



The feasibility of using pathobiome strains as live biotherapeutic products for human use

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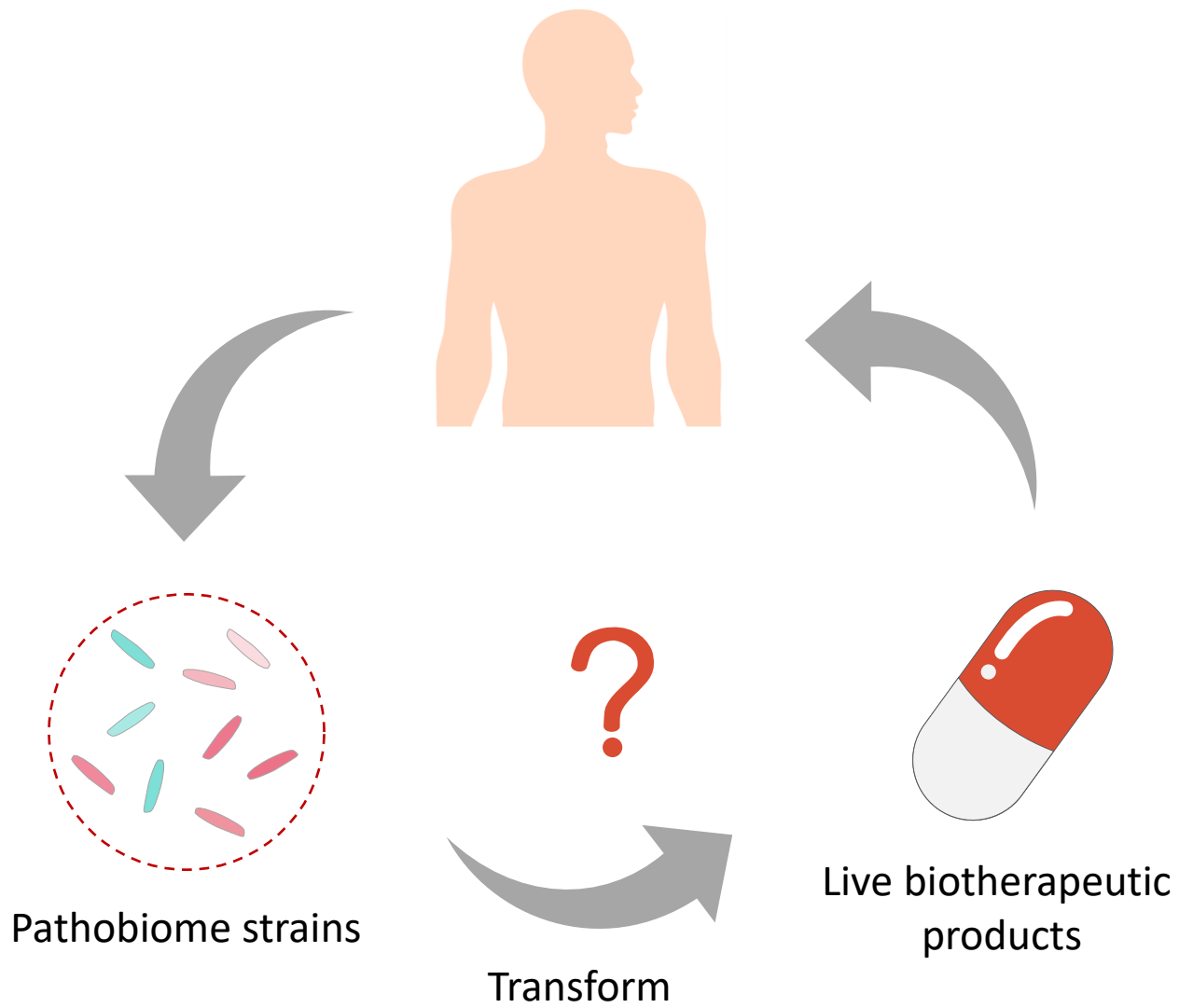
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Introduction





Section 1: Is pathobiome harmful or beneficial to human health?

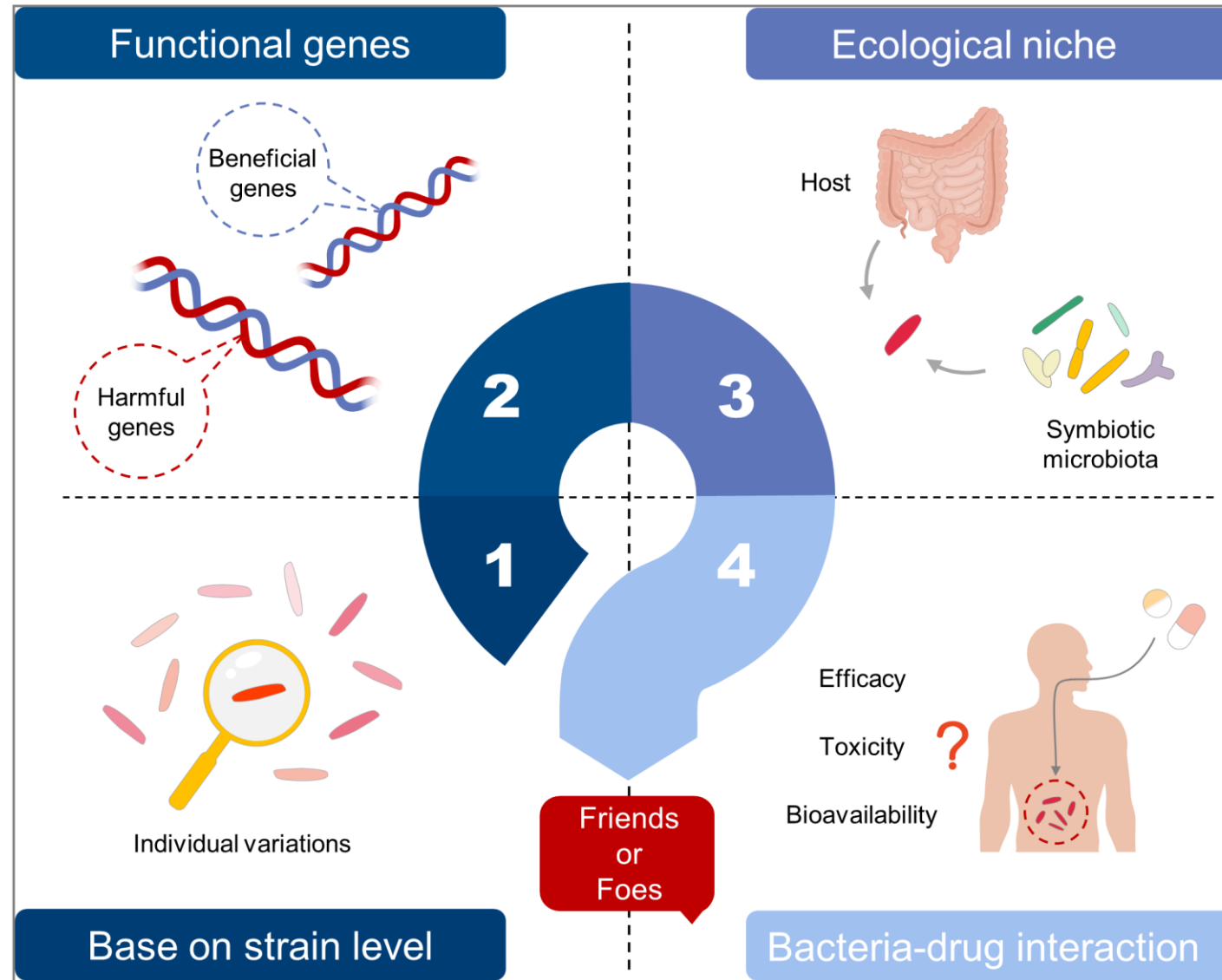


Figure 1. The four perspectives for evaluating the goodness or badness of pathobiome strains.

Section 2: The main challenges in utilizing pathobiome strains to develop live biotherapeutic products

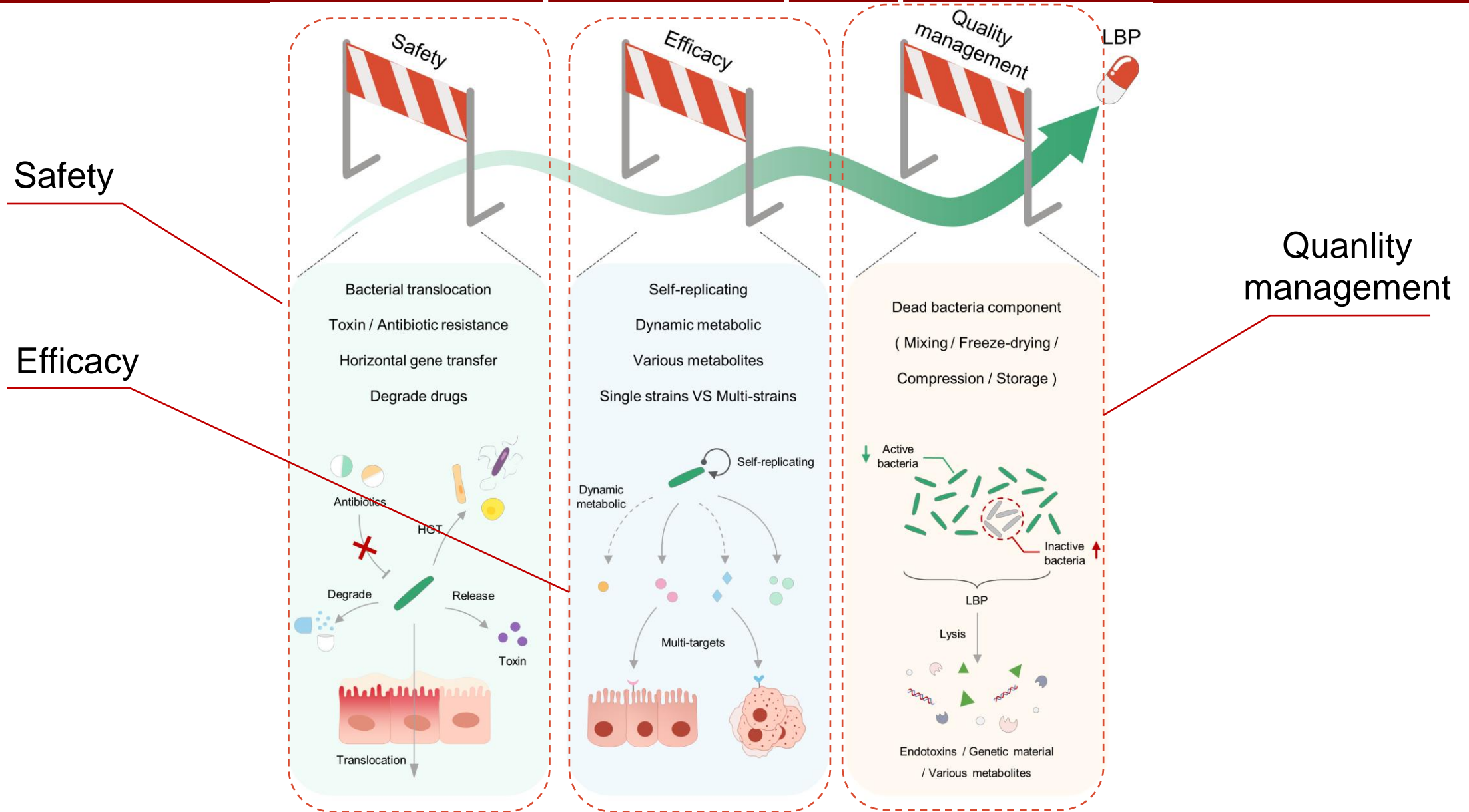


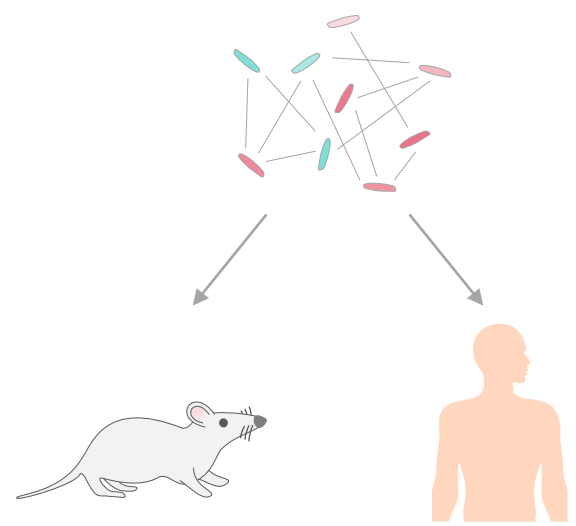
Figure 2. The main obstacles in developing pathobiome strains into live biotherapeutic products.



Section 3: Possible future research directions and applications

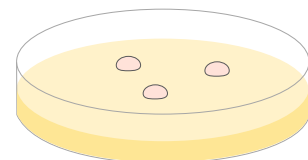


Functional gene investigation

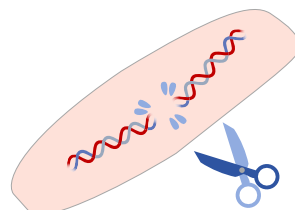


Microbial Interaction

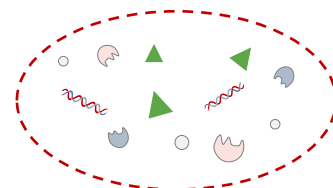
Basic research



Large scale screening



Recombinant LBP



Bacterial active metabolites

Development form



Summary

- ❑ The evaluation of pathobiome strains should be conducted at the strain level, involving the identification of the functional genes, while considering the impact of ecological niche and drug interactions.
- ❑ The safety, efficacy, and quality management of LBPs such as pathobiome strains have particular characteristics.
- ❑ Promising development methods include the recombinant LBP and active metabolites.

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