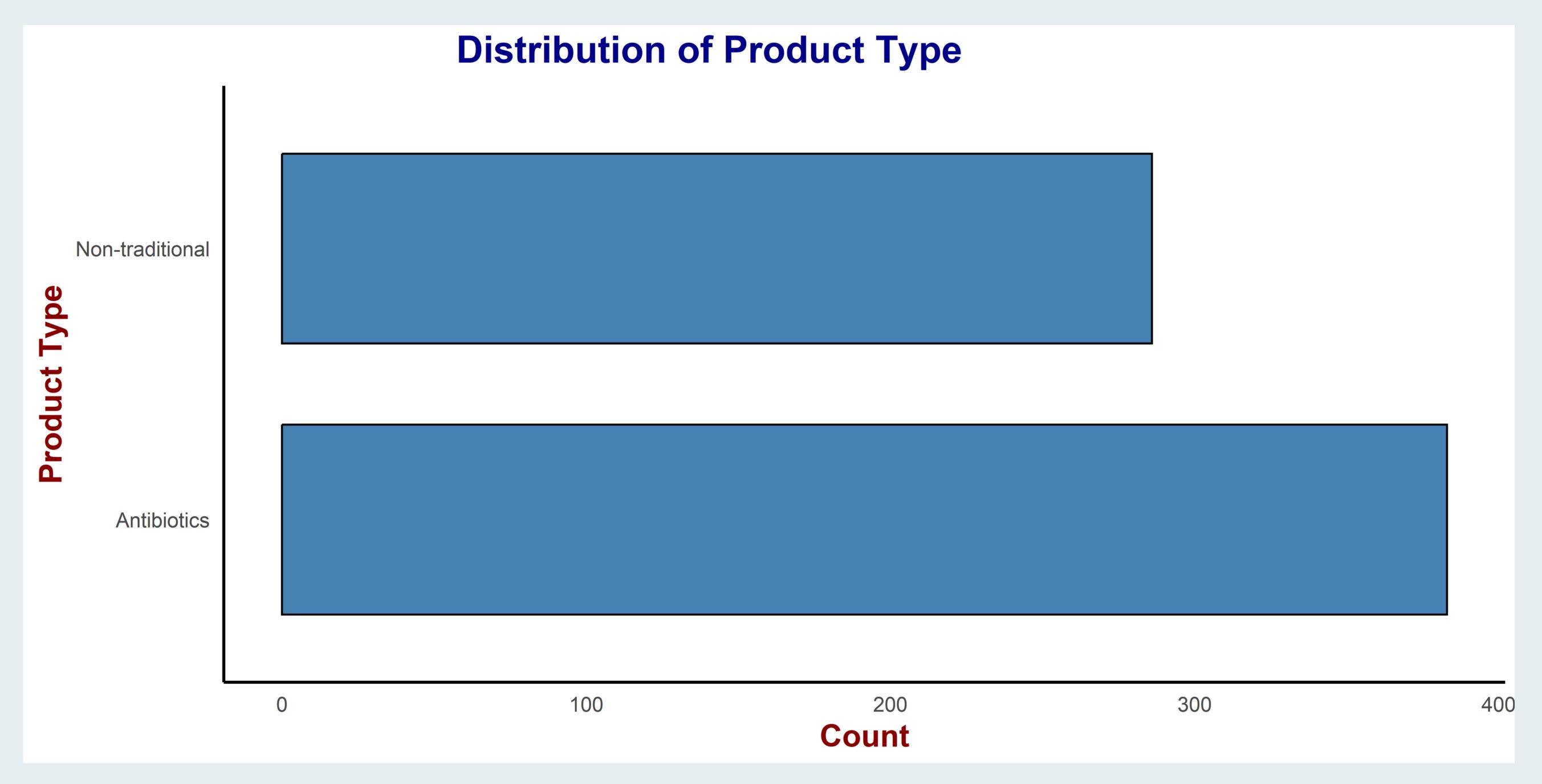


## ACTIVITY OF NEW ANTIBACTERIAL PRODUCTS ON PRIORITY PATHOGENS

## **Authors**

Claudia Agyeere(@Agyeere9), Gideon Danso(@Gideon\_0703), Akeemat Ayinla(@That\_Hakeemah), Frederick Allou(@Freddie), Duong Gia Khanh(@Khanh)

This presentation focuses on the WHO AMR pipeline analysis. It includes information on various non-traditional and antibiotic products targeting priority pathogens



## F1: Distribution of Product Type

This shows 383 traditional antibiotics and 283 non-traditional products in the pipeline. While many efforts focus on improving conventional antibiotics, nearly half explore innovative approaches like bacteriophages, probiotics, and immune modulators, balancing existing treatments with new strategies.

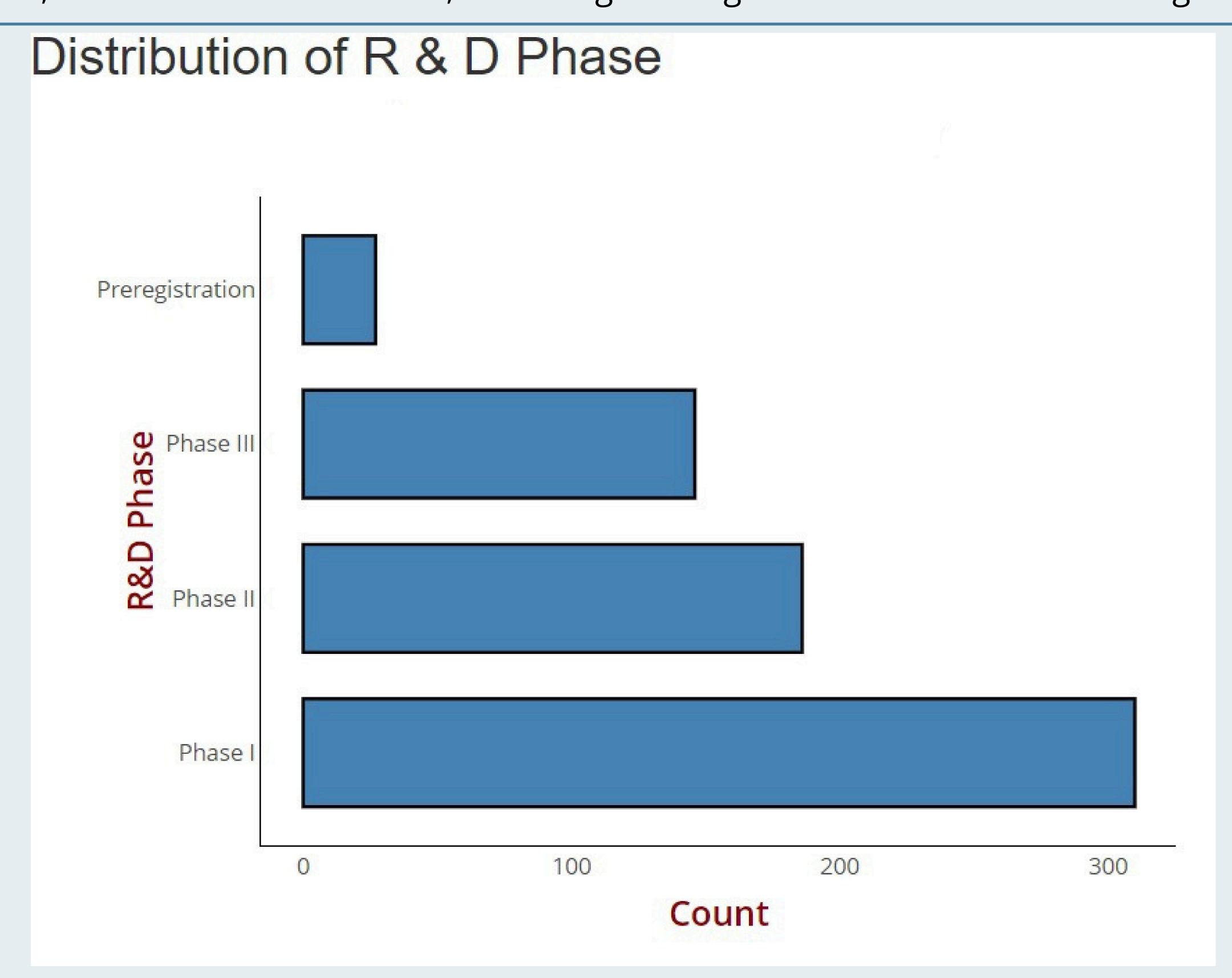


Figure 2: Distribution of AMR Products by R&D Phase

Considering the research and development phases, the majority of the tested products (46.3%) are in Phase 1 while Preregistration happened to be the phase with the least number of AMR Products (4.03%).

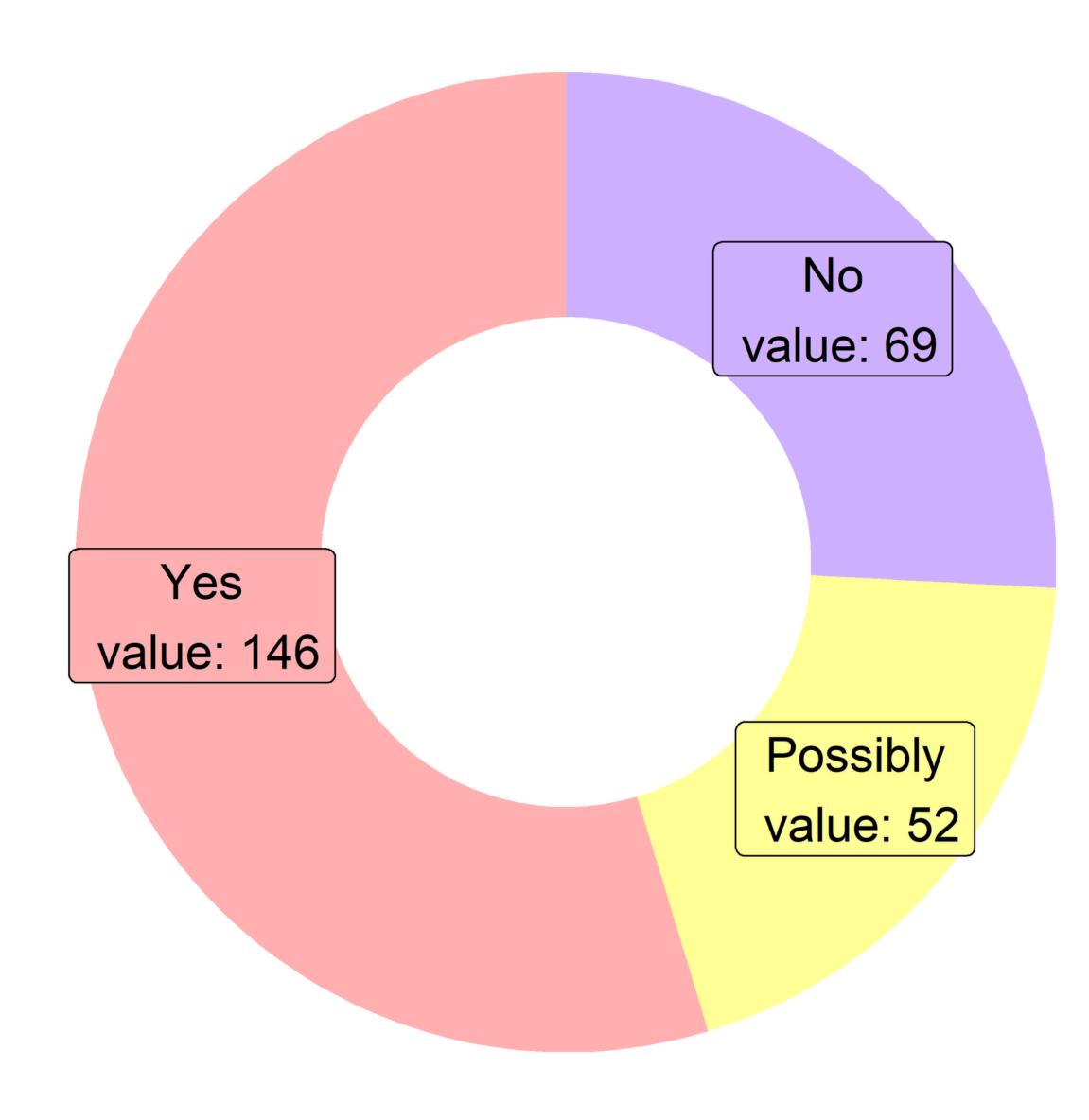


Figure 3: The activity of antibacterials against priority pathogens

Out of the 669 antibacterial entries tested, a total of 146 (54.6%) showed activity against priority pathogens.

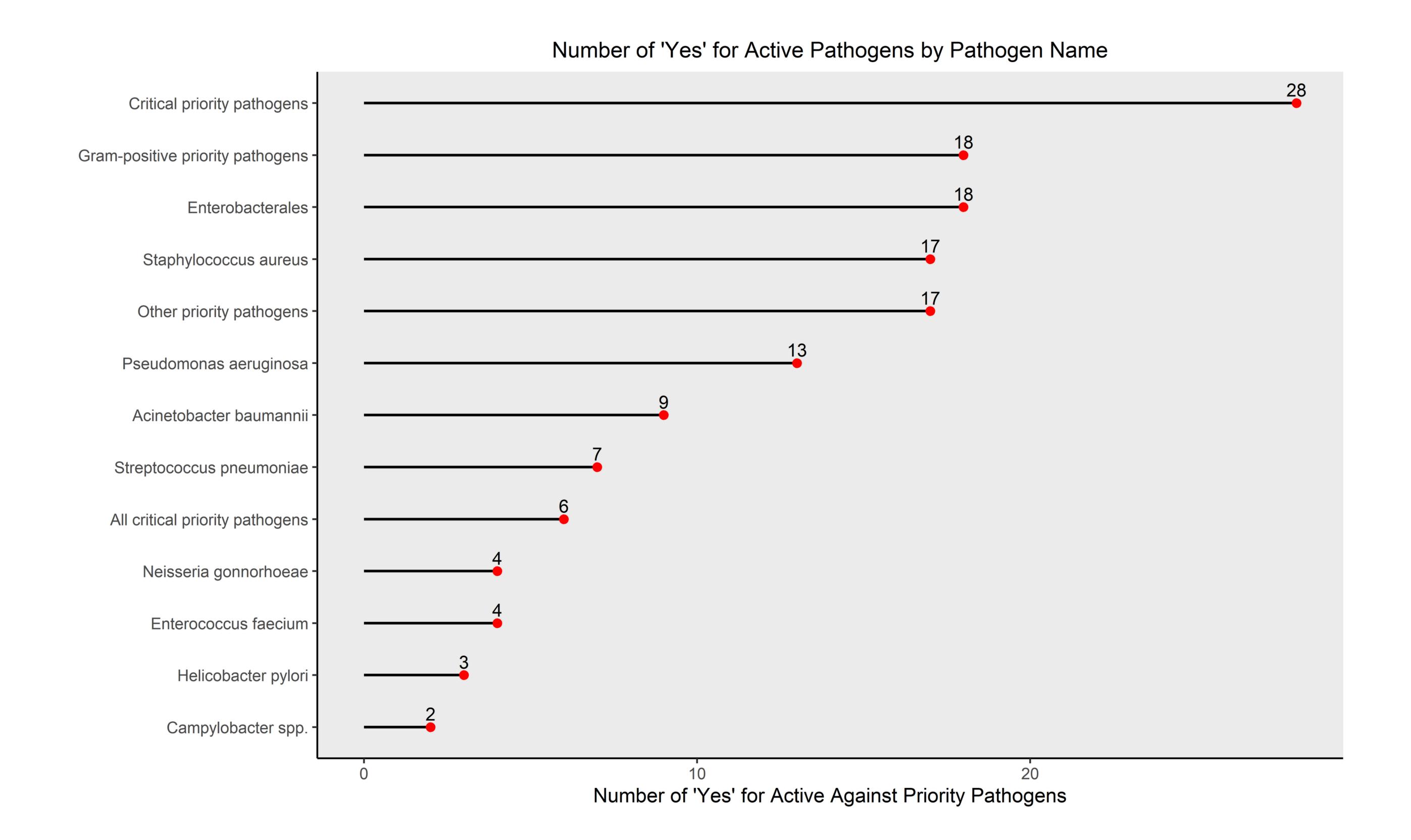


Figure 4: Pathogen Activity against Active Priority Pathogens

Critical priority pathogen have the highest number of active products, indicating strong research focus. Significant activity targets Gram-positive infections like Staphylococcus aureus. However, lower product counts for pathogens such as *Helicobacter pylori* and *Campylobacter spp*. highlight the need for increased research and development efforts in these challenging areas.

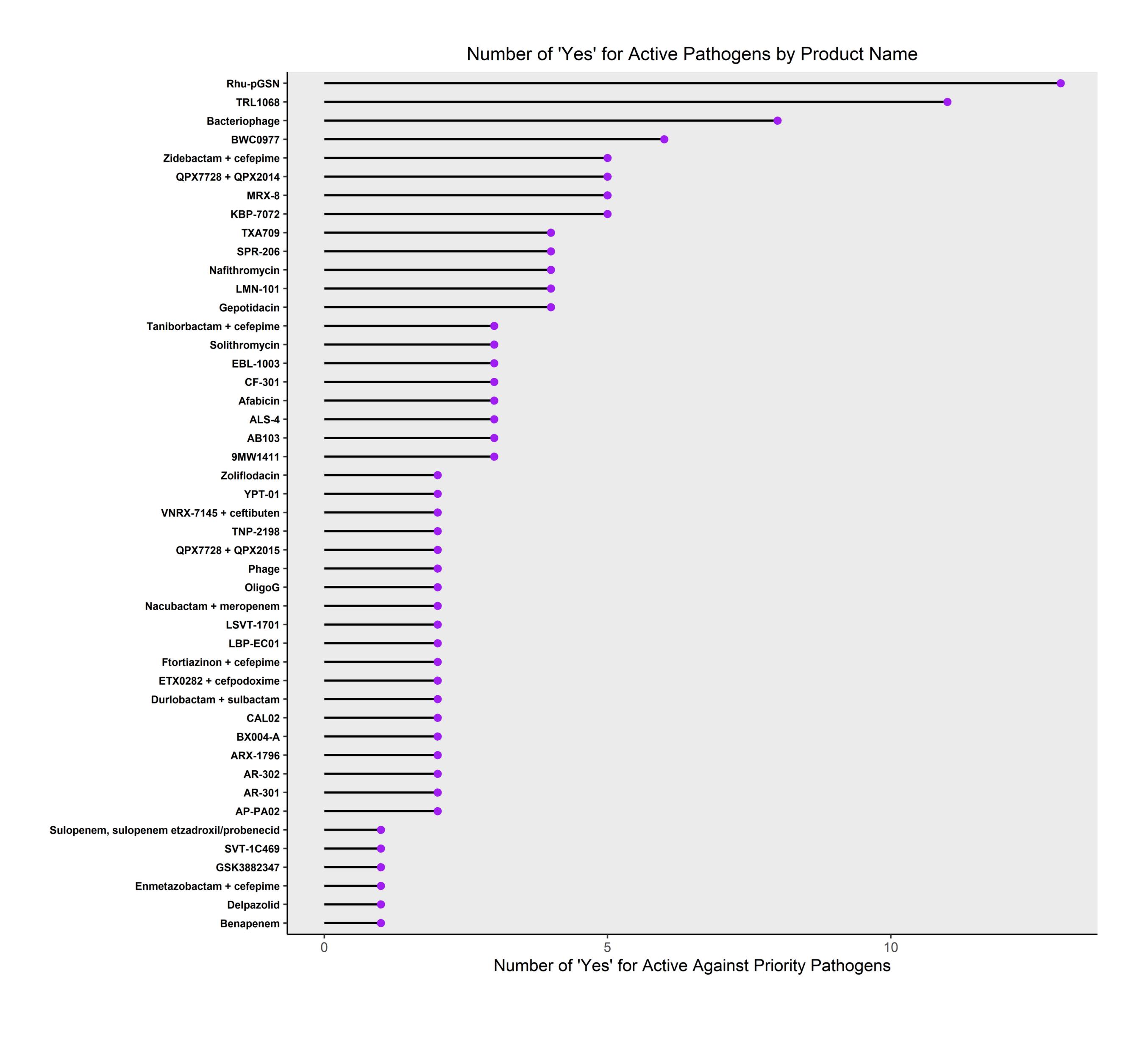


Figure 5: Shows a graph of the "Number of Yes for Active pathogens by Product name"

The product named Rhu-pGSN showed greatest antibacterial activity

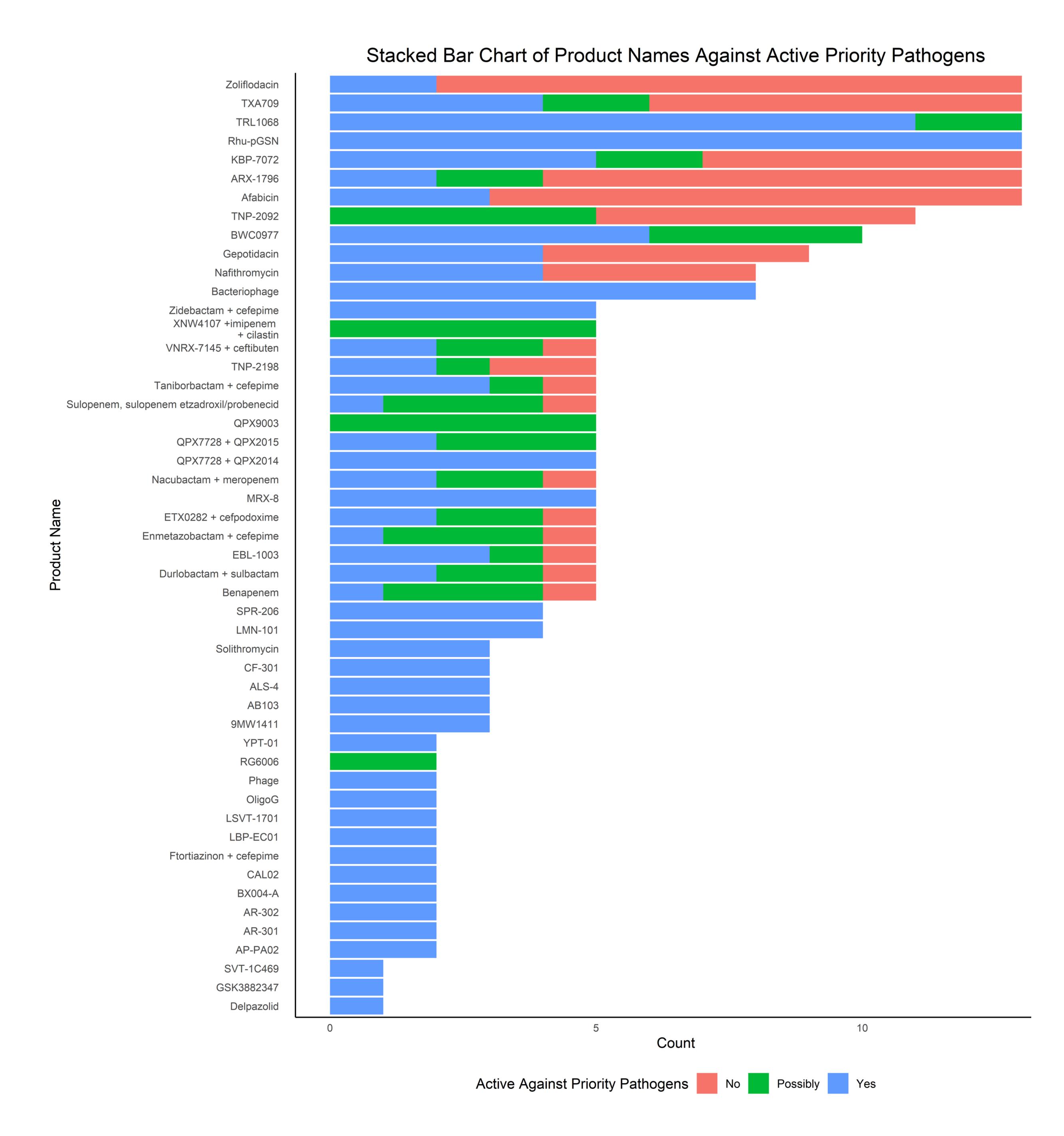


Figure 6: Product name against active priority pathogens

We evaluated how well the products work against critical pathogens. "Yes" means the pathogen is susceptible, "No" means it's resistant, and "Possibly" indicates the need for more research to improve effectiveness.

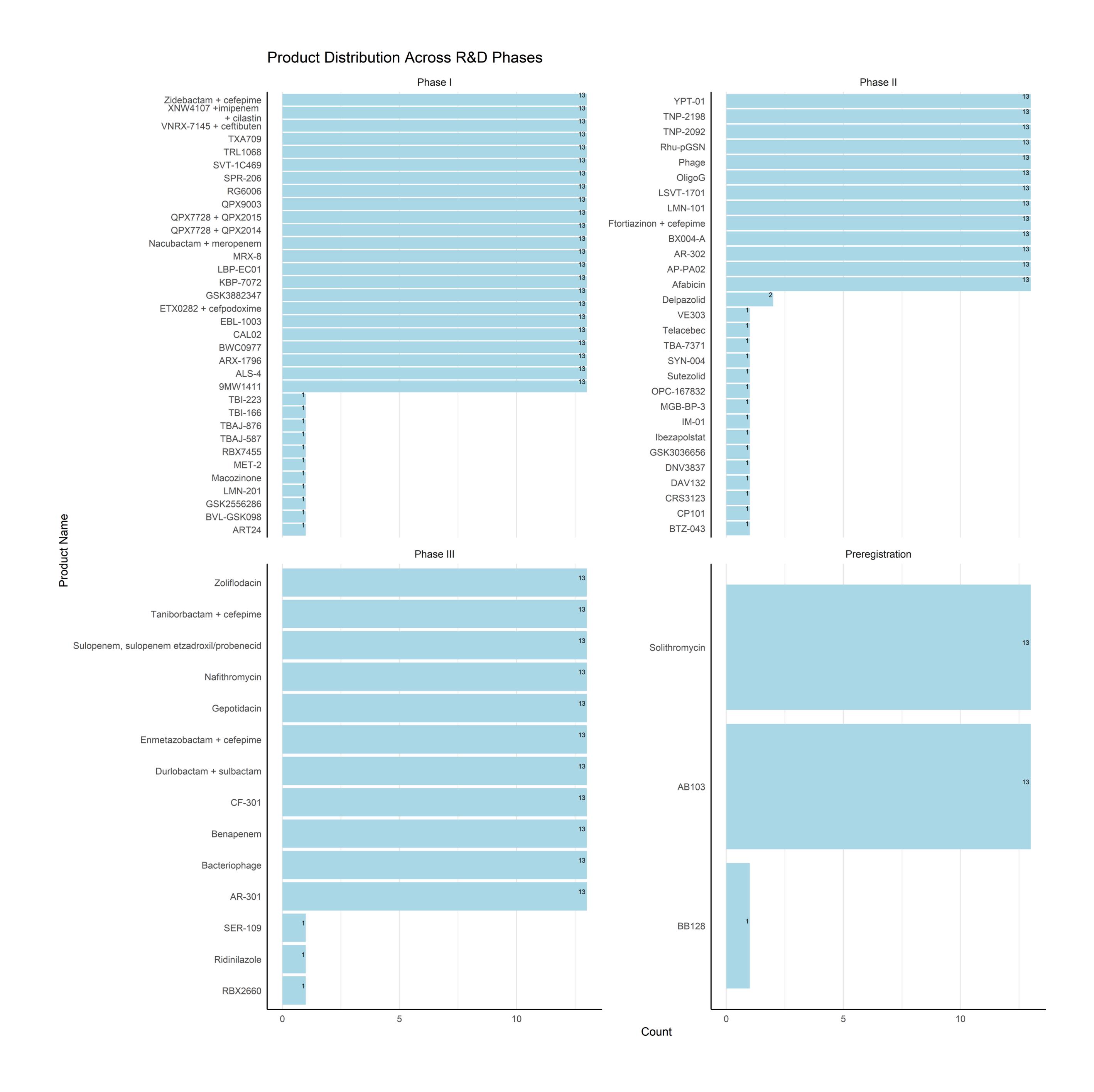


Figure 7: Product distribution across R&D phases

This highlights 27 products that made it to the Preregistration phase. Indicating that "BB128", "AB103", and "Solithromycin" might be the only products to hit the market soon