

# Case Study 1 D8 VENTURE – Our in-house beamline

#### More targets investigated in-house

Vernalis Research is a world leader in structure- and fragment-based drug discovery. We have generated seven development candidates in the past seven years and cell active lead compounds for a further ten other targets in the field of CNS, oncology, neurodegeneration and inflammation.

#### Synchrotron time vs in-house data

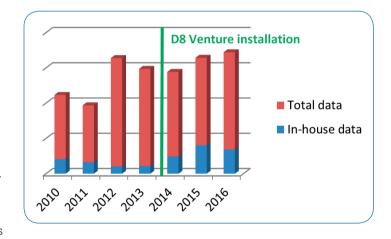
Before the D8 VENTURE was installed in 2014, we could only work on 2 projects fully in-house collecting 3-4 datasets each week. A further 4 projects could be screened on our premises. As a result, we required many synchrotron shifts per year.

Since installation of the D8 VENTURE, we are able to collect diffraction data for over 15 structures each week on all Vernalis projects. As well as reducing the reliance on the availability of synchrotron time, this importantly provides more rapid turnaround on critical projects.

## D8 VENTURE – the standard for quality and versatility

In our hands the D8 VENTURE is the ideal instrument as it features:

- High brilliance, high quality TXS source with excellent up-time
- Large PHOTON 100 detector with high sensitivity
- Comprehensive PROTEUM3 software



### Towards stronger sources and stages for screening

As shown above, we have significantly increased the number of projects we can deal with in-house. This means we can generate the structures needed for the projects faster – crucial for the detailed understanding that underpins our drug discovery chemistry.

After our system has been installed Bruker launched the even brighter METALJET source and the ISX STAGE for *in-situ* crystal screening. We look forward to seeing what impact that could have on our productivity and projects.

OC-J86-EXS001. © 2017 Bruker AXS.