

New antibiotic thwarts bacterial resistance

The British chemist Lesley Orgel had a rule: Evolution is cleverer than you. [Antibiotic-resistant bacteria have repeatedly proven him right.](#)

Since humans started making antibiotics for ourselves in the 1940s, bacteria have evolved to counteract our efforts. They are now winning. There are strains of old foes that withstand everything we can throw at them. Meanwhile, our arsenal has dried up. Before 1962, scientists developed more than 20 new classes of antibiotics. Since then, they have made two.

More, hopefully, are coming. A team of scientists led by [Kim Lewis](#) from Northeastern University have identified a new antibiotic called teixobactin, which kills some kinds of bacteria by preventing them from building their outer coats. They used it to successfully treat antibiotic-resistant infections in mice. And more importantly, when they tried to deliberately evolve strains of bacteria that resist the drug, they failed. Teixobactin appears resistant to resistance.

Bacteria *will* eventually develop ways of beating teixobactin—remember Orgel—but the team are optimistic that it will take decades rather than years for this to happen. That buys us time.

Teixobactin isn't even the most promising part of its own story. That honour falls on the iChip—the tool that the team used to discover the compound. Teixobactin is a fish; the iChip is the rod. Having the rod guarantees that we'll get more fish—and we desperately need more.

Read full, original article: [A New Antibiotic That Resists Resistance](#)