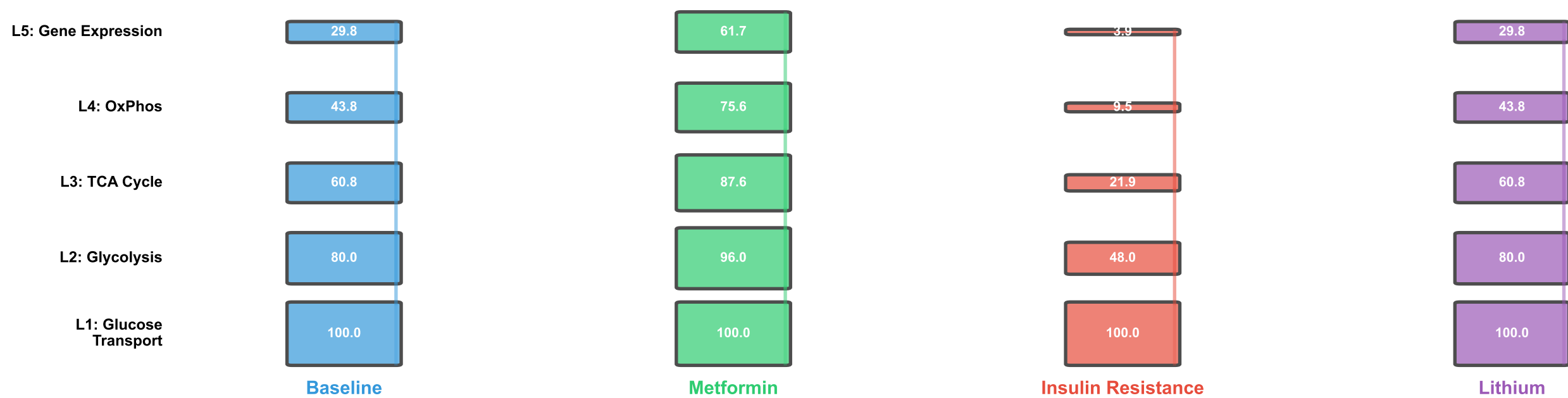
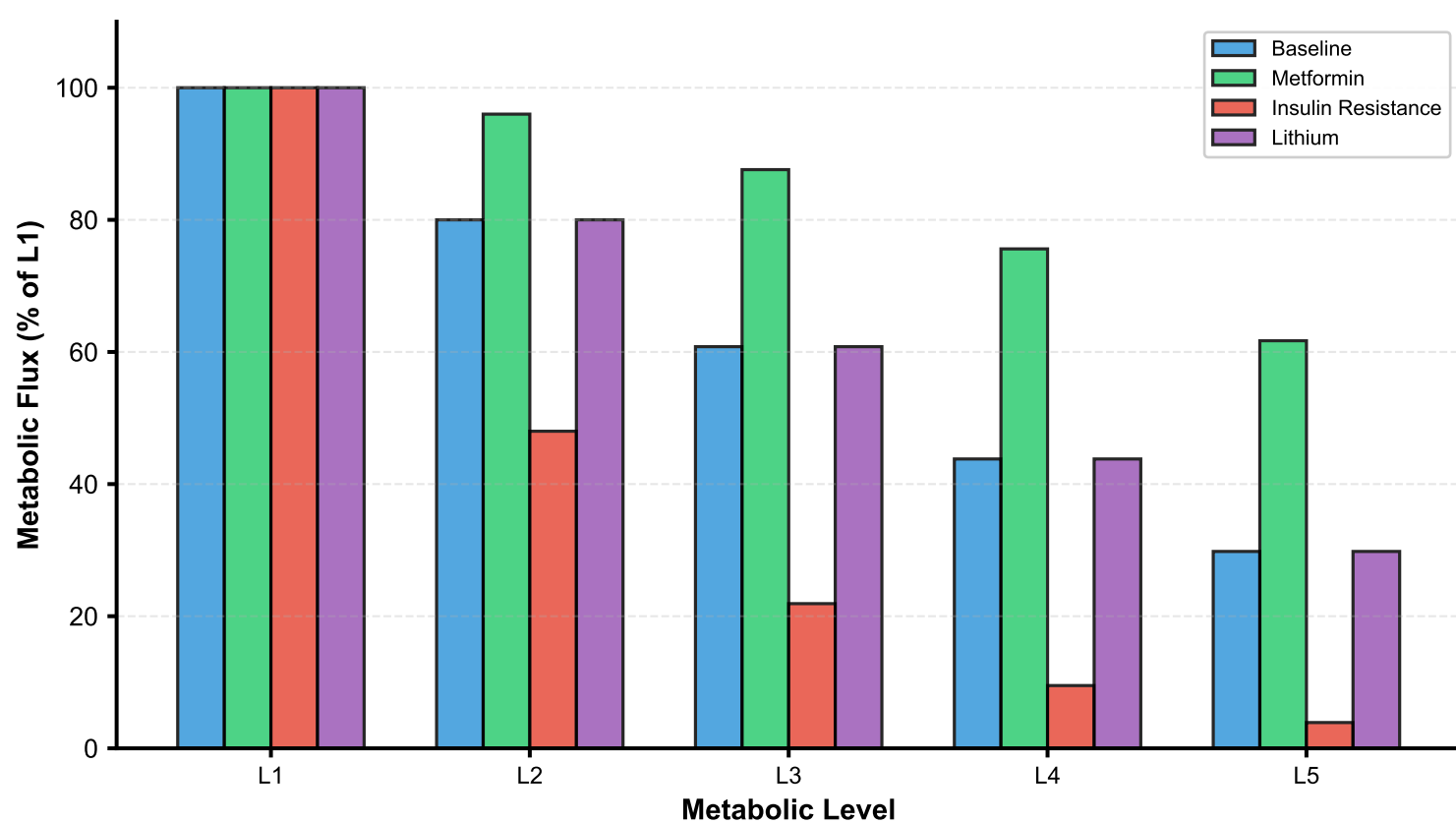


# Metabolic Flux Hierarchy: Multi-Scale Information Cascades Through Drug-Modulated Pathways

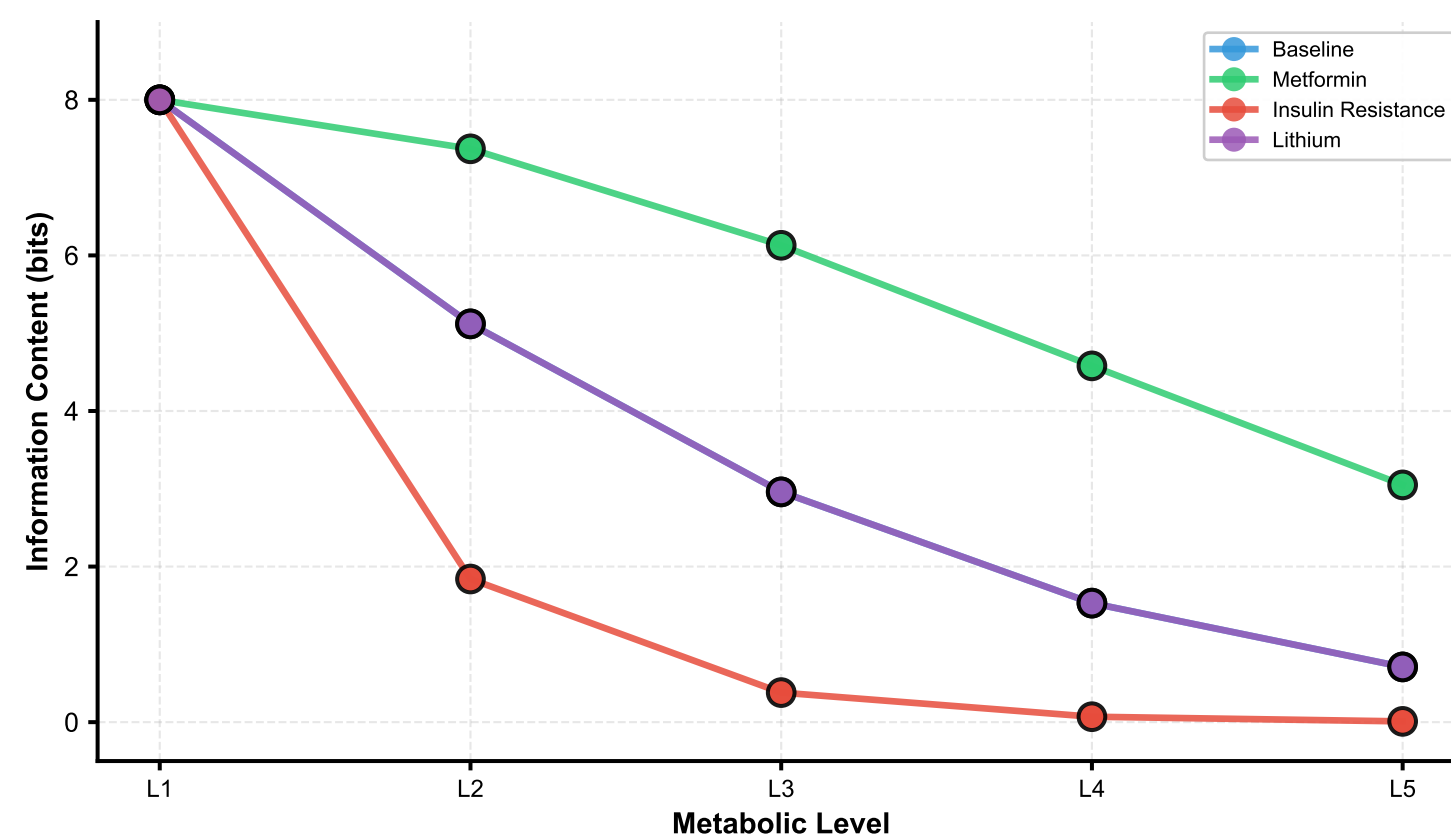
## (A) Hierarchical Flux Propagation: Energy Flow Diagram



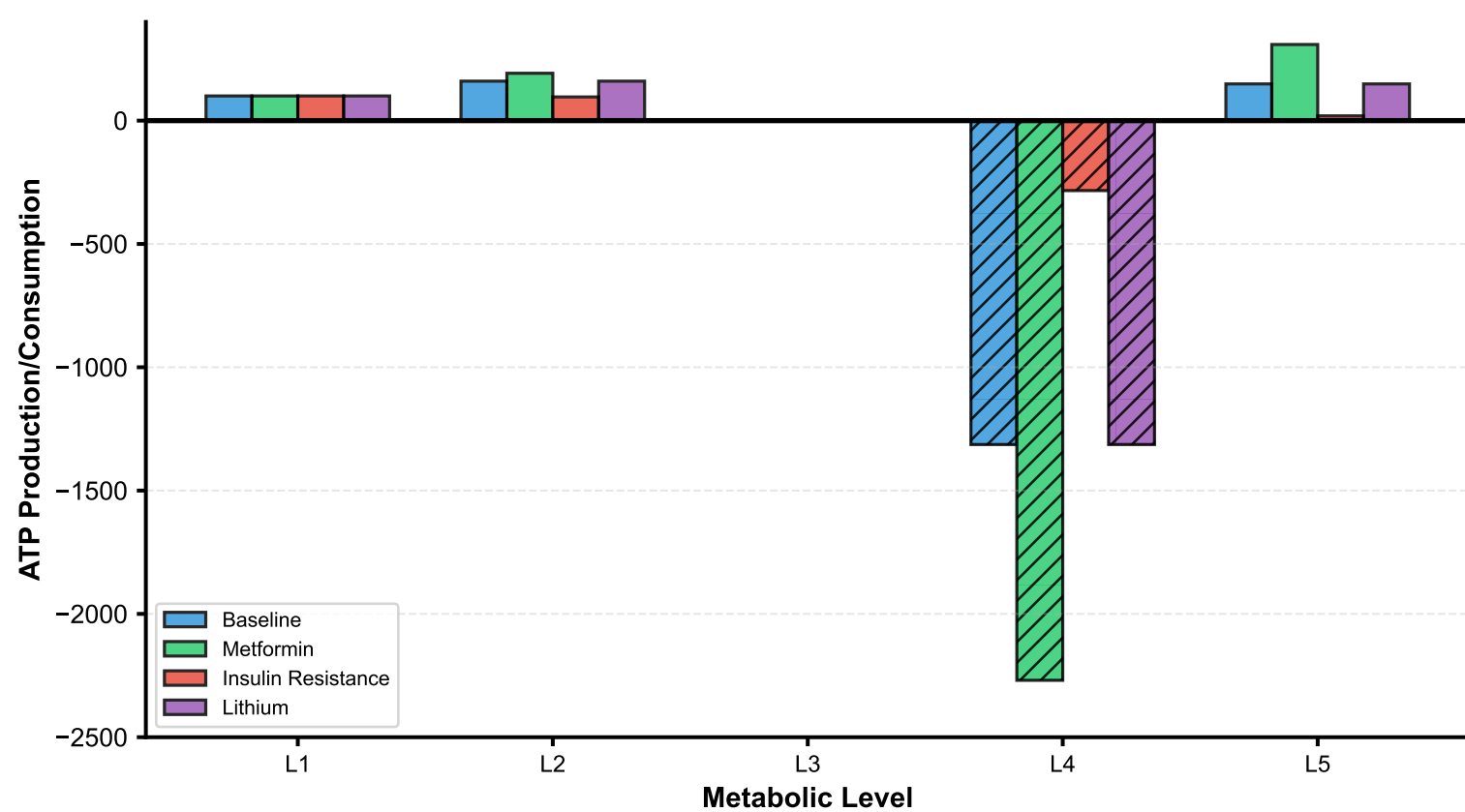
## (B) Hierarchical Flux Cascade



## (C) Information Compression



## (D) ATP Production/Consumption Profile



## (E) Metabolic Efficiency Comparison

