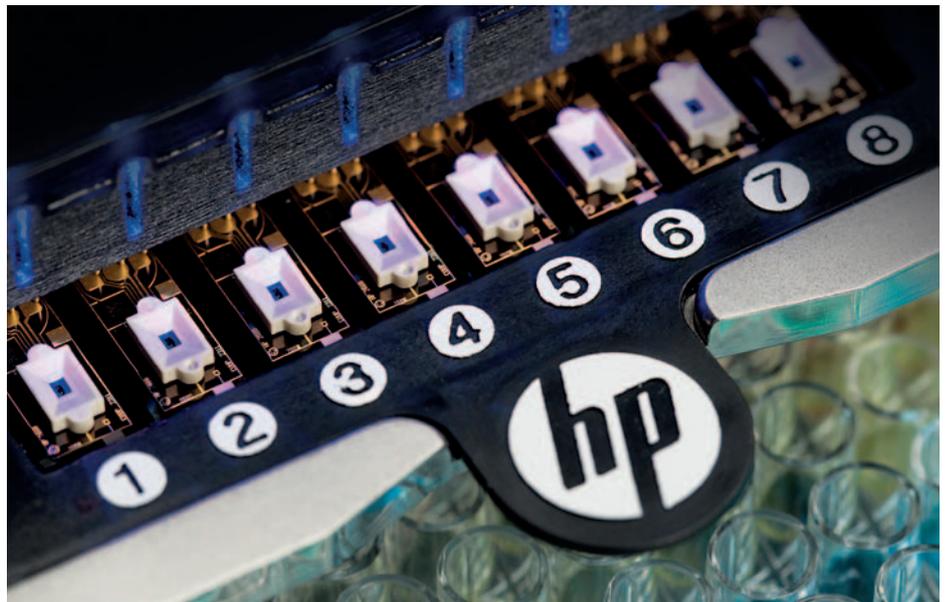


# Reinventing drug titration

In the last issue of the Tecan Journal, we announced the availability of the revolutionary HP D300 Digital Dispenser exclusively through Tecan's Life Science Business. As customers in Europe and North America begin to place their orders, Kevin Peters, HP Global Sales Development Manager, reports on early customer experiences with the new technology.

Titration is an everyday necessity for drug discovery biologists, and we have worked closely with customers to develop the product they need. For what might be considered a standard protocol, there is a surprising amount of diversity in how titrations are performed. This is because, until now, researchers have had to make a compromise, balancing quality of data with productivity, throughput and cost. Each laboratory makes a different trade-off, and so performs titration in surprisingly different ways. Early adopters of the HP D300 Digital Dispenser have been astounded at how digital titration technology has standardized this technique, radically improving quality, throughput and cost, as well as eliminating variability between operators. As a result, this technology has the potential to eliminate manual serial dilutions – and possibly even the serial dilution process – from drug discovery research.

As researchers become familiar with this technology, we are likely to see it being used for more and more applications, and there are already examples of how digital titration has enabled new science that was previously impractical; allowing study of drug-drug combinations as a potential avenue for new therapeutics, as well as providing access to some of the biological mechanisms involved in target binding for the first time. Our understanding of many of these interactions is being advanced simply by learning faster; you can now go from theory to experiment to results very quickly. Scientists are also able to perform more experiments with the same limited resources, allowing higher risk experiments to be performed earlier in the drug discovery process, potentially offering greater rewards.



The HP D300 allows direct dispensing to bioassay plates, for faster experimental set-ups and less waste

Overall, interest in the marketplace is very high, and the HP D300 has already won two awards. This early success is due to its combination of affordable technology – making it very attractive to low to medium throughput laboratories – and the system's ability to quickly and conveniently standardize

processes for contract laboratories and large pharmaceutical customers. It really does offer something for everyone.

To find out more about Direct Digital Titration, visit [www.tecan.com/digitaltitration](http://www.tecan.com/digitaltitration)

