

# **Steroid Chemistry**

WuXi AppTec's steroid chemistry team supports you across all stages, from discovery through development and manufacturing.

15+ years' experience

100+ dedicated chemists

10000+ steroid compounds synthesized

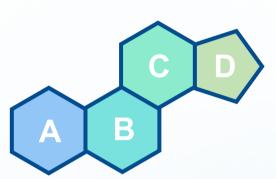
## **Steroid Chemistry Capabilities**

#### ► Hit to Lead Support

- New structure synthesis
- New chemistry development
- · Focused library generation

#### **▶ Lead Optimization Support**

- Fast production
- Route development
- Isotope labelling
- Absolute structure determination



### Drug Candidate Support

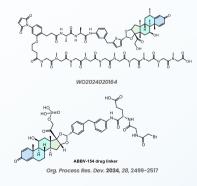
- Large scale synthesis
- Impurity synthesis
- Metabolite synthesis
- Process development

## **New Modalities Conjugated with Steroid**

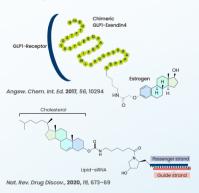
#### **▶ PROTAC**



#### **ADC**



#### **▶** Oligonucleotide



"Steroidal molecules are preferred for their rigidness and good ability to penetrate biological membranes. Slight alteration in the basic ring structure results in the formation of steroidal derivatives with a wide range of therapeutic activities. Steroids are not only active as such, conjugating them with various biologically active moieties results in increased lipophilicity, stability, and target specificity with decreased adverse effects.

> A Comprehensive Review on Steroidal Bioconjugates as Promising Leads in Drug Discovery ACS Bio Med Chem Au 2022, 2, 340-369







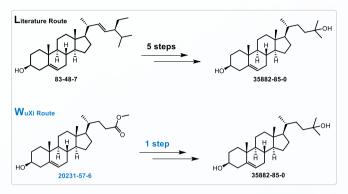




## Research Chemistry Services

## **Steroid Capabilities**

- 20+ chiral methods to build chiral center on steroid
- Strong steroid chemistry background enables efficient synthesis & delivery



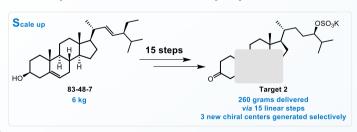
Steps were reduced by 83%

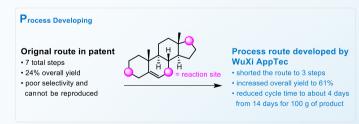
Timeline was reduced by 63%

- 130+ steroid starting materials in stock
- Selected examples showed below

## Scale up & Process Development

Over 15 years of steroid chemistry experience enables earlier stage process development and quicker scale up.





## **Platforms Enhancing Steroid Chemistry Capabilities**

- Core Analytical Services (CAS)
- Kilo Lab & Process Safety Assessment
- Recrystallization Platform
- Flow Chemistry
- Electrochemistry

• Reaction Conditions Screening

- Photoredox
- WuXi LabNetwork