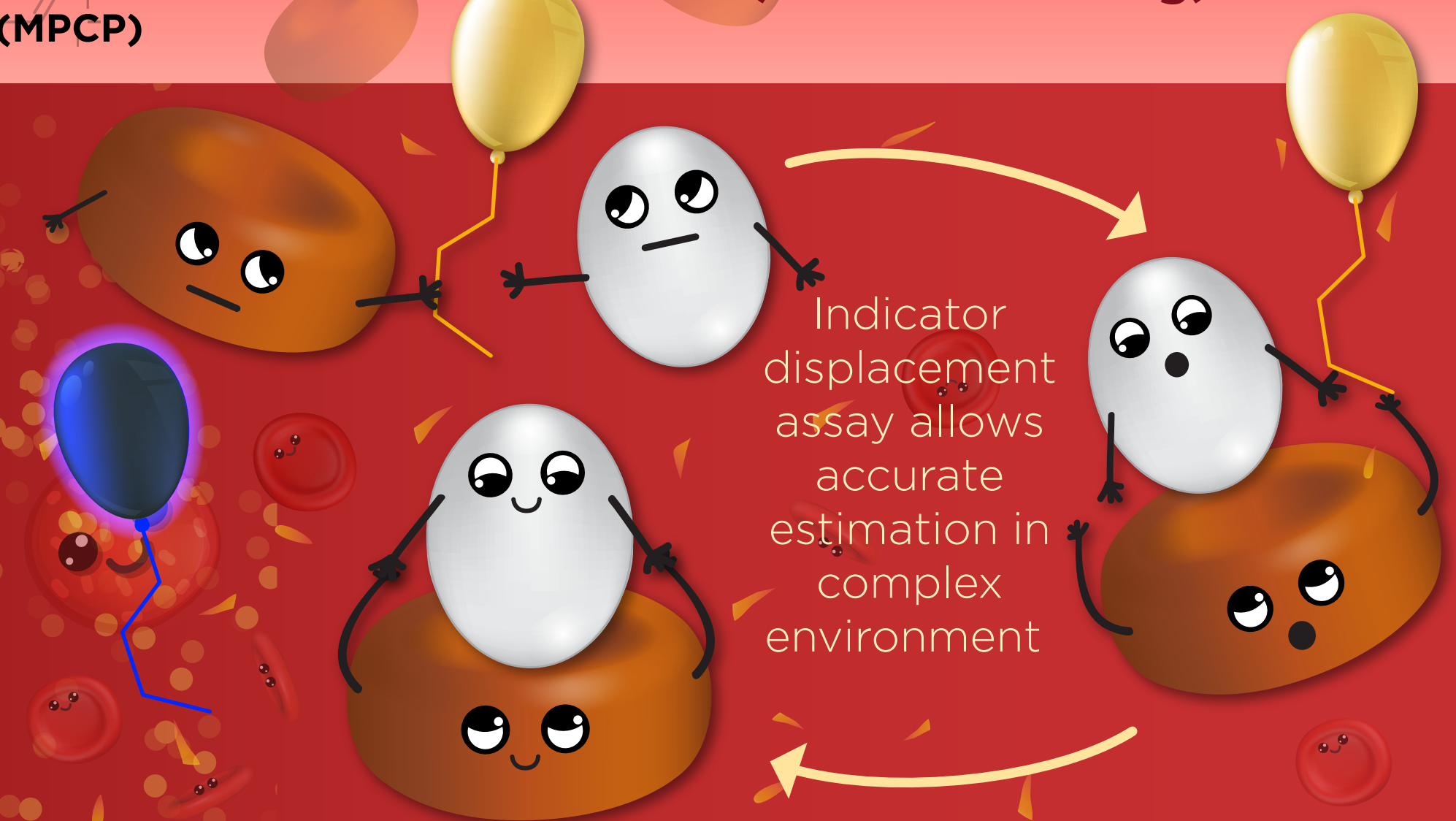
However, numerous molecules are present in blood, which compete to bind with these reporters reducing the effectiveness of such sensing methods.

Synthesis of novel indicator dye in conjunction with receptor CB8



Benefits of this detection:

- High binding strength
- Accurate estimation
- Purely synthetic hosts
- Sensitive to sample variations
- Fast and inexpensive



Indicator displacement assay allows accurate estimation in complex environment

CB8-based chemosensing ensemble exhibits excellent sensing capabilities and could be used for developing diverse blood serum-based supramolecular assays.