



Study on the Impact of the National Drug Price Negotiation Policy on the Affordability of Innovative Drugs in China

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Background and Objective

- The National Drug Price Negotiation (NDPN) in China has become a crucial mechanism for strategic purchase of new drugs since 2019, which progressively shapes an innovative drug pricing system to improve the affordability of novel drugs.
- According to the newly implemented NDPN 2023 effective January 1, 2024, there are currently 430 negotiated drugs still within the agreement periods, comprising 330 western drugs, 67 traditional Chinese patent drugs and 33 bidding drugs.
- This study aims to evaluate the affordability of negotiated drugs included in China's 2023 National Reimbursement Drug List and provide insights for decision-makers.

Methods

- Referring to the WHO/HAI affordability calculation methodology, our study firstly figured out the drug cost per DDD (DDDC) based on negotiated prices and defined daily doses (DDD).
- DDD values came from the WHO ATC/DDD Index and package inserts, and price data from the YaoZH Database.
- Then we calculated the out-of-pocket (OOP) of each drug and treatment category for patients after reimbursement based on the median reimbursement rates for urban employees and rural and urban residents in China.
- Affordability ratios were measured using China's 2024 minimum daily wage as the benchmark, with a ratio ≤ 1 being seen as affordable.

Results

- 430 listed innovative drugs were analyzed, covering 69 treatment categories. The mean (SD) DDDC was RMB 466.12 (3731.98) and the median (Min, Max) was RMB 67.66 (0.18, 71668.26).
- Reimbursement rates ranged from 65% to 85% (median 80%) for employees and 50% to 80% (median 70%) for residents. After reimbursement, the mean (SD) OOP was RMB 93.22 (747.26) for employees and RMB 139.84 (1119.59) for residents.

Results (continued)

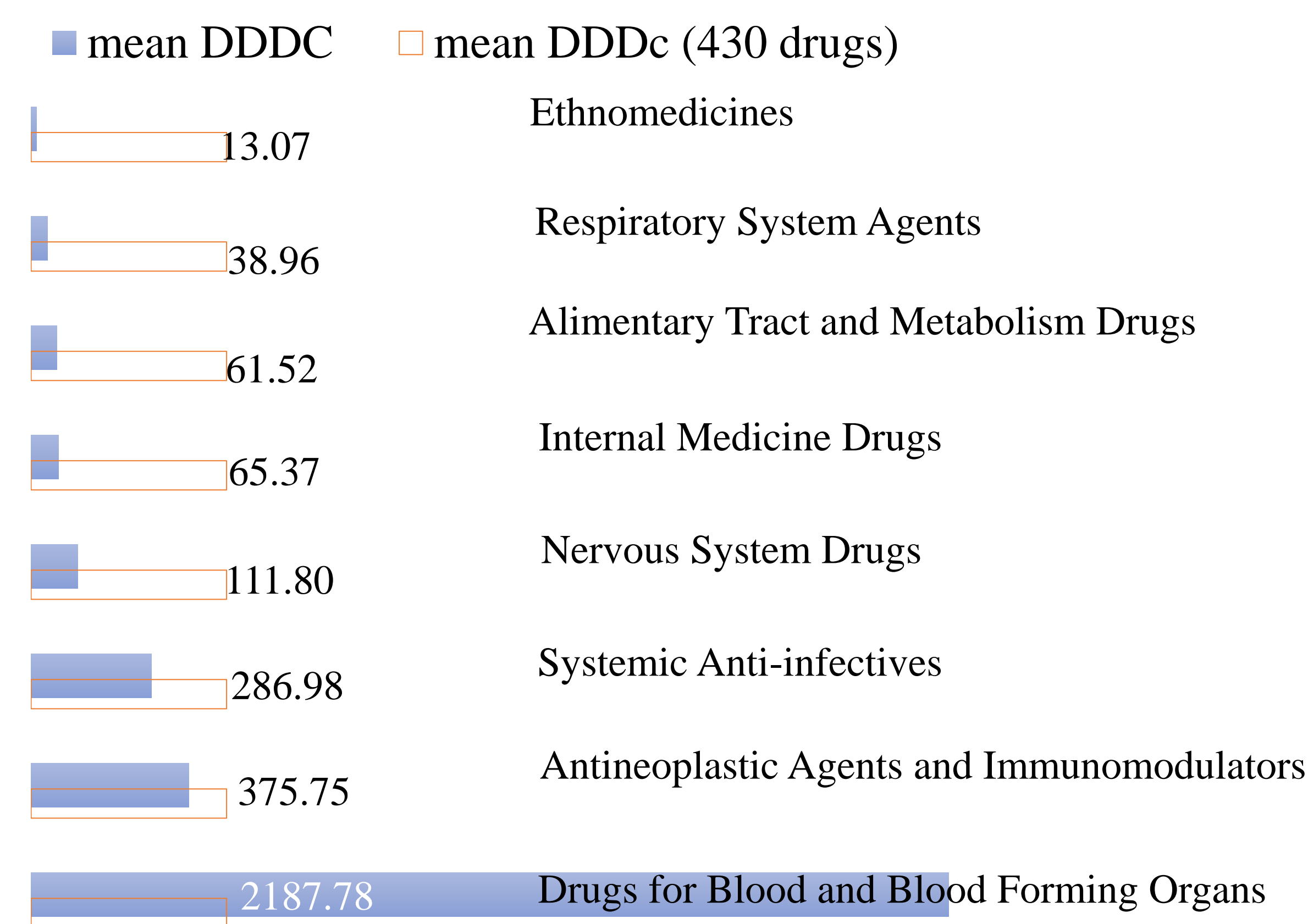


Figure 1 Mean DDDc of Major Drug Categories (RMB)

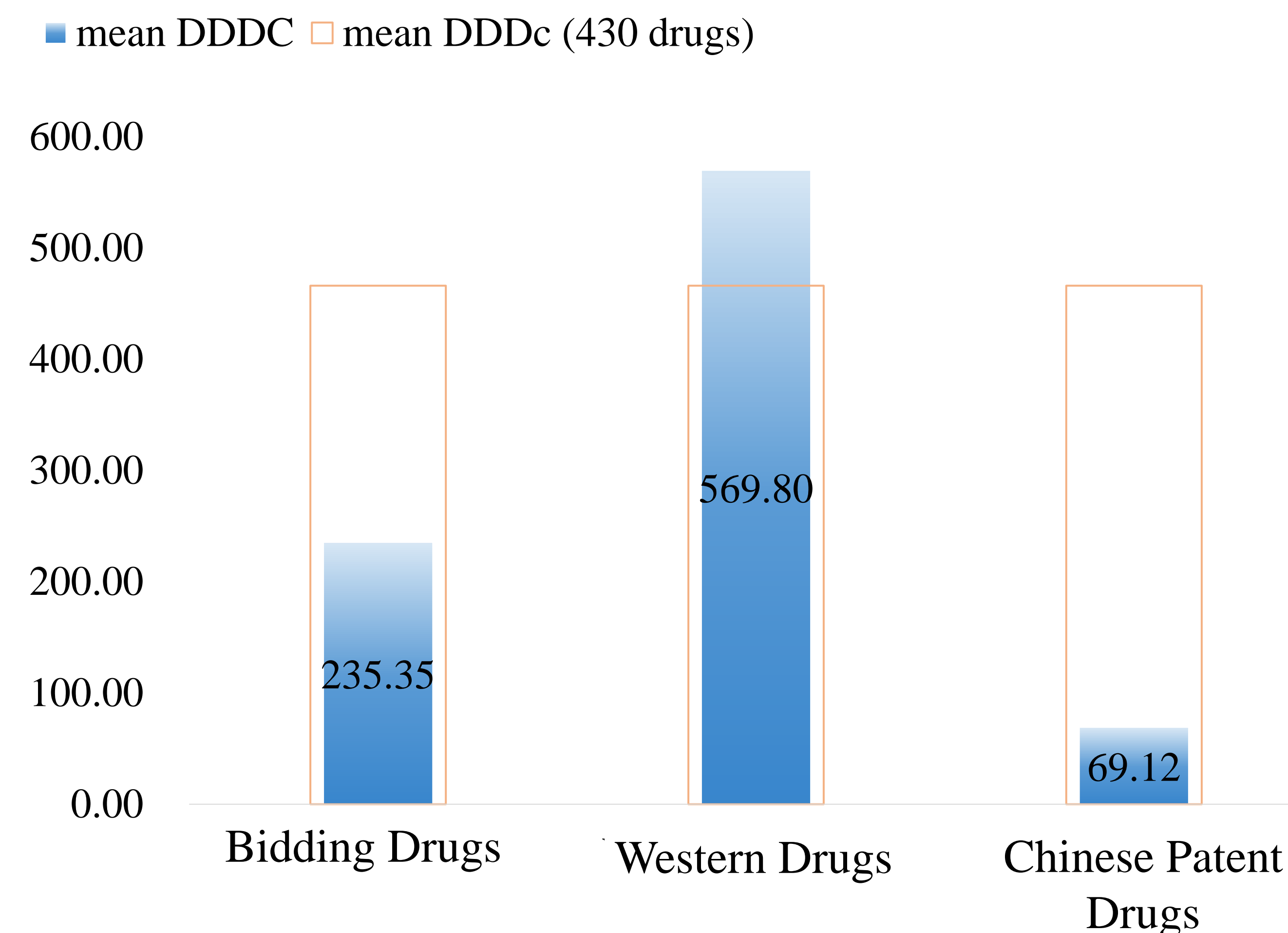


Figure 2 Mean DDDc of Drugs Under Three negotiated Conditions (RMB)

- Among residents, reimbursement increased the number of affordable drugs from 232 (53.95%) to 332 (77.21%), and all listed drugs were assessed as affordable in 47 treatment categories (68.12%). The highest affordability ratio was for antihemostatic drugs (32.34) and the lowest was for topical antifungal drugs (0.001)

Results (continued)

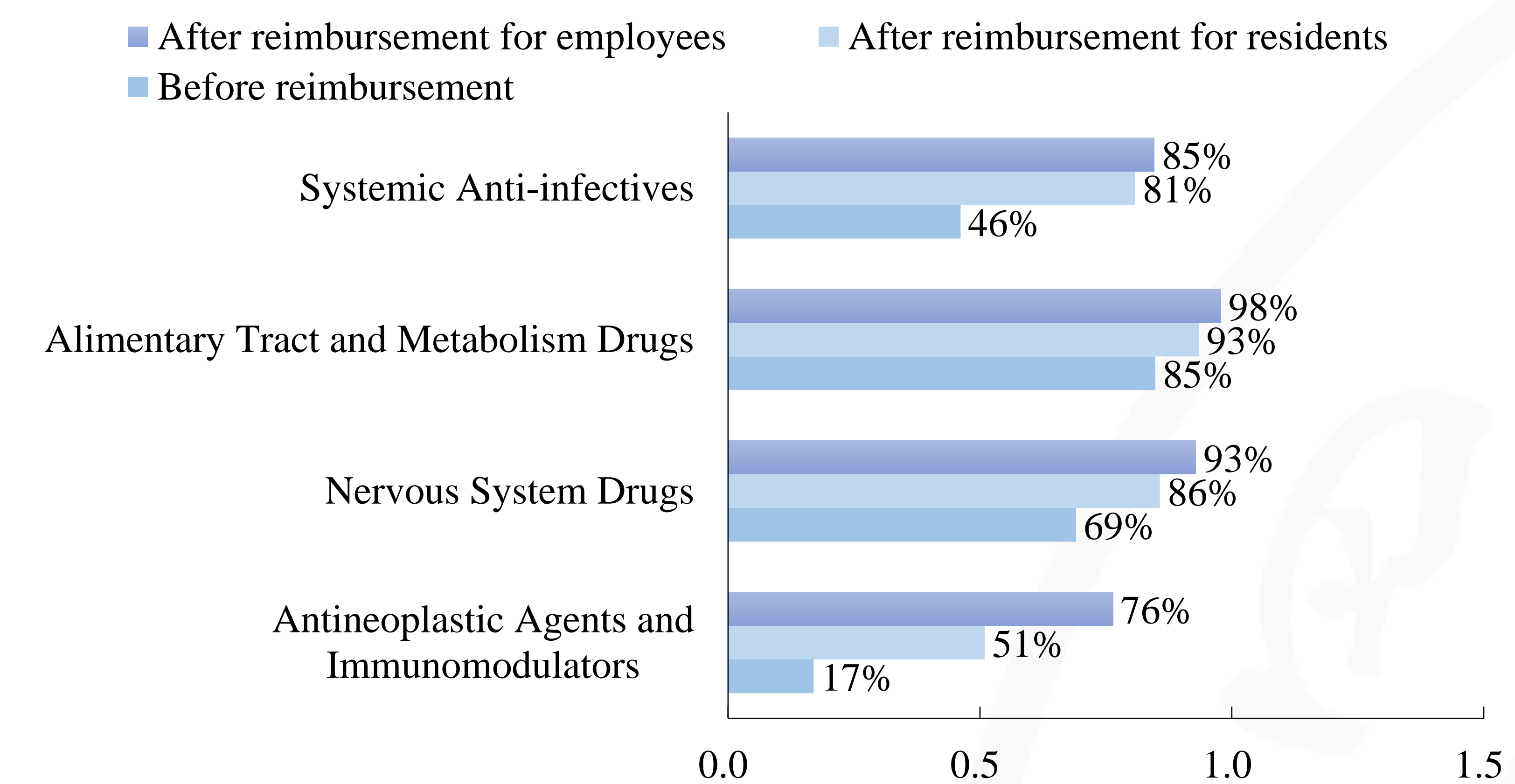


Figure 3 Affordability Ratio of Major Drug Categories

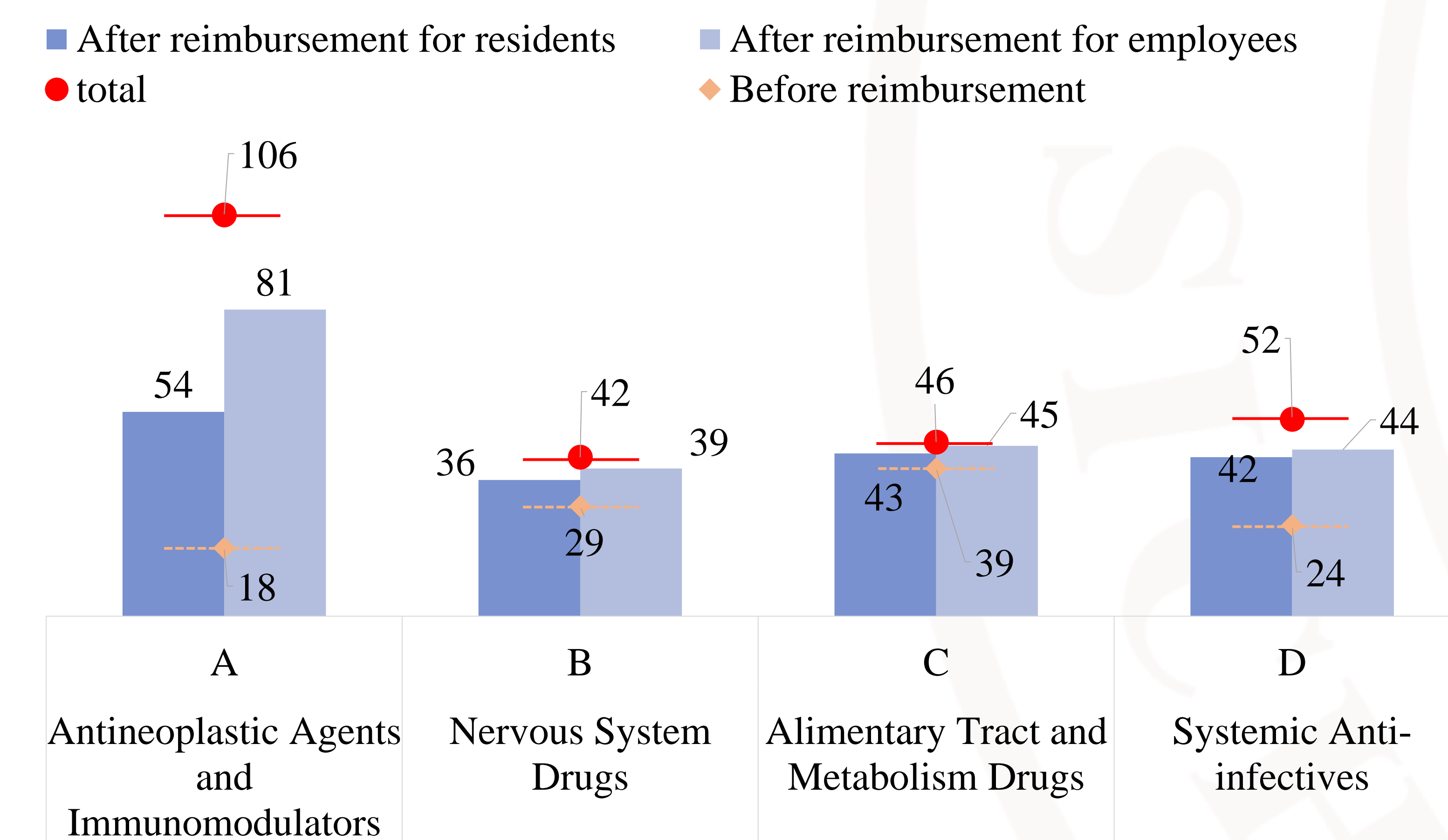


Figure 4 Number of Affordable Drugs in Major Drug Categories

Conclusions

- The NDPN mechanism has substantially reduced the prices of novel drugs and enhanced affordability for patients. While there are still drugs keep low affordability, especially orphan drugs.

Presented at ISPOR 2025, May 13-16, 2025, Montreal, QC, Canada